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COMPARING THE EFFECT OF PAINT AND CLAY THERAPY ON THE SYMPTOMS OF SEPARATION ANXIETY DISORDERS IN PRE-SCHOOL CHILDREN

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ABSTRACT
The goal of this research is to determine the effect of paint therapy and clay therapy on separation anxiety disorder symptoms in pre-school children as well as to compare the two mentioned therapies. The research methodology was individually done and child anxiety symptoms were studied by CSI-4 questionnaire. The present research is performed based on cognitive- behavioral psychological method and subject-oriented team art therapy. Research testees were six children with separation anxiety disorder randomly selected from those who visited Golestan Zendegi and Saf clinics in Isfahan through using a diagnostic interview and children's separation anxiety scale. The six children were divided in to three groups of two: painting therapy; clay therapy as well as control group who received no treatment. Followed by three baseline sessions, intervention stages were initiated and conducted in eight sessions. Research findings showed that according to data visual analysis based on descriptive statistics and visual analysis paint therapy and clay therapy were effective in reducing separation anxiety disorder symptoms in intervention step as compared to baseline ($P<0.5$); in addition, there was no significant difference between the two mentioned treatments ($P<0.5$). However, there was seen a difference between experimental and control groups. The research results show the effectiveness of paint therapy and clay therapy on reducing separation anxiety disorder.

Keywords: Separation Anxiety Disorder, Paint Therapy, Clay Therapy, Pre-School Children

INTRODUCTION
Separation Anxiety Disorder (SAD) is the common anxiety disorder in childhood. Feeling distressed in separating from caregiver indicates the normal development observed in all children. However, the extremely distress continuing in to post childhood is diagnosed separation anxiety disorder (American Psychiatric Association, 2000).

Separation anxiety has long been of interest to researchers and practitioners which is considered as the health process and relatively normal status. This term is related to the child or parent concerns about losing important people in life (Hatami, 2003; Chandller, 2008). Sometimes, normal separation anxiety may be serious and destructive to child life; in that case, it will be regarded as separation anxiety disorder in the form of unproportionate, excessive anxiety (over-anxiety) of separating from home or attachment source (Mofrad *et al.,* 2009).

Of the reported disorders among children, separation anxiety is the most common (Dollan, 1995). In spite of separation anxiety prevalence in pre-school children and its possible relation to later pathology, few experimental studies investigated the efficacy of treatment interventions in separation anxiety of childhood (Olendick *et al.,* 1991). In addition, clinical studies usually included children older than seven which may be due to this fact that children with anxiety disorders or any other disorder, at this age, are rarely seeking for treatment; rather, children distress are often diagnosed by adults trying for treatments. Hence, children are less motivated for treatment and it is extremely difficult to establish a therapeutic relation with (Shirk and Karver, 2003). Then, game and art are being used as higher motivation tools and more effective non verbal interaction to children. Two points must be regarded in applying cognitive-behavioral treatment in children under seven: first, childhood cognitive therapy literature less discussed interpersonal beliefs factors such as trust, family stability and the effect of early attachments on

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interpersonal schemes (Reinecke *et al.,* 2003). Second, given the key role of reinforcement in children therapy, treatment efficacy requires generalizing reward system from therapy sessions out of treatment and parents-child relations. Therefore, as these children objective thinking, cognitive therapy should go from abstract (subjective) and holistic form in to utilizing regular, objective concepts (Ronen, 1992). Thus, this research integrated behavioral-cognitive therapy with art therapy (concentrating on painting and clay) in order to increase research effectiveness.

Team (group) art therapy is performed for the clients (here children) with particular problem or common human aspects like anxiety or anger, and with a common goal. Child, during art therapy sessions, is involved in making an art craft (painting, sculpturing, and poetry, storytelling, dancing and performing/acting out). Children in each team art therapy sessions create an art craft before therapist and peers causing mutual learning and being aware of what others feel (Kalmanowitz, 2004).

Helping in problem-solving process, high flexibility, increasing self-confidence, enhancing cooperation as well as sharing experiences are mentioned as art therapy advantages in children (Kalmanowitz, 2004). Creativity, self-awareness, and improving school functional activities are other teamwork art therapy advantages in children under this treatment. The main point is that child finds out during therapy sessions that there is no right or wrong way; rather, the only way is that consistent with the child unique nature (Henley, 1998; Steinhardt, 1995).

Painting as a subset of art therapy is considered as the most critical factor to express child's thoughts, feelings, opinions and internal needs in addition to culturing creativity and aesthetic. It is also effective in reducing mental difficulties (Winnicott, 1971).

Clay therapy also is a version of game and art therapy currently used as therapy measure in studies. Thousands of therapists who recently work on clay therapy reported the effectiveness and usefulness of this new tool for children (Sherwood, 2004). Therapists used mud and clay to increase therapeutic relation and supporting of clinical process (Shaefer and Kaduson, 2006).

Clay therapy as a therapeutic tool has been used to improve problem-solving, increase self-esteem and decision making processes, control impulsion and anger in children. Clay therapy reduces children fear of consulting as it creates motivation so that they are able to keep clinical relation with therapist during treatment; in addition, it is considered as an entertainment, too (Landreth, 2009).

Previous studies indicated that therapy assisted by game and art successful achieved in inhibiting clients' anxiety. For instance, Jalali *et al.,* (2010) applied game therapy in reducing separation anxiety disorder in 5-11 years old children. Rahmani and Moheb (2010) studied the effectiveness of story therapy and clay therapy on children's anxiety and concluded that both methods are effective in reducing anxiety. Kazemi *et al.,* (2012) also used teamwork game therapy in treating this disorder and considered that more effective than traditional therapy (talking) in responding children's special needs. Based on the aforementioned and lacking of enough researching on reducing separation anxiety disorder symptoms in pre-school girl and boy (4-6 years old), the present research comparatively studied the comparative effect of paint therapy and clay therapy on the separation anxiety disorder symptoms in pre-school children through using two art therapy methods (painting and clay) integrated with behavioral- cognitive therapy.

Research Hypotheses

H1: Paint therapy is effective on reducing separation anxiety disorder symptoms of pre-school children.

H2: Clay therapy is effective on reducing separation anxiety disorder symptoms of pre-school children.

H3: There is a difference between the effect of paint therapy and clay therapy on reducing pre-school children separation anxiety disorder symptoms.

Research Variables

1. Independent variable: the first independent variable here is paint therapy intervention for two participants. Second independent variable is clay therapy intervention for two participants.

2. Dependent variable: separation anxiety disorder frequently measured in this research is dependent variable.

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Research Tools

Children Symptoms Inventory (CSI-4)

CSI-4 is screening tool for the most common psychiatric disorders that the items are formulated based on diagnostic manual and statistical mental disorders criterion. This inventory includes 21 emotional and behavioral disorders. The first version of the questionnaire with list name of Sprofkin, Loney, Unitat and Gadow was provided by Sprofkin, Loney, Unitat and Gadow, relying upon classifying the third edition of diagnostic manual and statistical mental disorders, in 1984. There were two scoring methods designed for CSI-4: The screening Cut of Score Method and The Symptom Severity Score Method. In screening cut of score method, in this research, scoring based on severity in was applied in a 4- scale scoring of Never=0, Sometimes=1, Often=2, Occasionally= 3.

MATERIALS AND METHODS

Research Methods

The qualified individuals were selected of the children visited Golestan Zendegi and Saf Counseling center in Isfahan. Initially, mothers were diagnostically interviewed two sessions based on DSM- IV- TR criteria (2000) to measure the 6 children separation anxiety disorder participated in research.

Preceding intervention, only CSI-4 was successively filled out in three sessions by all six mothers with no treatment. Paint therapy, followed by three baseline sessions, was performed for two participants of experimental group 1 and clay therapy for the two participants of the experimental group 2. Intervention included 8 weekly sessions during which participants were treated, about 120 min, in the groups of two. At the end of the first, third, fifth, seventh and eighth, mothers of experimental groups received CSI-4 questionnaire and filled it out. In the present research, both behavioral-cognitive psychological method and subject- oriented teamwork art therapy were used; detailed paint therapy and clay therapy are as follows.

Paint Therapy Sessions Plan

First Session: Introduction: group members are introduced; then, the general purposes and objectives of the painting therapy were explained for parents and children.

Second and Third Session: Drawing the child and mother by child: the main purpose was being familiarized with children's feelings and emotions to itself and mothers.

Fourth Session: pair painting by child and mother: the main purpose was creating an intimate, happy environment in order to improve child and mother relation.

Fifth Session: Group painting: the main purpose of group painting was familiarizing children with cooperation, mutual work, and teamwork and discussing about each other's ideas.

Sixth Session: Painting the thoughts and feelings of separation from parent: the goals of this session were familiarizing the child with its mind and thought at the time of separation, distinguishing thoughts from feeling and differentiating between thoughts (ideas) and events.

Seventh and Eighth Sessions: Painting based on the story narrated characters: the goal was changing status from control to acceptance status.

Clay Therapy Sessions Plan

First Session: Getting familiarized with clay and mud as an entertainment mean: the purpose of this session was expressing unpleasant emotions such as anger and anxiety.

Second and Third Session: Making clay sculpture by mother and child: the main purposes: familiarizing and expressing child emotions and feeling about itself and its mother as well as motivating touch and movement senses by working with clay techniques.

Fourth Session: Making clay sculpture based on story narrated characters: the main purpose was explaining the thoughts of separation from parent. A similar situation like the child separation from mother is narrated as story; then, the child is asked to continue its own story.

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Fifth Session: Making a clay mask: the goal was identifying the child feelings like fear and anger at separating from parent and explaining the difference between thoughts and feelings.

Sixth Session: Implementing recommended ideas for problem-solving using clay: this time, the child is independently requested to recommend a simple, easy solution for separating from mother.

Seventh Session: Exercising island practice with clay: the goal is to reinforce the anxious child's independent behavior. The children are told that they are alone stuck in an island with no facilities; they must meet their requirements with the existed things around in the island.

Eighth Session: Reviewing all previous sessions and coloring all made crafts. Clay coloring is a desired, entertaining process in order to increase the child creativity; in addition it enhances self-esteem and self-confidence in children. Finally, the children were gifted in order to encourage children's independent behaviors.

Research Findings

Mothers of all six children, preceding intervention, just successively completed Children Symptoms Inventory CSI-4 with no treatment. Followed by three baseline sessions, paint therapy was done for two participants of the experimental group one; and clay therapy for two participants of the experimental group two.

Intervention included 8 weekly sessions that participants were under almost 120 min group treatment. At the end of first, third, fifth, seventh and eighth, mothers of experimental groups children were given CSI-4 to fill out.

Table 1: Separation anxiety disorder questionnaire scores in baseline and paint therapy of two patients

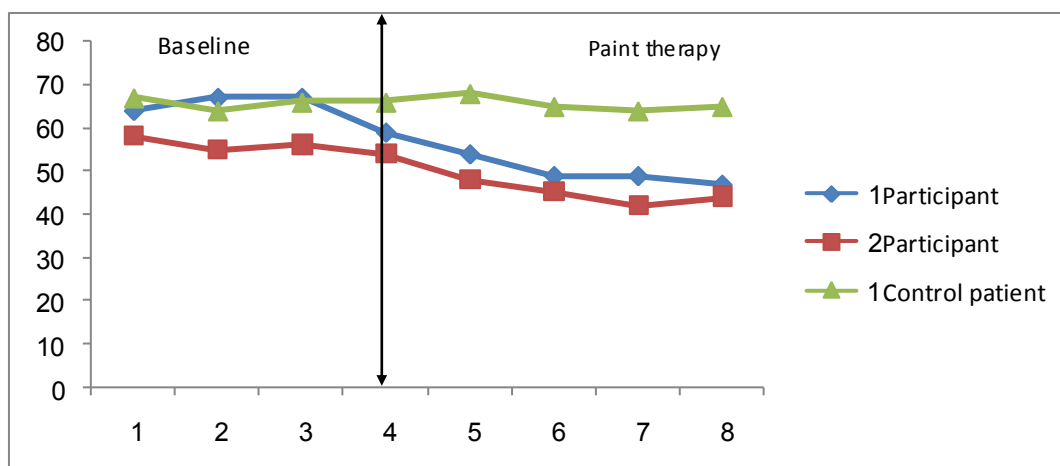| Patient	Sessions							
	Baseline			Paint therapy				
One	64	67	67	59	54	49	49	47
Two	58	55	56	54	48	45	42	44

Figure 1: The effect of paint therapy on reducing separation anxiety disorder symptoms and comparing control patient one with two participants of paint therapy group
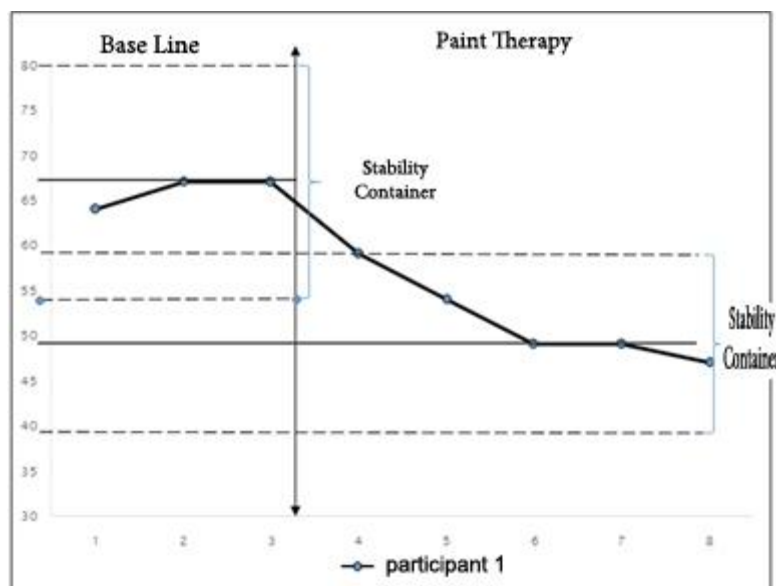
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Figure 2: Drawing median line and stability container of separation anxiety disorder in paint therapy of patient one
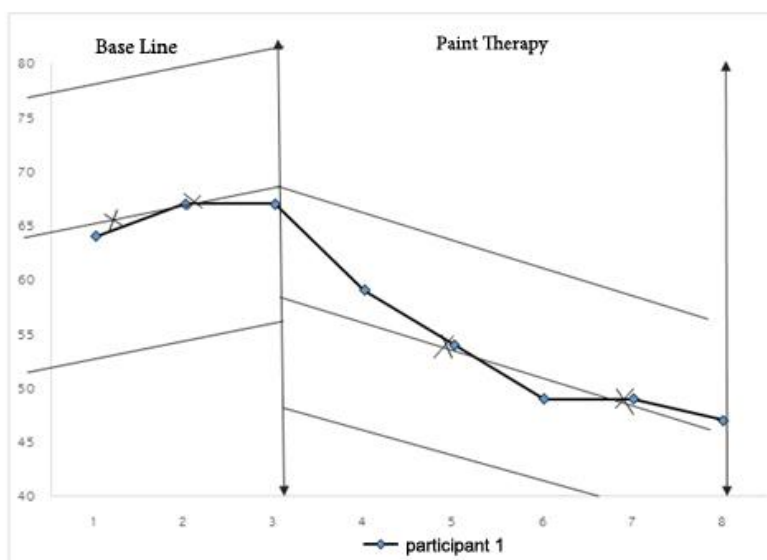

Figure 3: Drawing trend line and stability container of separation anxiety disorder in paint therapy patient one

To determine the effect of treatment (independent variable) on separation anxiety disorder scores (dependent variable), therapeutic sessions data can be compared with baseline sessions data.
Determining Overlapping Percentage: There are two methods of computing and reporting overlapping at data points' values between two neighbor positions.
Percentage of Non Overlapped Data (PND): the number of data (therapeutic sessions) located outside adjustments amplitude (baseline sessions) are computed and multiplied by 100.

$$PND = \frac{3}{5} \times 100 = 60\%$$

PON: the numbers of data located inside (therapeutic sessions) or on the adjustments amplitude (baseline sessions) are calculated and multiplied by 100.

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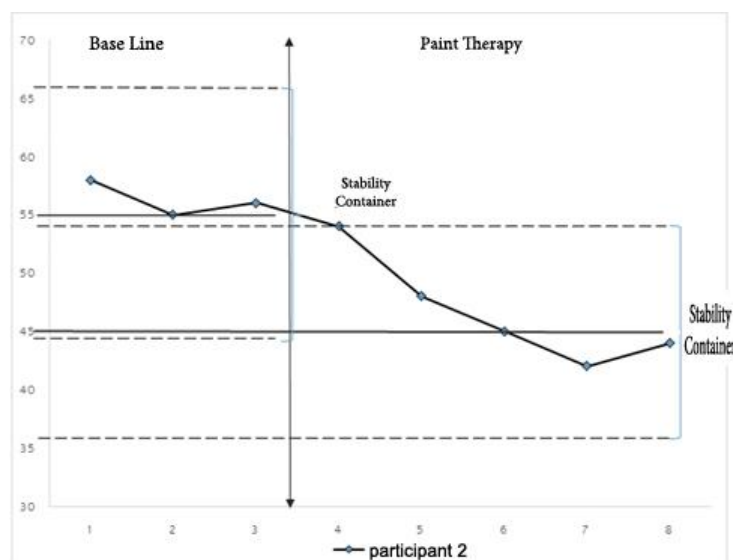
$$PON = \frac{2}{5} \times 100 = 40\%$$

Figure 4: Drawing median line and stability container of separation anxiety disorder in paint therapy of patient 2
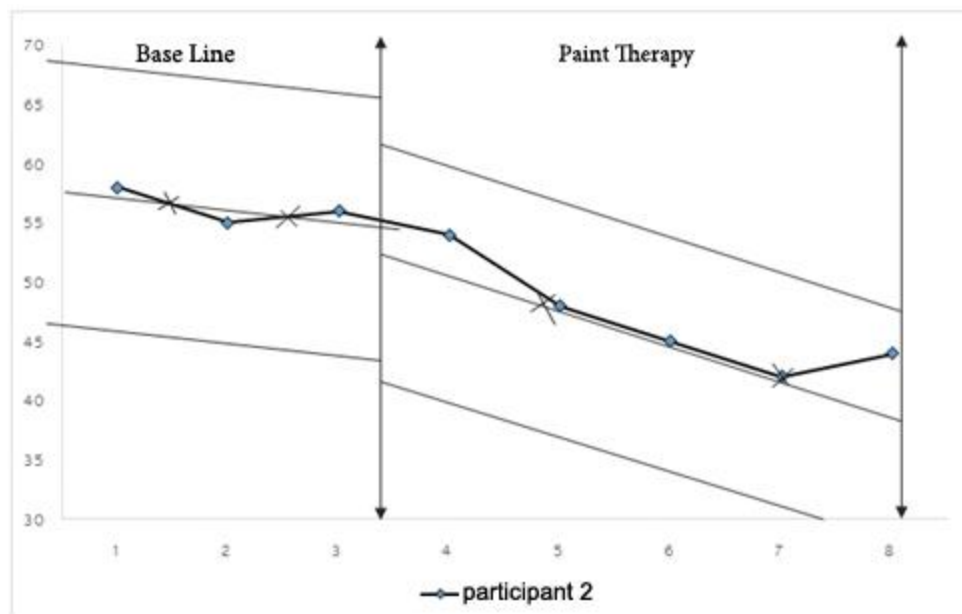

Figure 5: Drawing trend and stability container of separation anxiety disorder in paint therapy of patient 2

Hypothesis 1: Therapy by painting is effective on reducing pre-school separation anxiety disorder.
Above mentioned results show that paint therapy is effective for separation anxiety disorder. PND of treatment position and baseline for both patients is 60% indicating treatment effectiveness. Moreover, as Figure 1 presented, there was seen a significant difference in the descending trend of participants under paint therapy as compared to control patient one which had almost an stable trend.

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Table 2: Separation anxiety disorder questionnaire scores at baseline and treatment with clay for two patients

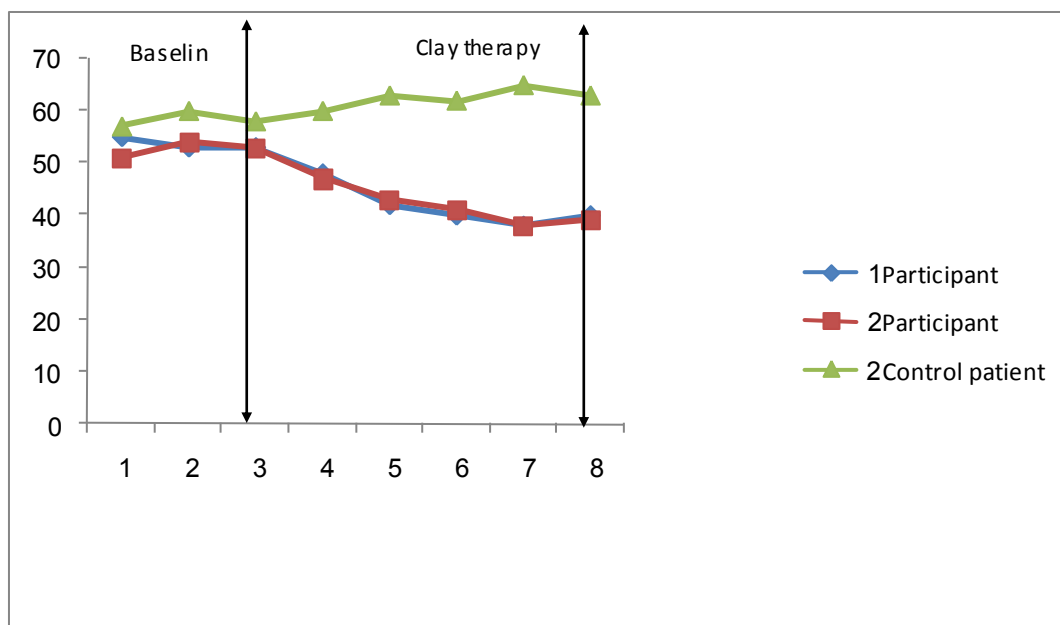| Patient	Sessions							
	Baseline			Clay therapy				
One	55	52	52	48	42	40	38	40
Two	51	54	53	47	43	41	38	39

Figure 6: The effect of clay therapy on reducing separation anxiety disorder symptoms and comparing control patient two with two participants of clay therapy
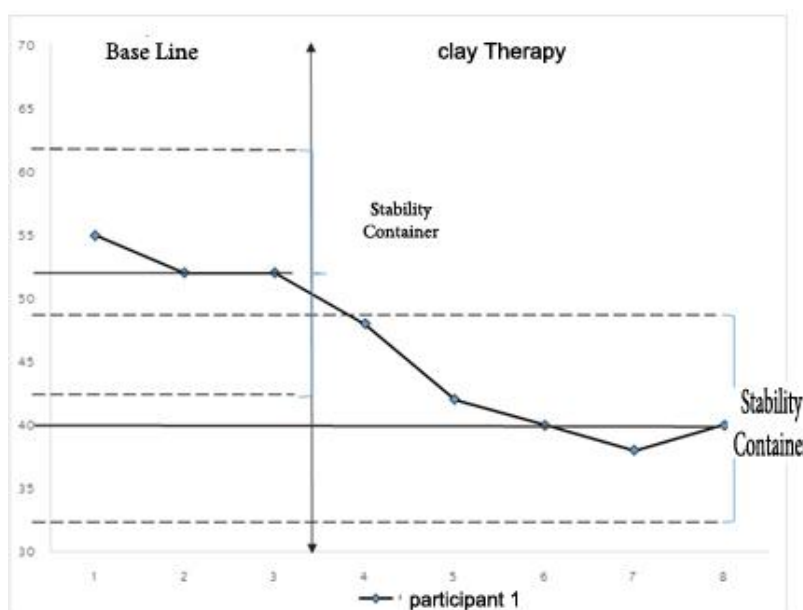

Figure 7: Drawing median line and stability container of separation anxiety disorder in clay therapy of patient one
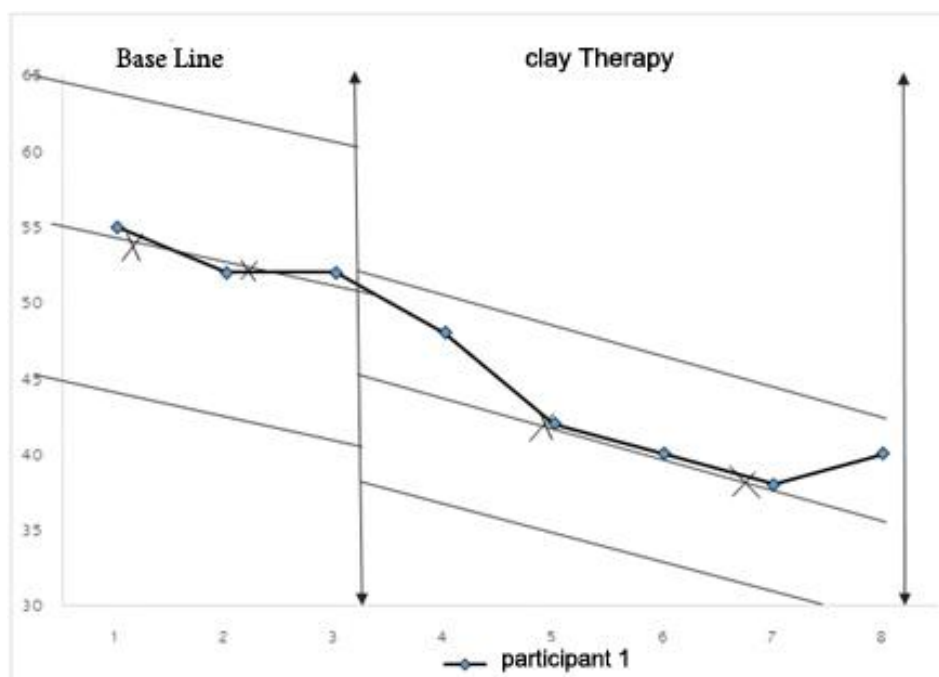
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Figure 8: Drawing trend and stability container of separation anxiety disorder in clay therapy of patient one
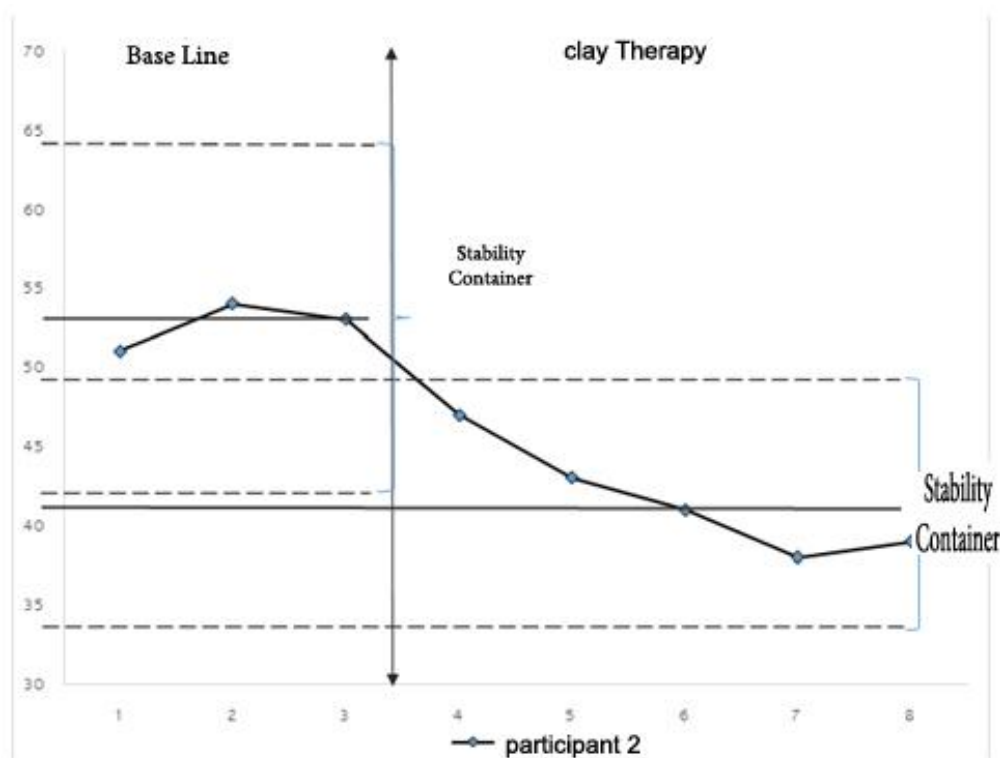

Figure 9: drawing median line and stability container of separation anxiety disorder in clay therapy of patient 2
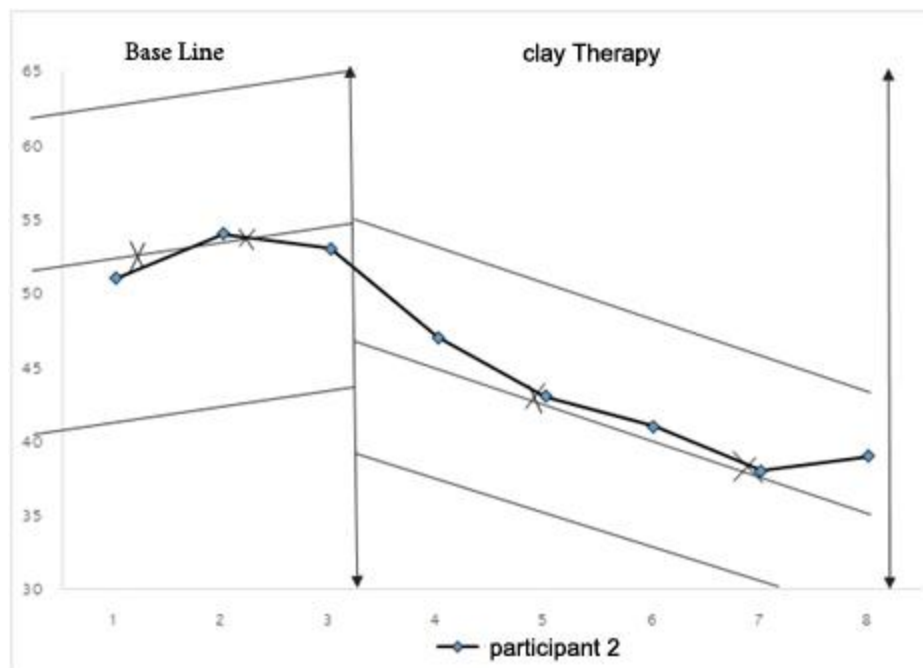
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Figure 10: Drawing trend and stability container of separation anxiety disorder in clay therapy of patient 2

Second Hypothesis: Clay therapy effects on reducing pre-school children's separation anxiety disorder.
Results of patients one and two demonstrate that clay therapy influenced on separation anxiety disorder. PND between treatment and at baseline for patient one and two was 80% and 60%, respectively which indicate the treatment effectiveness. Furthermore, according to Figure 6, there was a significant difference seen in descending trend of clay therapy participants' graph in comparison to the ascending trend of control patient two.
Third Hypothesis: There is a difference between the effect of paint and clay therapy on reducing pre-school children separation anxiety disorder.
As Figure 1 and 6 showed, therapeutic trend in all 4 participants indicate the effectiveness of paint therapy and clay therapy. Hence, there is no difference between the two therapies in reducing SAD.

RESULTS AND DISCUSSION
In defining the results of the first research hypothesis it can be stated that in treating separation anxiety disorder in children using painting, the children were assisted to maintain and watch their emotions including fear, anger, etc rather to immediate excitements which will only be achieved through game and arts in children. As, game consisted the most parts of a child's life; the child with game can observe its emotions and excitements (painting, is the children creative game). 61.9% of the anxious children are also depressed that artistic environment and freely painting with various tools effectively increased the children's mood. Moreover, practices like painting without looking at paper starring at the addressee (mother) were useful to reduce obsession (24-34% of the anxious children have obsession) and to increase self-confidence in children.
Mothers' companionship with children in some sessions created an effective, normal relation among (in contrast to mothers' fear of children's more dependency). Also, teamwork in coping with social phobia (8.3%) and simple phobia (12.5%) was effective. And finally, children being aware of their thoughts at separation and distinguishing thoughts based on what they feel as well as facing with the extreme fear of separation anxiety and yet continuing life regardless of these feelings and thoughts were the research main purposes achieved with behavioral-cognitive techniques and practices.

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The second hypothesis result was relevant with the results of Rahmani and Moheb (2010), relying upon the effectiveness of clay therapy and story therapy, on reducing children anxiety. In explaining the obtained results it can be said that clay therapy was initiated by expressing undesired excitements to reduce pre-school children's separation anxiety disorder, clay features like its coolness and flexibility helped in this self-expression, too. Next, the children were introduced with their thoughts and feelings of own and mothers. Then, by making masks, they identified and recognized thoughts at separation from parent.

The children learned to observe undesired excitements from excitements expression step during frequent clay therapy practices along with behavioral- cognitive techniques. In addition, independent behaviors were reinforced and undesired behaviors were decreased through recommendations offered by children. Thus, children recognized that in spite of threatening thoughts it is also possible to achieve what other peers do and found that this thinking is not limited to them.

In analyzing the third hypothesis, according Figure 1 and Figure 6, treatment trend is descending in all four participants and almost close.

Further, non overlapping data index in therapeutic intervention of all four participants with confidence level were close, too.

Therefore, it can be concluded that there is no significant difference between the effect of clay therapy and paint therapy on reducing pre-school children separation anxiety disorder. However, according to figures 1 and 6, there is a significance difference between control group and therapeutic groups of clay and paint therapies.

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