————————————— **Original Article** —————————————

Effectiveness of Group Play Therapy in Generalized Anxiety Disorder of Children

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Objective: Anxiety is one of the most common psychiatric disorders and almost 30% of the primary school children are affected by various kinds of it. Group play therapy has been reported to be a useful component of treatment of Generalized Anxiety Disorder (GAD). The goal of this research was to determine the efficacy of this treatment in children with GAD.

Methods: In this quasi-experimental study, 30 youths with GAD aged between 5 and 11 referred from Isfahan child psychiatric clinics were randomly assigned to two groups (15 patients in each group). Parents' form of CSI-4 questionnaire, GAD subscale, was used to diagnose the problem of these children with the help of a child psychiatrist. Case group got 1-hour weekly sessions for three months while no intervention was done for control group (waiting list). Analysis of covariance was used to compare two groups.

Results: Analysis of covariance showed that group play therapy reduces GAD symptoms in posttest stage meaningfully (p=0.02). It also reduces GAD symptoms in follow up significantly (p<0.0001).

Conclusion: The results of this study shows that group play therapy can be an effective method for reducing GAD symptoms in posttest and follow up stage.

Introduction

Generalized anxiety disorder (GAD) is characterized by excessive and uncontrollable worry about multiple events for at least six months. If GAD remains untreated in children, symptoms may persist and worsen in adulthood (1,2). Clinical observations indicate that severe cognitive psychological problems including difficulty in social role acceptance, academic problems and low self-esteem happen during this disorder (3,4). Most young children are unable to benefit from traditional talk therapy. Group play therapy refers to a method of psychotherapy for children involving peer interactions and interactions with a trained play therapist. In this method, a therapist uses the child's fantasies and symbolic meanings of his or her play as a medium to understand and communicate with the child to implement social, emotional and behavioral changes (5,6). Ray, Brattone, and Jones found that play therapy is effective on anxiety in children and improve their social skills (7). Furthermore, it has been demonstrated by Baggerly and parker that group play therapy is effective in reducing depression and anxiety (8).

The effectiveness of group play therapy in children's GAD has been evaluated in reviews and meta-analysis. The aim of this research was to investigate the effectiveness of group play therapy in reducing GAD symptoms in a group of Iranian children.

Materials and Methods

This research was performed as a quasi-experimental study including pretest, posttest and follow up. This study was conducted on 30

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youths aged between 5 and 11 years referred to child psychiatry clinics in Isfahan from September 2008 until March 2009. The samples were selected after a clinical interview conducted by a child psychiatrist and based on DSM-IV-TR and CSI-4 questionnaire (group D parental form). The children with GAD were diagnosed and those with no physical or major psychiatric disorder were included. Then, children were divided into two groups randomly, study group (7 girls and 8 boys) and control group (8 girls and 7 boys). There were no significant differences between groups in age, sex and GAD subscales. CSI-4 questionnaire was filled for participants before, after and two months after play therapy. Twelve 1-hour sessions of group play therapy were held every week by an expert play therapist. Reliability of GAD subscale was evaluated according to Cronbach's alpha (r= 0.801).

Contents of group play therapy:

Session 1: Therapist introduced herself to children and introduced the children to each other and play area.

Session 2: Determination of plays and selection of group plays.

Session 3: Creation of happiness and play with string.

Session 4, 5, and 6: Use of block time and hand puppets for role playing.

Session 7: Doll representation to exposure children to anxiety.

Session 8: Ball pool play and thief, police play.

Session 9: Paste play.

Session 10: Review of three previous sessions and transference of trained information to out of play area.

Session 11: Imaginary travel.

Session 12: Review of previous sessions and helping the children to abandon therapy sessions.

No intervention was done for control group (waiting list). In this study, analysis of covariance was performed using SPSS version 11.5 to compare two groups.

Research Performance Stages

Person's scores (CSI-4) which were used for detecting and choosing enrolled children were considered as pretest. Therapy took part during 12 weekly 60-minute sessions. After finishing therapy, mentioned questionnaire was completed by two groups' parents as posttest and by parents of those who were in test-group two months later as follow up. The Child Symptom Inventory-4 is a scale that screens DSM-IV emotional and behavioral disorders in 5- to 12-year-old children (9).

Results

Mean age was 6.4 and 7.4 years in study and control groups respectively. Study group included 7 girls and 8 boys while 8 girls and 7 boys were assigned to control group. In this research, analysis of covariance was used to compare the results of two groups. Using this method considering two hypotheses was necessary: 1- Normal distribution score suspicion. Because of equality of groups' volumes (case group=15, control group=15), considering this suspicion was not necessary. 2- Hypothesis of variance equality. Levin's test was used regarding this hypothesis. As visualized in table 1 Levin's test didn't show variance equality (p>0.05).

Table 1. Variances equality test of GAD subscale scores

subscale	f	Degree of freedom 1	Degree of freedom 2	Significance
GAD	3.905	1	28	0.06

Analysis of covariance of play therapy effects on GAD in posttest stage are shown in table 2. In order to inhibit pretest effects on results of posttest scale, pretest scale was controlled. It means that its effect on posttest scale has been eliminated and two groups have been compared according to residual scales.

Analysis of covariance of group play therapy effects on GAD is shown in table 3.

As it can be inferred from table 3, adjusted means difference between two groups are significant (p<0.0001). In other words, group play therapy decreases GAD symptoms in follow up stage. Our findings showed that GAD symptoms in study group decreased more compared with control group in posttest stage and this difference was significant (Figure 1).

Table 2. Analysis of covariance of mean posttest GAD scales in two groups

source	Sum of squares	df	Mean squares	F	Sig	Effect size	power
Pretest	261.566	1	261.566	34/145	0.00	0.558	1.000
Group membership	41.641	1	41.641	5/436	0.027	0.36	0.71

Table 3. Analysis of covariance comparing average GAD scores in follow up

source	Sum of squares	df	Mean squares	F	Sig	Effect size	power
Pretest	197.138	1	197.138	18/596	0.00	0.147	0.986
Group membership	239.903	1	239.903	22/630	0.00	0.465	0.996

Discussion

The findings of this study showed that GAD symptoms in study group who received group play therapy decreased more than control group in posttest stage significantly. This shows that group play therapy is efficacious in decreasing children's behavioral problems generally and their anxiety problems specifically. Group play therapy is an interpersonal process whereby a trained therapist helps children with behavioral and emotional problems and facilitates children's coping skills learning. Play is an appropriate therapeutic mode because young children frequently have difficulty verbalizing their feelings. Through play, children may lower their barriers and express their feelings better (10,11). A recent meta-analysis of 93 group play therapy studies revealed that group play therapy is an effective intervention for children (12). Analysis of covariance showed that GAD symptoms in case group who received interventional therapy was meaningfully lower than GAD symptoms in control group in follow up stage. The cause of this can be that the children need more time to universalize teaching to their peripheral environment. These findings are similar to the researches of Ray et al (2001) (7), Gerly et al (2005) (8), William lie et al (2007) (13), Ray (2004) (14) and Landert et al (2009) (15). Therefore, group play therapy is an effective treatment for children with GAD.
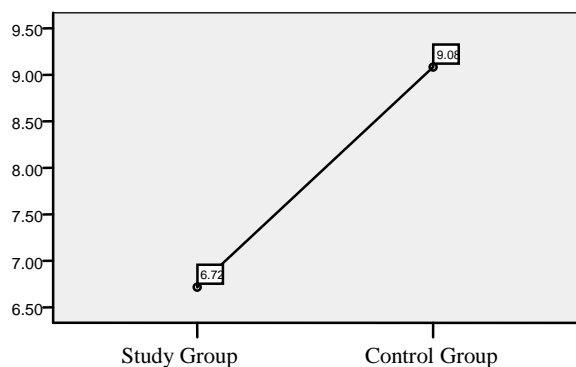

Figure 1. Adjusted means of GAD in posttest stage in two groups

The findings showed that GAD symptoms in study group decreased significantly in follow up stage compared with control group (Figure 2).
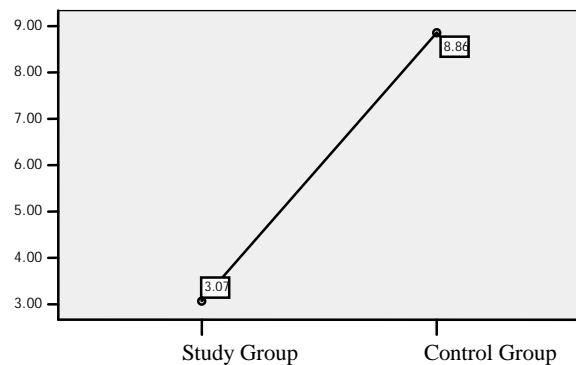

Figure 2. Adjusted means of GAD in follow up stage in two groups

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