

An Investigation into the Effect of Group Play Therapy on Aggression Reduction in Male Preschool Students

Elina Khadivi Zand ^{1*}, Seyyed Mohsen Asghari Nekah ²

-
1. MA in Clinical Psychology, Department of Mental Health, University of Medical Sciences, Mashhad, Iran.
 2. Assistant Professor of Education and Psychology of Exceptional Children, Faculty of educational and sciences psychology, Ferdowsi University of Mashhad. Email: asghari-n@um.ac.ir
- * Corresponding Author's Email: Khadivize2@mums.ac.ir
-

Abstract – The current research aims at investigating the effect of group play on aggression reduction in male preschool students. The population of the study was male preschool students in Mashhad, a city in north east of Iran. Among the preschool centers across the city, one center was randomly chosen for the study, from which thirty students were randomly assigned into two groups of experimental and control. The experimental group would undergo 11 sessions of play therapy. The research benefits from a quasi-experimental pre-test post-test design with descriptive, prescriptive and co-variance analysis for interpreting the data. The results of the study indicate that play therapies reduced the amount of aggression on children to a large extent. Thus, a comparison of the results of pre-test with the post-test indicates a meaningful difference at the $p < 0.05$ degree of freedom, suggesting that group play therapy can reduce the preschool children's aggression.

Keywords: group play therapy, aggression, children

I. INTRODUCTION

Preschool is a right period for diagnosis and treatment of children's problems, which will, in turn, prevent ensuing emotional, social and educational problem in children's future. One of the most common problem both parents and children suffer from is children's aggression. Thus, timely diagnosis and treatment of such problem can prevent this problem from continuing into adult years (Goodwin, Pacey and Grace, 2003). Aggression is a complicated issue. On the one hand, there are contextual and situational constraints that bring about the aggression. On the other hand, biological and genetic factors can result in children's aggression. Thus, providing a concise definition for the term "aggression" is an arduous task. According to Baron and Richardson (1994), the aim of aggression is to harm other people physically or damage their properties, which result in reaction by the victim.

In a number of studies, Moyer (1968), Boss and Perry (1992), Buss and Durkee (1997) and Harris (1995) have indicated that aggression is far from being a general problem but aggressive behavior can appear under the framework of different subtypes. Among these researchers, Moyer

(1968) indicated that aggression is not a uniform phenomenon even in animals. For this reason, he has identified a number of subtypes of aggressive behaviors in animals such as hunting aggression accompanied with feeling of hunger and attainment of prey, competitive aggression which is way for obtaining higher social and professional positions, providing food and water, mating and breeding and defensive aggression presented as the animal faces dangers or with other animals. Irrigative aggression is a type of internal anger invests on both objects and live creatures. Painful stimulators such as electric shock can bring about this kind of aggression.

Human aggressive behavior has also been paid attention to in new theories. According to social-cognitive information processing model (Crick, 1995; Dodge and Coie, 1987), violation in one or a few of component of the process is the key reason for formulation of aggressive behavior. According to this model, it can be claimed that one hand, aggressive behavior is way of confronting daily problems. On the other hand, it can be considered to be the product of faulty interpretation of situation, planned goals, selected strategies and evaluation of responses which are the main components of personal and cognitive information analysis system. The findings from these researches is an indication of the fact that aggressive children are likely to be aggressive in their adulthood. On the other hand, various researches have been suggesting that aggressive behavior has increased among school children over the past few years, which can have long term negative and irreparable effects on children. Various researches now suggest that aggressive children are often left by their peers, have lower school performance, and are more susceptible to being dropped from school and committing delinquency (Kozden, 1997).

Play is probably the most appropriate and strongest medium for children's growth which enables them to communicate with their adult peers and create in themselves the causal analysis thinking within their own minds. Play can give children a feeling of power resulted from being encountered with the challenges and problems during the play process. As a result, play will create confidence and satisfaction in children and help them improve further in their future careers (Derouz, 2010). Through play and play-oriented activities, children will be able to communicate with each other without conversation. Play relates children's internal contemplations with their external world, enabling children to control external objects. Play will let children to show those feelings, experiences, thoughts, and tendencies which are often threatening to them (Wethinton, 2008). Play is an appropriate approach to treat children because children often find it difficult to express their internal tendencies. Through play, children will be able to reduce barriers and express their feelings even further. Plays enable children to learn their controlling skills even further (Porter, Hernandez, Reif and Jessee, 2007).

Because of the unpleasant effects of aggressive behavior, it has been a long time that anger and aggression is considered a real problem that requires clinical and legal investigation. Those young adults who are not able to repress their anger often indicate certain degree of aggressive behavior, which put them among those target groups requiring most attention and investigation. A large number of researchers have been concerned with finding approaches to control aggression (Feindler and Ecton, 1986). Group play therapy can be considered as a combination of two types

of treatments. This approach can create psychological and social treatment for children. The combination of play therapy and group therapy is a cognitive and psychological approach in which children learn in play rooms things about themselves. Group play therapy provides opportunities for therapists to help children resolve their internal contradictions (Dayle Jones, 2002).

Play therapy is a structured approach based on treatment therapy which plans the children's learning processes and natural communication (Carmichael, 2006). Treatment power hidden in play can be used in different ways. Through play, therapists will be able to teach children with low social or emotional skills to behave in more suitable ways (Pedro-Carroll and Reddy, 2005).

A positive relation can be created between the children and the therapist during the therapy process, which creates an invaluable experience necessary for the therapy process. Objects are an important component of play therapy (Moustaks, 1997). Play therapy is an approach which can act as both preventing and curing children, which can teach children the right way of communicating with their peers through collective play, plays, etc. (Landreth, 1995). Since play are a tool for children to express their "identity", it can prompt thoughts, experiences and act as a site where children can get rid of their false excitements. Various research indicate that group play therapy can improve children emotionally, socially, behaviorally and reduce the impact of such events as divorce, death, disease and being admitted to the hospital, physical and sexual offenses and family aggression. On the other hand, the main problem children with aggression suffer from is the fact that they cannot find opportunities to discharge their excitement. Thus, the current research aims at investigating the effect of play therapy on decreasing the aggression in preschool children.

II. METHODOLOGY

The current research employs a pre-test post-test quasi-experimental approach with two groups of experimental and control group participants (Sarmad, 2006). The independent variable in this paper is the play therapy in children while the dependent variable is the children's aggression. The population of the study is the preschool children in the city of Mashhad, a city in north-east of Iran. 30 children participated in the study, which reduced to 21 after the pre-test. The participants were randomly assigned to the experimental and control group.

A Likert scale questionnaire with 42 items has been used in the current study to assess the amount of aggression in children. The questionnaire has been made valid and reliable in 1999 by Vahedi, Fathi Azar, Hosseini Nasab and Moghaddam. The reliability coefficient of 0.98 in the four factors is satisfactory. According to the findings of the current study, the general Cronbach's Alpha coefficient for aggression has been computed as 0.81 while the Cronbach's Alpha for each factor as relational aggression, physical aggression, speech aggression and pulsed aggression have been obtained as 0.69, 0.74, 0.83 and 0.76 respectively. Each item is scored as zero (never) to 5 (always). The total score ranges between zero and 168. The higher the score for each factor, the higher is the aggressive behavior in the participants. In other words, those participants with the average of 117.48 (for females) and 125.77 (for males) are known as aggressive.

After assigning the preschool center for the study, the questionnaires were completed by the parents of the participant in the study. As it was mentioned, the high scores are in indication of the more aggressive behavior while the low score show that the child is less aggressive. The participants were randomly assigned to t experimental and control groups. The experimental took eleven sessions of play therapy two sessions a week with each session taking 1 hour and a half. The data obtained by the questionnaire were both descriptively and analytically analyzed. In order to analyze the data, SPSS was used to compute the mean as well as the standard deviation. Also, at the inferential level, MANOVA test was used to examine the relation between the data.

III. RESULTS

The participants of the study were 21 children. The lowest and the highest age frequency were group aged 6 and group aged 4 to 5.5 year olds respectively. The highest and lowest birth order belonged to the first and third birth order. In this section, the descriptive data regarding each variable will be presented.

Table 1: Descriptive characteristics of variables

variable	mean	Standard deviation
pre-test speech aggression	25.3	7.9
pre-test physical aggression	27.1	2.8
pre-test relational aggression	17.8	4.5
pre-test pulse aggression	21.4	4.2
pre-test general aggression	90	17.1
post-test speech aggression	22	5.7
post-test physical aggression	18.8	3.9
post-test relational aggression	18.6	4.8
post-test relational aggression	17.4	3.9
post-test general aggression	64.1	13

Data related each of the variables have been indicated in table 1. In order to test the hypotheses of the study, Kolmogorov-Smirnov test has been used. In the current study, variables of speech, physical, relational and pulsed aggressions have been compared across the experimental and control group. Since it was suspected that the resulting difference might have been because of the effect of the pre-test, the pre-test and population variables were analyzed with multiple variable variance analysis, which eventually indicated the pure resulting difference. The results of the

Kolmogorov-Smirnov test indicated that the assumption that data had been equal while the Kolmogorov-Smirnov test proved the equality between the variances, thus justifying the need to do a parametric MANOV test.

Table 2: Results of one-way co-variance analysis, comparing mean of post-test aggression in control and experimental group with pre-test control

aggression	Total squares	df	Mean squares	F	Level of meaningful	Eta
general	1686.76	1	1686.76	17.74	0.001	0.496
physical	96.266	1	96.266	8.12	0.011	0.311
relational	12.692	1	12.692	0.50	0.486	0.027
speech	140.52	1	140.52	5.29	0.034	0.227
pulse	87.213	1	87.213	7.247	0.015	0.287

As indicate in the above table, by controlling the pre-test, a meaningful difference can be found in general, physical, speech and pulsed aggression across pre-test and post-test. In other words, there exists a meaningful difference between general, physical, speech and pulsed aggression when removing the effect of the pre-test ($p < 0.05$). besides, the amount of impact or difference in general, physical, speech and pulsed aggression variables are 0.49, 0.31, 0.22 and 0.28 respectively, meaning that there has been 49, 31, 22 and 28 percent individual difference in the results of general, physical, speech and pulsed aggression post-test.

IV. DISCUSSION AND CONCLUSION

The purpose of the current research has been to investigate the effect of group play therapy on reduction of aggression in preschool children. Also, among subsidiary aims of the study is investigation into the effect of play therapy on each component of aggression in children. The current research is employs a quasi-experimental pre-test post-test design with both experimental and control group. The independent variable of the research is group play therapy and the dependent variable is children's aggression. Since one third of children referring to psychology services suffer from aggression (Achenbach, Edelbrock, Gilbert, Herbert, Robins), aggressive behavior is not valid enough to recognize the behavioral criterions in children.

Numerous research studies have indicated the clinical importance of aggression in children. Meanwhile, preschool years are the best time to diagnose and treat such aggressive problems as this will help children into their future social, educational and behavioral life. Also, play therapy can tremendously improve children's level beyond their existing aggressive behavior. Thus, what can be seen in preschool children's behavior can continue into their future life (Kedason, 2003).

In this paper, we aimed at reducing the amount of aggressive behavior in children. The result from the current study are in line with the previous literature on aggressive behavior in children such as (Ghaderi, 2006) the effect of behavioral-cognitive play therapy on 11-18 male children with aggressive behavior; (Asgarniya, 2001) the effect of the method of behavioral-cognitive method; Ashoori (2008) the effect of group play in aggression reduction; Nasirzadeh (2010) investigating the effect of storytelling in aggression reduction in 6-8 male children; Bahrami (2005) the effect of teaching problem solving techniques on the reduction of aggression reduction of male students; Zolmajd (2007) the effect of sand play therapy on aggressive male children and Jalali (2008) the effect of children's play therapy on special fears in children. Also, among foreign findings, the current research study is in line with such papers as Landreth (2009) the effect of play therapy on children's behavior and excitement; Tyndall-Lind (1992) the effect of play therapy on children suffering from family sexual abuse, Bornan et al. (2007) and Lochman (1994) the effect of group game therapy on the aggressive male student's behavior; Baggerley (2004) the effect of child oriented group play therapy on children's depression and anxiety, Nangle, Erdly, Carpenfer, Newman (2000) teaching social skills to aggressive children and teenagers. However, the findings in this study are not in line with the research findings from McGivern (2000) who investigated the effect of group play therapy on reducing behavioral problems, increasing behavioral and emotional compatibility, improving the concept of self and increasing self-regulation in children.

While determining the results of the current research, it should be mentioned that there are a large number of studies that estimate the effect of group play therapy on the treatment and reducing children's various impairments. These studies determine the change in children's behavior before and after the treatment. Of particular benefit are such treatments on children with such problems as sexual abuse, aggression, dependence problems, autism, schizophrenia, phobia, stress, emotional problems, chronic disease, physical challenges, reading problems, deafness, confidence, self-image, trauma, divorce and psychological problems (Rennie, 2000).

In fact, physical expression of anger and aggression within the safe environment of play can help children to recognize their own fears, empty their fear, and improve the right way to express their own anger (Lendre, Namke, 1995; cited in Kedason, 2003). Play will enable children to solve their own problems independently in their plays. In this approach, children are allowed to express their annoying emotions and internal problems through plays (Exline, 1990).

In fact, within the current research, such skills as recognizing various excitements that help children recognize their own capabilities, self-regulatory skills, aim-oriented plays that help children resolve their own problems and home works that help parents recognize their children's behaviors are taught.

Generally, it can be claimed that various research studies indicate that group play therapies can affect positively on children's resolve their life challenges. Various research studies show that group play therapy can predict various behavioral problems in children, such as behavioral problems, aggression, anxiety and depression, sexual abuse, divorce, overdependence, educational

development, etc. also, according to the results, psychological advantages such as group dependence, and learning as a result of cooperation and facilitated excitement removal. Also, the fact that group play therapy is more similar to social events (Khadivi Zand, 2003) makes such type of plays more effective than individual plays. The findings from the current research study which indicate that play therapy can positively affect children with aggressive behavior are in line with those research studies indicating play therapy as a strong tool to reduce children and teenagers' problems.

A. Limitations of the Study

All kinds of therapy including play therapy require parents' cooperation and satisfaction to take part in the experiment and treatment process. Since art of the therapy process include changes in parents own behaviors and norms and the way they treated and dealt with their aggressive children, occasionally reluctance on the parents to do so was one of the limitations of the study. Other limitations of the study include the restricted number of the participants of the study and the fact that all the participants were male, which make the results of the study less generalizable.

B. Recommendations

What is less costly and more effective than treatment is prevention. Thus, in order to prevent impairments resulting from aggressive behavior, play and story sessions are recommended to be held for children where teaching necessary skills will help children resolve their own problems. Other recommendations include training skilled people to work with children, and working with parents of children to improve children suffering from aggressive behavior.

REFERENCES

- Achenbach, T.M., Edelbrock, C. (1978). The classification of child psychopathology: A review and analysis of empirical efforts. In: Hughes, Jahn (1988). *Cognitive Behavior Therapy with children in schools*.
- Asgarniya, R. (2001). The effect of cognitive-behavioral play therapy in aggression reduction of children aged 6-7. Thesis for a master's degree Ferdowsi University of Mashhad
- Ashouri, A., Malayeri, M., Navaii, Z. (2008). The effect of centered group therapy on aggression reduction and educational improvement in kids. *Journal of psychiatry and psychology of Iran*. 14(4): 389-393.
- Baggerly, Jennifer, (2004). The Effects of Child-Centered Group Play Therapy on Self-Concept, Depression, and Anxiety of Children who are Homeless, *International Journal of Play Therapy*, 13(2): 31-51.

- Baggerly, Jennifer, (2003). Child-Centered Play Therapy with Children who are Homeless, *International Journal of Play Therapy*, 12: 87-106.
- Bahrami, F. (2005). The effectiveness of teaching problem solving in reducing aggressive behavior in female students. *Journal of Thoughts and behavior* .11(4), 469-476.
- Baron, R. A. and Richardson, D. R. (1994). *Human Aggression*. New York: Plenum Press.
- Bornann, B.A.; Mitelman, S.A.; Ber, D. (2007). Psychotherapeutic relaxation: How it relates to levels of aggression in a school with inpatient child psychiatry a pilot study the arts in psychotherapy, retrived,1, from <Http://www.Elsevier.com>
- Boss, A.H. Perry M. (1992). The Aggression questionnaire. *J Pers Soc*; 63: 452-9.
- Buss, A.H. and Durkee, A. (1997). An Inventory for Assessing Different Kinds of Hostility. *Journal of Consulting Psychology*. 21, 343-349
- Crick, N.R; Grotpeter, J.F.(1995). Relational aggression, gender, and social psychological adjustment child development,66,710-792.
- Carmichael, K.D.(2006). Play Therapy: An introduction. Glenview, IL: Prentice Hall
- Dayle Jones, K., (2002). Group Play Therapy with sexually abused preschool children: Group Behaviors and Interventions, *Journal for Special in Group Work*.
- Derouz. A. (2010). The combination of play therapy and behavioral-cognitive therapy. Translated by Ramezani. GH. Tehran. Vaniya.
- Dodge, K.A. and Coie, J.D. (1987). Social Information Processing Factors in Reactive and Proactive Aggression in Children's Peer Groups. *Journal of Personality and Social Psychology*. 53, 1146-1158.
- Exline. V., (1990). Play Therapy. Translate; Hajjarian. A., Tehran. Keyhan.
- Findler, E. L. and Ecton, R. B. (1986). *Adolescent Anger Control, Cognitive-Behavioral Techniques*. New York: Pergamon Press.
- Free. M (2001). Group Cognitive Therapy. Translate; Sahebi. A., Andouz. Z., Hamidpour. H .Mashhad: Jahad daneshgahi.
- Ghaderi. N., Ashgharimoghadam., Shaeer. M. (2006) . Evaluation of the efficacy of cognitive-behavioral play therapy on aggression in children with conduct disorder. *Journal of Behavior*.75-84.
- Gilbert,G.M.(1957). "A survey of referral problems" in metropolitan child guidance centers. In: Hughes, Jahn (1988). *Cognitive Behavior Therapy with children in schools*.
- Goodwin, T., Pacey, K., & Grace, M. (2003). Children: Violence prevention in preschool settings. *Journal of Child and Adolescent Psychiatric Nursing*, 16, 52-59.

- Harris, J. A. (1995). Confirmatory Factor Analysis of the Aggression Questionnaire. *Behavioral Research Therapy*. 33(8), 991-993.
- Herbert, M. (1987). Conduct Disorder of childhood and adolescence: A behavioral approach to assessment. In: Hughes, Jahn (1988). *Cognitive Behavior Therapy with children in schools*.
- Jalali, S., Aghaii, A., Molavi, H., Karahmadi, M. (2008). The effect of play therapy on 5-11 year old kid's phobia. *Journal of Knowledge and Research in Applied Psychology*. 10(25).
- Khadivi zand, M.M. (2003). Group Therapy. *Journal of psychotherapy news*. 7(27).
- Kedason, H., Schaefer, G., Charlz, Y. (2003). Translate Saberi, S., Vakili, P. Tehran. Arjmand.
- Kozden, A. (1997). Conduct disorder across the life span. In S. Luthar, J. Burack, D. Cicchetti (Eds.), *Developmental psychology: Perspectives on adjustment, risk, and disorder*, 248-272.
- Landreth, G. (1995). Play Therapy dynamics of consultation with children. Translate Ariyan. KH. Tehran. Etelaat.
- Landreth, G.L, Ray, D.C, Bratton, S. (2009). Play Therapy in Elementary School. *Psychology in the School*. 46 (3), 1-9.
- Lochman, J.E, & Wayland, K.K. (1994). Aggression, Social Acceptance and Race as Predictors of negative adolescents' outcomes. *Journal of American Academy of Children adolescent Psychiatry*, 91, 1026-1035.
- Mc Give, D.E. (2000). Child-Centered Group Play Therapy. *Dissertation abstract International*, 61-3903.
- Moustaks, C. (1997). *Relationship play therapy*. Northvale, NJ: Jason Aronson, Inc.
- Moyer, K. E. (1968). Kind of Aggression and their Physiological Basis. *Communications and Behavioral Biology*. 2, 65-87.
- Nangle, Douglas, W; Erdly, Cynthia, A. ; Carpenfer, Erika, M; Newman, Julie, E. (2000) Contribution to the outcome of mood and anxiety disorder patients in a group cognitive behavior therapy program? *American Journal of Psychotherapy*, vol.40, no.10.
- Nasirzadeh, R., Roshan, R. (2010). The effect of storytelling on aggression reduction of 6-8 year old male students. *Journal of thought and behavior*. 16, 118-126.
- Pedro-Carroll, J. Reddy, L. (2005). A preventive play intervention to foster children resilience in the after of divorce.
- Porter, M.L., Hernandez-Reif, M. Jessee, p. (2007). *Play Therapy: A Review*. *Early Child Developmental and Care*. Taylor & Francis.

- Rennie, Robyn Lyentte, (2000). A Comparison study of Individual and Group Play Therapy In *Treating Kindergarten Children With Adjustment Problems*. Dissertation Prepared for the Degree of Doctor of Philosophy.
- Robins,L.N.(1974). Antisocial behavior disturbances of childhood. In: Hughes, Jahn (1988). *Cognitive Behavior Therapy with children in schools*.
- Sarmad. A., Bazargan. A., Hejazi.E. (2006). Behavioral science research methods. Tehran. Agaah.
- Vahedi, SH., Fathi, E., Hoseini nasab, D., Moghadam, M. (2008). Investigating the validity and reliability of aggression scale in preschool students in Erumiya. *Journal of Mental health*. 10(37), 15-24.
- Wethinton, H.R., Hahn, R.A., Fugua-whitley, D.S., SIPE, T.A., Crosloy, A.E., Johnson, R.L., Liberman, A.M., Mosci chi, E.,Price, L.N., Tuma, F.K., Halra, G., Chatto Padhyay, S.K. (2008). The effectiveness of interventions to reduce psychology harm from traumatic events among child and adolescents. *American Journal of Preventive Medicine*. 35(3). 287-373.
- Zolmajd. A., Borjali. A., Ariyan. KH. (2007). The effect of playing on sand on treating aggressive behavior in male students. , *a research in exceptional children's area* .7. 155-168.