

ORIGINAL ARTICLE**ROLE OF OCCUPATIONAL THERAPY ON DEPRESSION, ANXIETY AND SELF-ESTEEM OF ABUSED CHILDREN****ABSTRACT****BACKGROUND AND AIM**

According to WHO, 40 million children of ≤ 15 years old are abused in a year. Child abuse is the contravention of rights and dignity of children whether it is physical, sexual, neglect or emotional, causes depression, anxiety, antisocial life, low self-esteem, destructive personality, disturbed sexual behavior and suicide. Pediatric occupational therapy plays an important role in physical, emotional, cognitive and sensory development of the children. This study outlines that Occupational Therapy interventions play significant role in reducing depression, anxiety and improving self-esteem among children with abuse

METHODOLOGY

It was Quasi experimental study. This study was conducted at NGOs on abused children. This study carried out on 50 participants, aged 8-17 years. Pre and post evaluations and assessments with two scales were administered for 10 weeks program with Occupational Therapy interventions that has been implemented in different groups consisted of 6-7 members in group settings with art therapy and play therapy.

RESULTS

The Revised Children's Anxiety and Depression Scale-25 (RCADS-25) measured for anxiety and low mood to conclude for the total anxiety and total depression.

CONCLUSIONS

Occupational therapy serves an effective intervention to reduce anxiety, depression and improves self-esteem providing better life quality, boosting confidence, trust and rebuilding personality of abused and neglected children.

KEY WORDS

Abuse, Depression, Anxiety, Self-Esteem, Occupational Therapy, Rehabilitation.

Urooj Javed

Occupational Therapist
Freelancer
jd_ot072@hotmail.com

Syeda Shawana

Occupational Therapist
Freelancer
khan.shawanatalha@gmail.com

Sobia Haroon

Occupational Therapist
CS School and Thinkmatic
sobia.haroon7@gmail.com

[Javed U,Shawan S,Haroon S.
Role of Occupational Therapy on
Depression, Anxiety and Self-Es-
teem of Abused Children .Pak.-
j.rehabil.2020;9(2);54-59]
DOI:10.36283/pjr.zu.9.2/011

INTRODUCTION

According to world health organization, around 40 million children of 15 years of age and below are abused each year¹. Child abuse is the contravention of basic rights of children and mutilates their dignity whether it is physical, sexual, neglect or emotional abuse². It is also known as the forceful involvement of these children in activities or acts that require consent which in case of age below 18 cannot be given by children themselves making them a vulnerable population³. Each of the conduct against rights of children is defined as child maltreatment (CM)⁴.

According to East, Central and Southern Africa health community, 223 million children are sexually abused globally with 150 girls and 73 boys. Sexual abuse has a marked 7.67% increase in Pakistan over the past years. Most susceptible ages for sexual abuse in Pakistan include children between 11 to 15 years⁵. In contrast, sexual humiliation is more common in children between 13–17 years of age, as reported in US department of justice⁶. Girls between 14 to 17 years of age are more vulnerable to sexual assault as compared to boys⁷.

Physical abuse is more common in children above 6 years of age⁷. According to a study conducted in US, 5.9% of children younger than 11 years and 12.5% of children of 18 years are physically abused⁸. Physical abuse is more common among all abuses representing 25 to 50% of children¹.

In US, Neglect is faced by 78% of children⁹. Neglect is mostly faced by children who are dwelling with multiple family members or have low socioeconomic status and education as well. Parental qualities also greatly effect neglect abuse by them on their own children, factors such as, parental stress or addictive habits make their children vulnerable to abuse by their parents⁹. Thus, children mostly suffer neglect as abuse at their own home¹⁰. Along with neglect, physical abuse is also influenced by socioeconomic status¹¹. About 20% girls and 5 to 10% boys suffer emotional or psychological abuse¹ and it is more commonly observed among children between 14 to 17 years of age⁷.

Studies conducted from 2010 to 2012 represents that global prevalence of child abuse represents 36.3% emotional abuse, 8% physical abuse, 4.4% neglect and 1.6% sexual abuse¹³. Studies suggest that 89% of cases of sexually abused children are abused multiple times either physically, emotionally or by neglect and 9% children abused non-sexually are later on sexually abused¹³.

91.6% of children abused through any means know their abusers due to being abused by foster parents, family members, neighbors, and day care guard-

ians¹⁰. A study conducted in 2015, stated that sexual humiliation by identified and already known person had occurred to 4.3% of girls and 1.1% of boys. Physically abused children by a care giver were 5%; emotionally abused 9.3% and neglect were 5.1%⁷. Moreover, children with cognitive and intellectual diseases are more prone to sexual abuse¹⁰. According to U.S child maltreatment report 2017, representation of child victims for boys is 48.6% and for girls is 51.0%. Rate of child abuse among girls is much higher in girls than boys representing 9.5 per 1,000 girls in the population and 8.6 per 1,000 boys in the population¹².

According to David and coworkers (2015), neglect, physical and emotional abuse leads to depression, anxiety, antisocial life, eating disorders, use of psychoactive substances, destructive personality, disturbed sexual behaviors and suicide even. Not only confined to childhood, abuse effects children in adolescence and later on creating lack of confidence and difficulties to continue studies and employment. According to study at UK, emotional and sexual abuse has more persisting mental health consequences at adulthood as compared to physical or neglect^{13,14,15}. Moreover, child abuse leads to difficulty building trust and relationships with pronounced feeling of being powerless, unguarded, weak and self-blaming⁵.

Studies suggest that children abused at childhood become offensive, aggressive and violent at adulthood¹⁵.

It is an inevitable fact that child abuse has extreme effects on life quality and health of victims. Treatments of child abuse targeting on specific outcomes may not be effective rather wide range of treatments that prevent mental health of children from getting effected for a lifetime should be implemented⁴. Occupational therapy could play a role in this respect by rehabilitation of these victim children.

Art therapy is a health profession focusing on mental health along with psychosocial dimensions. It is not limited to victims of abuse or trauma but is beneficial for mentally healthy children as well¹⁶. Effect of art therapy is to develop acceptance and admittance among children helping them to recuperate from traumatic events of their life. It provides a comfortable platform to victims to express their feelings, thoughts, emotions, and reactions regarding the abuse experienced by them without any words^{17,18}. Art therapy provides a ubiquitous, nonverbal environment with immediate and long term effects¹⁹. Long term effect of art therapy is to decrease stress, depression and anxiety, enhance emotional strength, boost self-esteem, and to diminish the feeling of isolation. It also helps to rebuild relationships and trust. Creative art therapy

also improves problem solving capabilities among children and provides strength and confidence to cope with different situations in daily life, along with capability to manage their behaviors with respect to be neutral, accept, or reject^{17, 18, 19}. Thus, art therapy is a creative way of treatment and rehabilitation improving psychosocial conditions²⁰.

Play therapy is a mental and physical health development method²¹. Purpose of play therapy is to communicate with children without words, phrases or statements that children are hesitant to use²². Play therapy is implemented in 3 defined stages: first stage is development of communicable relationship between therapist and patient, encouraging children to share their thoughts, feelings and emotions whereas therapist observes their attitudes, responses and reactions. Second phase is actual effective phase where most of the therapeutic effects occur. Last stage is termination of therapy, and recognition of changes developed by children themselves and to follow a path to continue their progress²³. Play therapy removes insecurities from children and helps them to explore their strengths and skills²⁴. It also focuses to divert attention from facts that irritate or creates devastating effect on a child's personality towards positivity, relieving stress, anxiety and depression symptoms among children if applied effectively. Effective implementation requires a play therapist to provide comfort, strength and empowerment to children and develop their trust²².

Hence, the aim of this study is to determine the role of occupational therapy in rehabilitation of abused children to the lower symptoms of depression, anxiety and improve self-esteem.

METHODOLOGY

Study design

Quasi experimental study

Study setting

The study was conducted at non-government organizations (NGO)

Target population

Children between 6 to 17 years of age with reported child abuse.

Sample size

50

Sampling technique

Non-probability Convenience Sampling Technique

Inclusion criteria

- Children aged between 6 to 17 years
- Children with reported child abuse (Sexual, psychological, neglect and physical abuse)

- A conventional student (i.e. without intellectual disability).
- Children with intact orientation

Exclusion criteria

- Children with language barriers
- Any intellectual disability
- History of suicidal attempts
- Children representing injury due to abuse

Assessment parameters

1. Revised Children's Anxiety and Depression Scale-25 (RCADS - 25)

It is a modification of children anxiety and depression scale, a 47-item based assessment scale. RCADS-25 is 25 items-based questionnaires to assess anxiety and depression among children. RCADS-25 is calculated in terms of total score signifying the intensity of each parameter. Reliability of RCADS-25 was found to have a Cronbach $\alpha = 0.93$ ²⁵.

2. Rosenberg Self-Esteem Scale (RSE)

It is a 10-item based questionnaire to assess self-esteem and self-worth globally through positive and negative responses regarding one's own self. Reliability of this questionnaire was found to have a Cronbach $\alpha = .83$ ²⁶.

Data collection procedure

Written consent was obtained from non-government organizations included in the study. Children were assessed using RCADS - 25 and RSE, pre and post to application of occupational therapies. Two occupational therapies were implemented, one hour for each for duration of 10 months described as follows:

1. Art therapy

Art therapy included non-verbal treatment sessions conducted each day. Art such as sculpting, collage making, painting, drawing, clay and dough pottery were implemented involving each child to their best¹⁷.

2. Play therapy

Play therapy included both indoor and outdoor games.

Outdoor games were played on alternate days of week for an hour including football, cricket, skating, cycling, etc.

Indoor gaming was played for one hour daily that included Ludo, ONO, puzzles, character play, storytelling, passing the balls, etc²².

Statistical Analysis

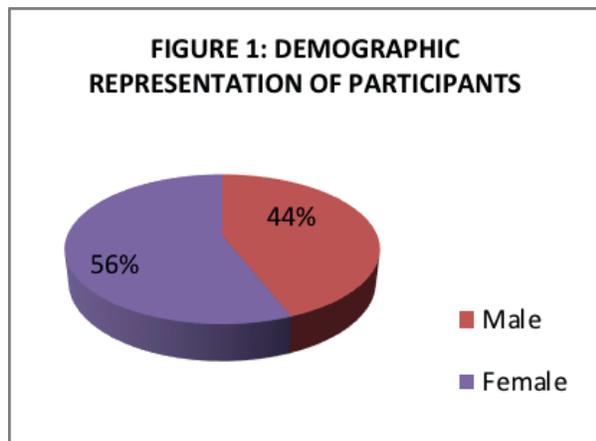
Data was analyzed using SPSS version 20. Demographic qualities of the participant were presented using descriptive statistics. Paired t test was used for the analysis of variables as the data was found to be normally distributed.

Ethical considerations

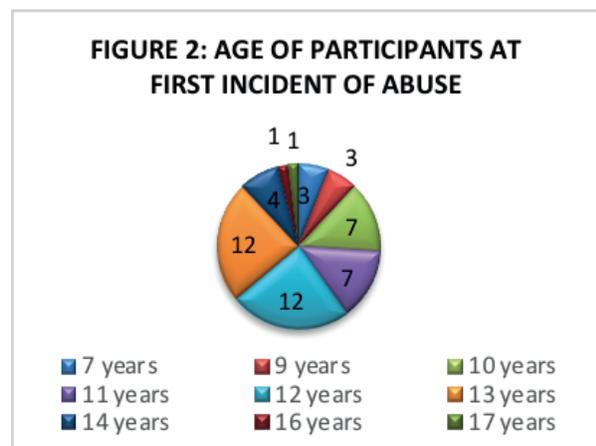
Consent was obtained from non-government organization to recruit children in this study. Study design was explained to concerned organization heads, confidentiality of data was assured. Participants and NGO were given the right to withdraw from the study at any point.

RESULTS

Demographic representation of studied participants depicts 44% boys and 56% girls. Noticeably, child abuse among girls is more common than boys (Figure 1).



Age of studied participants at first incidence of getting abused represents 24% children abused at 12 and 13 years of age, 14% children abused at 10 and 11 years of age, 8% children abused at 14 years of age, 6% abused at 7 and 9 years of age, and 2% abused at 16 and 17 years of age (Figure 2).



Results from revised children's anxiety and depression scale – 25 represents two components for assessment of anxiety and depression. Intensity of scores is represented as: scores below 65 indicates low severity, between 65 and 70 indicates moderate severity whereas scores above 70 indicates high severity of anxiety and depression²⁵.

Mean anxiety scores of studied participants before

therapy was 22.28±8.16 and after occupational therapy treatment was 14.06±6.59 (Table 1).

Table 1 Mean anxiety scores

ANXIETY	MEAN±SD	p-Value (<0.05)
n=50 PRE	22.28±8.16	1000.0 <
POST	14.06±6.59	

Results from Rosenberg's self-esteem scale were summed up using 4-point Likert scale ranging from strongly agrees to strongly disagree. Mean score of participants before intervention for positive responses was 11.32±3.36 and for negative responses was 11.66±2.11. Mean score of participants after intervention for positive responses was 11.94±3.97 and for negative responses was 10.34±2.91 (Table 3, table 4).

Table 3. Mean score of participants before intervention

POSITIVE RESPONSE	MEAN ±SD	p-Value (<0.05)
n=50 PRE	11.32±3.36	1000.0 <
POST	11.94±2.11	

Table 4. Mean score of participants after intervention

NEGATIVE RESPONSE	MEAN±SD	p-Value (<0.05)
n=50 PRE	11.66±3.97	1000.0 <
POST	10.34±2.91	

DISCUSSION

This study investigated the effect of occupational therapy interventions to decrease symptoms of depression, anxiety and improve self-esteem among abused children. Findings of the study suggests that effective implementation of art therapy and play therapy on abused children for a long period of time reduce their mean anxiety and depression scores, and their attitude towards their own self also turned out to be more positive after intervention. Throughout the intervention of occupational therapies, it was observed that the participants were hesitant to name or explain their emotions. Art therapy and play therapy thus provide a non-verbal source of communication and expression.

Occupational therapy, as a profession has always enabled people to participate in their various individual, social, vocational, and societal roles, has a large part to play in psychosocial rehabilitation. It is a misconception that rehabilitation is only needed for chronic mentally ill people but not for

people having mental disorders arising from traumatic events in life²⁷. Rehabilitation interventions help them change their attitudes, beliefs, patterns of maladaptive behavior developed due to traumatic or abuse incidences and also help them to adapt in different environment²⁷. Therefore, occupational therapy focuses on optimizing the fit between an individual's abilities and the environmental demands, which is the core theme of the recovery and bio-psychosocial models²⁷.

According to a study, feeling of worthlessness, shame, self-blaming, stigma, decreased confidence, low self-esteem, lack of trust in relationships are major barriers for children to enroll in therapies that are highly focused on verbal interactions with therapists. Moreover, verbal therapy may not be the most effective treatment method because; due to lack of trust and difficulty in interaction the children may not express and state their experience and associated emotions. The traumatic memories may exist not only in childhood but may haunt these children in adulthood affecting their life quality. By utilizing therapy focused on play or art, the children may process and work toward resolution more comfortably²⁸. Traumatic events are frequently re-called in multidimensional forms. A therapy allowing access to all of those dimensions is more beneficial and effective than merely treating the psychological symptoms of the abuse²⁸.

Previous study suggests that five out of 25 items (20%) in RCADS - 25 were detected as uniform non-invariance among genders, which suggested that adult girls and boys had different perceptions of these items because of different brain processing in both genders.

However, in our study no such differences were observed. Equal responses were observed for both boys and girls for each item of RCADS – 25²⁵.

In previous studies, a significant decrease in psychological symptoms was found in the treatment (sample) groups though implementation of art therapy and another study reported a significant decrease in symptoms of depression markedly. The evidence of effectiveness in these studies was based on comparative outcome trials with control groups depicting decrease in psychological symptoms such as depression, anxiety. Thus, sufficient evidence supports this study¹⁷.

According to a study in 2016, play therapy implemented on hospitalized children proved to reduce their stress, improved coping skills and had a positive impact on their psychosocial health. Although the overall results of this study support the occupational therapy interventions in reducing children's anxiety, depression and negative emotions but it is essential to assure the implementation

potential of such interventions by providing flexible time for the interventions with repeated sessions making sure that children are involved in therapies to their best so that maximum positive effects could be made³⁰.

Moreover, this study was conducted at a private non-government organization with a limited population of abused children. If government and non-government organizations join hands for implementation of occupational therapy, better results and effects could be drawn.

Thus, Occupational therapy serves to be a beneficial and wide rehabilitation intervention and since it is economical for people with lower socioeconomic status as well, it will be propitious for society to implement occupational therapies and interventions in different psychosocial disorders in children for which more research has to be done.

CONCLUSION

It is concluded that occupational therapy serves as an easy and effective intervention to reduce symptoms of anxiety, depression and low self-esteem among children abused either physically, sexually or emotionally, providing them a better quality of life and boosting their confidence, restoring trust and rebuilding personality with positive regards for their own being. Undoubtedly, there is need of early intervention of occupational therapy for child abuse to better assimilate and utilize therapeutic activities in clinical practice for long run with emphasis on assessment, facilitation and strengthening techniques for complete rehabilitation of such children.

REFERENCES

- [1] Koc EM, Dagli FS, Aksakal FN, Aksoy H, Kahveci R, Baser DA, Meads C, Ozkara A. Exploring Prevalence of Child Abuse: Use of ICAST-Retrospective Instrument with the First Year Medical Students in a University. *Konuralp Medical Journal/Konuralp Tip Dergisi*. 2018;10(1).
- [2] Seth R. Child abuse and neglect in India. *The Indian Journal of Pediatrics*. 2015;82(8):707-14.
- [3] Alam N, Naveed S, Ahmad MS, Aziz I. Prevalence Of Sexual Assault at District Peshawar. *Journal of Medical Sciences*. 2018;26(3):225-8.
- [4] Vachon DD, Krueger RF, Rogosch FA, Cicchetti D. Assessment of the harmful psychiatric and behavioral effects of different forms of child maltreatment. *JAMA psychiatry*. 2015;72(11): 1135-42.
- [5] Perveen S. Child Sexual Abuse in Pakistan – A Factual Analysis | *JPMS Medical Blogs [Internet]*. *Blogs.jpmsonline.com*. 2019 .
- [6] Manyike Pius C, Chinawa Josephat M, Aniwa-da Elias OO, Chinawa TA. Child sexual abuse

- among adolescents in southeast Nigeria: A concealed public health behavioral issue. *Pakistan journal of medical sciences*. 2015 31(4):827.
- [7] Finkelhor D, Turner HA, Shattuck A, Hamby SL. Prevalence of childhood exposure to violence, crime, and abuse: Results from the national survey of children's exposure to violence. *JAMA pediatrics*. 2015;169(8):746-54.
- [8] Lereya ST, Copeland WE, Costello EJ, Wolke D. Adult mental health consequences of peer bullying and maltreatment in childhood: two cohorts in two countries. *The Lancet Psychiatry*. 2015;2(6):524-31.
- [9] Friedman E, Billick SB. Unintentional child neglect: literature review and observational study. *Psychiatric Quarterly*. 2015;86(2):253-9.
- [10] Perveen, S. Child Sexual Abuse in Pakistan – A Factual Analysis | JPMS Medical Blogs 2019.
- [11] T. Leeb R, J. Paulozz L, Melanson C, R. Simon T, Aria I. https://www.cdc.gov/violenceprevention/pdf/CM_Surveillance-a.pdf [Internet]. Cdc.gov. 2019
- [12] Milner J. Child Maltreatment 2017 [Internet]. Acf.hhs.gov. 2019
- [13] Vachon DD, Krueger RF, Rogosch FA, Cicchetti D. Assessment of the harmful psychiatric and behavioral effects of different forms of child maltreatment. *JAMA psychiatry*. 2015 ;72(11):1135-42.
- [14] Lereya ST, Copeland WE, Costello EJ, Wolke D. Adult mental health consequences of peer bullying and maltreatment in childhood: two cohorts in two countries. *The Lancet Psychiatry*. 2015;2(6):524-31.
- [15] Debowska A, Boduszek D. Child abuse and neglect profiles and their psychosocial consequences in a large sample of incarcerated males. *Child Abuse & Neglect*. 2017;65:266-77.
- [16] Petruta-Maria C. The role of art and music therapy techniques in the educational system of children with special problems. *Procedia-Social and Behavioral Sciences*. 2015;187:277-82.
- [17] Schouten KA, de Niet GJ, Knipscheer JW, Kleber RJ, Hutschemaekers GJ. The effectiveness of art therapy in the treatment of traumatized adults: a systematic review on art therapy and trauma. *Trauma, violence, & abuse*. 2015;16(2):220-8.
- [18] Ugurlu N, Akca L, Acarturk C. An art therapy intervention for symptoms of post-traumatic stress, depression and anxiety among Syrian refugee children. *Vulnerable children and youth studies*. 2016;11(2):89-102.
- [19] Kestenbaum C, Canino IA, Wu WC, Duch H, Marti M, Snow R, Suzuki K, Cortez-Feliciano G, Levine M, Hoberman A, Benavides C. CARING at Columbia Head Start: Promoting resilience through creative art and play and a prevention model for at-risk preschool children and families. *J Am Acad Child Adolesc Psychiatry* 2016;55(10):S352.
- [20] Rowe C, Watson-Ormond R, English L, Rubesin H, Marshall A, Linton K, Amolegbe A, Agnew-Brune C, Eng E. Evaluating art therapy to heal the effects of trauma among refugee youth: The Burma art therapy program evaluation. *Health promotion practice*. 2017;18(1):26-33.
- [21] Stewart AL, Field TA, Echterling LG. Neuroscience and the magic of play therapy. *Int. J. Play Ther.*2016;25(1):4.
- [22] Ray DC, Armstrong SA, Balkin RS, Jayne KM. Child-centered play therapy in the schools: Review and meta-analysis. *Psychology in the Schools*. 2015;52(2):107-23.
- [23] Slade MK, Warne RT. A meta-analysis of the effectiveness of trauma-focused cognitive-behavioral therapy and play therapy for child victims of abuse. *J. Young Investig*2016 ;30(6).
- [24] Perryman KL, Moss R, Cochran K. Child-centered expressive arts and play therapy: School groups for at-risk adolescent girls *Int. J. Play Ther.*2015;24(4):205.
- [25] Bagheri Z, Akbari M, Jafari P, Huedo-medina TB. Assessing the measurement invariance of the RCADS-25 questionnaire across gender and child-parent dyads in the presence of multilevel data. *Quality of Life Research*. 2019;28(3):829-40.
- [26] Kong F, Ding K, Zhao J. The relationships among gratitude, self-esteem, social support and life satisfaction among undergraduate students. *J Happiness Stud*2015;16(2):477-89.
- [27] Samuel R, Jacob KS. Occupational therapy in India: focus on functional recovery and need for empowerment. *Indian J. Psychiatry*. 2017 ;59(2):242.
- [28] Glover NM. Play therapy and art therapy for substance abuse clients who have a history of incest victimization. *Journal of Substance Abuse Treatment*. 1999;16(4):281-7.
- [29] Li WH, Chung JO, Ho KY, Kwok BM. Play interventions to reduce anxiety and negative emotions in hospitalized children. *BMC pediatrics*. 2016.;16(1):36.