

# A Study to Assess the Effectiveness of Clay Therapy on Anxiety Symptoms of Preschool Children in Selected Schools at Bangalore

Shinymol T

Indiragandhi College of Nursing

**Abstract:** *Clay therapy, an innovative form of play therapy, is increasingly recognized as an effective intervention for managing anxiety symptoms in preschool children. This therapeutic approach integrates sensory, cognitive, and emotional engagement, enabling children to express their emotions, improve problem-solving skills, and enhance self-esteem. Anxiety disorders, prevalent among preschoolers, significantly impact their social, academic, and emotional development. Research indicates that clay therapy not only reduces anxiety but also fosters creativity and provides a non-threatening medium for emotional release. A quasi-experimental study was conducted in selected schools in Bangalore to evaluate the effectiveness of clay therapy in reducing anxiety symptoms. The study involved 60 preschool children, divided into experimental and control groups, with data collected using a structured child symptom inventory. Results demonstrated a significant reduction in anxiety levels among children in the experimental group, highlighting the therapeutic potential of clay therapy as a supportive tool for managing childhood anxiety.*

**Keywords:** clay therapy, preschool anxiety, play therapy, child development, emotional well-being

## 1. Introduction

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.1

“Preschool children are more sophisticated than toddlers. . . . your goal as a parent is to nature the child’s desire to be self starter and help him to begin to adopt some of your attitude and values, but without humiliating the child or suppressing his newfound assertiveness” (Lawrence Balter).1

Preschool children are in the children those who are the age group of 3 - 6 years. The combined biological, psychosocial, cognitive, spiritual, and social achievements occur during the preschool period. In the preschool age, there will be significant changes in life style of children as they enter into the school for the first time. According to many authors preschool period is a very fruitful period.2

In present scenario anxiety disorders are most common form of psychopathology in preschool children with overall prevalence rate of 8 - 10%. Mental health professional believe that the majority of mental health problems in adult are rooted in childhood generally before the 8 years.3

According to the report of New York University of child study centre, mental health problems may originate as early as in the preschool years. One in 10 children aged 2 - 5 years found

to be experiencing anxiety. In that 9.5% have in the form of separation anxiety, social anxiety, specific fears, and generalised anxiety.4

More over these severe and chronic conditions also have the potential to significantly cause impairment in academic, emotional, and social development. Thus as the understanding of these disorders has evolved, the need to recognize and effectively treat these anxiety has become more salient. Play therapy is one of the important methods of prevention of anxiety disorder among preschoolers.5

Play has been recognised as important since the time of Plato (429 - 347BC). Play is essential part of child and is important aspect in fostering growth and development. Toys are the tool of play. Play is synonymous with being a child and it is universal language of child. Children involved in the work of play do not require expensive toys and gadgets to keep them entertained but often enjoy playing with common household items such as broom handle, boxes, clay materials, drawing book etc.6 Play helps in the sensory motor and intellectual development. It also improve socialization and self-awareness. Creativity is developed through play. Play also has therapeutic and moral value. Therapeutic play provides diversion and brings relaxation, feels more secure in a strange environment, lessens stress and provides a means of release tension.6

In the current scenario, clay therapy act as a version of play therapy is employed as a therapeutic tool. Clay therapy is an adjunct to play therapy. Researcher use clay as a therapeutic tool has been effective for children in improving their problem solving skills, cognitive development, self esteem enhancement, decision making process, control of impulses, and anger. Clay therapy reduces children fear and anxiety because it holds their interest, provides a wide array of connection by establishing an immediate problem solving environment which compliment the ongoing treatment plan

Volume 13 Issue 11, November 2024

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

[www.ijsr.net](http://www.ijsr.net)

and also fun. Therapist teaches children about some models made by clay<sup>7</sup>.

## 2. Need for the Study

“A Child is precious and beautiful,  
A Source of joy and happiness,  
A focus of love and care,  
A subject of dream for its future”  
(CHILD CARE)

Anxiety disorders represent one of the most common form of psychopathology. Studies with community sample suggest that around 8 - 12 % of preschool children meet diagnostic criteria for some of the anxiety symptoms that sufficiently serve to interfere in daily functioning. Anxiety disorders among preschool children represent variety of forms such as separation anxiety, social phobia, generalised anxiety and panic disorder<sup>8</sup>.

Anxiety symptoms among preschool children are higher than that of virtually all other mental disorders of childhood. Generalised anxiety disorder is a repeated unrealistic fear that much more intense than what is considered normal daily anxiety. One article reports that 80% of preschool children with anxiety has school refusal as a main symptom. 50 - 75% of children who suffer this disorder are from low socio-economic status family<sup>8</sup>.

According to the report of surgeon general, 13% preschoolers have anxiety disorders, about 4% have generalised anxiety disorder and 12.8% have social phobia<sup>9</sup>.

A descriptive study conducted on prevalence of anxiety among preschool children. The research design used as exploratory survey, and 3, 860 preschool children were screened. The result shows that prevalence of anxiety disorder was 8.3%, 9.1% have severe anxiety disorder and 21.4 % have separation anxiety disorder. Male children are more affected than female children<sup>10</sup>.

“You can discover more about a person in an hour of play than in a year of conversation” by Plato. Play therapy have major role in preventing the anxiety among preschool age children. Play therapy refers to wide variety of treatment methods all of which incorporate the use of play. For children, play is a natural method of learning, development and expression of feeling, thoughts and concerns.<sup>12</sup> Play therapy offers a natural, safe and non-invasive method to foster and hasten recovery from anxiety disorders such as social anxiety, separation anxiety etc. It has been specifically designed to be developmentally appropriate for children and is based on the idea that children communicate and express inner feelings and conflict through play<sup>13</sup>.

An experimental study was conducted to examine whether interactive play therapy is an effective treatment for production anxiety among preschool children. Researcher conveniently selected the sample. Quasi experimental design was used. The anxiety was assessed by trait anxiety scale. Researcher selected 35 sample for each experimental and control group. The result shows that after interactive play the children anxiety was reduced. The result shows that there is a

significant difference between experimental and control group after administration of interactive play therapy<sup>14</sup>.

Play therapy sounds fun but is extremely difficult. Since the inception of play therapy, one new therapy is introduced for the children i. e., clay therapy. Clay has always been an element noted and suggested as a necessary instrument of therapist. Therapist used natural clay, and more recently synthetic modelling clay. Children are naturally attracted to clay. Most have grown up with clay at home and school. Children like clay. They like feeling, moulding, rolling and pounding clay<sup>15</sup>.

One article reports that, clay therapy has many advantages. This therapy should be effective in very anger, anxious and child with attention deficit hyperactive disorder. Clay therapy helps the child to express his anger through rolling, folding, and pounding the clay. Clay therapy helps the children to move from crippling emotional experiences to flourishing opportunity for inner growth and healing<sup>16</sup>.

A study was conducted to assess the effectiveness of clay therapy on attention deficit hyperactivity disorder in preschool children. Research design was quasi experimental design. Researcher selected sample from counselling clinics. For examining children child symptom inventory - 4 parent checklists were employed which was answered by parents of preschool age children. Results clearly shows that the score of experiment group was less than control group<sup>17</sup>.

Anxiety disorders are more common in preschoolers. These anxiety disorders cause many problems in later life. Anxiety disorder significantly affect the learning, cognitive pattern and memory status. Early identification and treatment are the main management of anxiety disorders. Researcher felt that clay therapy helps to reduce the anxiety of preschool age children. Hence the researcher felt the need of conducting this study to provide clay therapy for preschool children to assess the effect of clay therapy on anxiety.

## 3. Review of Literature

Review of literature is presented under the following headings  
Incidence of anxiety among preschool children effectiveness of clay therapy among preschool children

### 1) Incidence of Anxiety among Preschool Children

A descriptive study was conducted to assess the social anxiety and maladjustment in the preschool children. Participants were 175 children between the age of 3 to 4yrs. Research design was descriptive approach. Data was collected from parents, children interviews and direct observations. The result shows that research categorize the children into anxious and non anxious children in terms of temperament characteristics, free play behaviour and attitude towards preschool. Social anxious children are more shy, more difficult to sooth and having lower attention span and they have less interaction with teachers<sup>18</sup>.

A cross sectional study was conducted on the structure of anxiety symptoms among preschool children. Research design was descriptive approach. Child symptom inventory - 4 parent check list was used to assess the anxiety of children.

The results shows that 51% of children having separation anxiety disorder.46.8% have social anxiety disorder.4.8% have generalised anxiety disorder<sup>19</sup>.

A pilot study was conducted on tantrums and anxiety in early childhood. Research design used as exploratory survey. Researcher selected 33 children as sample. Data should be collected by using Achenbach child behavioural check list. The result shows that most parents reported that frequency of tantrum as occurring often, with roughly half of those reporting daily tantrums and half reporting weekly tantrum. In case of anxiety level 50% have separation anxiety disorder, 40% have social anxiety disorder and 10% have other panic disorder<sup>20</sup>.

A study was conducted in a hospital in Bangalore to examine the emotional distress in 80 preschool children during paediatric hospitalization. Using multiple regression analysis, children's depressive and anxious symptoms (emotional distress) were positively related to stress of previous hospitalization experience. The result shows that correlation of emotional distress and stress of previous hospitalization experience is positively related. Emotion stress was negatively related to age. It concluded that stress is less in children who had a previous history of hospitalization<sup>21</sup>.

## 2) Effectiveness of Clay Therapy among Preschool Children

An experimental study was conducted to examine the efficacy of clay therapy on attention deficit hyperactivity disorder, anxiety and social maturity in 5 - 8 years old male and female. The sample consist of 80 boys and girls whom were selected randomly via simple sampling procedure from clientele children whom were identified and diagnosed for ADHD and anxiety in counselling clinics. The tool used as conies parent rating scale, haws children anxiety test and social maturity scale. The research design was pre - test and post test experimental design. There were significant difference between scores of experimental group and control group. The study recommended that clay therapy is effective in reducing the ADHD, social maturity and anxiety among children<sup>22</sup>.

A comparative study to assess the effectiveness of clay therapy and narrative therapy on anxiety of preschool children. Data was collected from 6 year old children. Child symptom inventory for parent check list was used as tool. Data was subjected to one way analysis of variance. The result shows that significant difference on anxiety scores among group. The anxiety scores of control group is higher than that of experimental group. No significant difference was found among clay group and narrative group<sup>23</sup>.

### Statement of the Problem

A study to assess the effectiveness of clay therapy on anxiety symptoms of preschool children in selected schools at Bangalore

### Objectives

- 1) To assess the anxiety symptoms of preschool children among experimental and control group.
- 2) To determine the effectiveness of clay therapy on anxiety symptoms of preschool children.

- 3) To determine the association of anxiety symptoms scores of preschool children with their selected demographic variables.

### Operational Definitions

- **Effectiveness:** In this study, it refers to reduction in anxiety symptoms scores of preschool children as measured by structured child symptom inventory - 4 teacher check list
- **Clay therapy:** In this study, it refers to a form of supervised play therapy in which researcher teaches the preschool children about making different clay models like human models, animal models, and cartoon models for 3 hours per day for 3 days.
- **Anxiety symptoms:** In this study, it refers to the preschool children experiences a state of tension and feeling of fear due to separation from home and certain social situation especially situations that are unfamiliar to the child as measured by structured child symptom inventory - 4 teacher check list.
- **Preschool children:** In this study, it refers to children whose age group between 3 - 6 years
- **Selected personal variables:** In this study, it refers to age, sex, type of family, family income and number of siblings.

### Hypothesis

H1: The mean post test anxiety symptoms scores of preschool children who have undergone clay therapy will be significantly less than the mean pre - test anxiety symptoms scores of preschool children.

H2: The mean post test anxiety symptoms scores of preschool children who have undergone clay therapy will be significantly less than mean post anxiety symptoms scores of preschool children who are not exposed to clay therapy.

H3: There will be association of anxiety symptoms scores of preschool children with their personal variables.

### Assumptions

Clay therapy may help in reducing the anxiety symptoms of preschool children.

Preschool children may have anxiety symptoms.

### Delimitations

The study is delimited to preschool children.

Assess the anxiety of preschool children only through structured child symptom. inventory 4 teacher check list.

The study is conducted in selected schools at Bangalore.

## 4. Materials and Methods

### Research Approach and Design

Research design of this study is quasi experimental design, non equivalent control group pre - test post test design.

The symbolic representation is

E: O1 X O2

C: O1 O2

### Keys:

E: Experimental group

C: Control group  
X: Intervention  
O1: Pre - test  
O2: Post test

### Variables of the Study

#### Dependent Variable

Anxiety symptoms of preschool children.

#### Independent Variable

Clay therapy among preschool children.

#### Demographic Variables

Age  
Gender  
Type of family  
Family income  
Number of siblings

#### Sources of the Data

**Setting:** Selected schools at Bangalore.

**Population:** Preschool children in selected schools

#### Method of Collection of Data

#### Sample & Sampling Criteria

##### Inclusion Criteria:

- Preschool children
- who are available at the time of study
- who can understand Kannada and English.

##### Exclusion Criteria:

- Children who are sick.
- Children who are absent.
- Children who are having skin allergy and respiratory problems.

**Sampling Technique:** Convenience sampling technique will be used.

**Sample Size:** 60 children – 30 each in experimental and control group.

#### Data Collection Technique:

Demographic variable Performa to assess the sample characteristics.

Structured Child symptom inventory for teacher check list.

#### Method of Data Collection:

Approval from authority.

Select sample as per criteria.

Assess the pre - test anxiety symptoms scores of preschool children.

Administer clay therapy.

Assess the post test anxiety symptoms scores of preschool children.

### Plan of Data Collection

#### Group

Pretest

Day 1

Intervention

Day1 - Day3

Posttest

Day 3

#### Experimental Group

- Structured CSI for teacher check list
- Clay therapy
- Structured CSI for teacher check list

#### Control Group

- Structured CSI for teacher check list
- No intervention
- Structured CSI for teacher check list

## 5. Plan of Data Analysis

#### Descriptive statistics:

Frequency and percentage will be computed to analyse the personal variables.

Mean median and standard deviation will be computed for describing the anxiety symptoms scores of children.

#### Inferential statistics:

Paired t test will be computed to analyse the significant difference between pre - test and post test anxiety symptoms scores of experimental group.

Independent t test is used to analyse the significant difference between the pre - test and post test anxiety symptoms scores of both experimental and control group

Chi square test will be used to find the association of anxiety symptoms scores preschool children with their selected personal variables.

7.3 Does the study require any investigation or intervention to be conducted on patients or other human or animal? If so please describe briefly.

Yes, clay therapy will be given to preschool children for reducing anxiety symptoms.

7.4. Has ethical clearance being obtained from your institution? Yes

## References

- [1] Marilyn J. Hockenberry, David Wilson. Essential of paediatric nursing. Myssouri: Elsevier publication; 2009.439 - 440, Available from: <https://www.researchgate.net/>
- [2] Anagold A, Egger H. L. Preschool age development [Internet].2007 [Updated 2007 Jun 10; cited 2011 Aug

- 10]. Available from: <http://bmo.sagepub.com/content/15/3/310>. short.
- [3] Christopher P. Lucas. Anxiety in preschool years Indian journal of paediatrics.2008 15 (4): 437 - 58.
- [4] Dorothy R. Marlow, Barbara R. Redding. Text book of paediatric nursing. Philadelphia: Elsevier publications; 2009.888 - 889
- [5] Susan Gafole. Play therapy for children [Internet].2007 [Updated 2010 Feb10; cited2011Nov10]. Available from: <http://www.playtherapyforchildren.com/play.html>