

## **THE EFFECTIVENESS OF COGNITIVE BEHAVIORAL GAME THERAPY ON DEVELOPING SOCIAL SKILLS IN MENTALLY RETARDED CHILDREN**

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### **ABSTRACT**

The aim of the present research was to investigate the effectiveness of cognitive – behavioral game therapy on the development of social skills in handicapped children of Ilam city. This research was a semi – experimental having pretest and post test design with control group. The statistical society of the research included all of the mentally retarded students who were studying in exceptional school of social education for educable mentally retarded children in Ilam. Of these children 32 ones were selected through availability sampling method. The selected sample, then, was divided into two 16 – member groups (one experimental and one control group). The subjects of the experiment group participated in cognitive game therapy sessions. Both of the groups had a pretest and posttest. In order to collect the related data the questionnaire of the mentally retarded children's social skills inventory was used. The findings showed that cognitive - therapeutically game therapy develops the mentally retarded children's social skills. This finding indicates that this training is effective on these children's social skills.

**Keywords:** Game Therapy, Cognitive – Behavioral, Mentally Retarded Children

### **INTRODUCTION**

According to DSM-IV-TR definition, mental retardation is a state in which the function of the individual's general intelligence is significantly lower than the average limit (conventionally the intelligent score of 70 or lower) and at the same time has damaged his/her adjusting behaviors (Bryan, and *et al.*, 2003). These individuals have deficiency in on lack the expected skills in each of age group.

(Bryan and *et al.*, 2000). These individuals have also deficiency in social skills which are adjusting behaviors which enable the individuals to have mutual relationships with other individuals, display positive reactions, and refrain from behaviors which have negative consequences (Morris, 2002).

During early years, social skills are learned through successful and effective relationships with others (McClellan, 2007). The child having proper social skills probably builds satisfying relationships and receives positive feedbacks (Geldard and Geldard, 2008). It is very important to consider the fact the deficiency in social skills is a determining factor in increasing the children's emotional and mental problems (Shahim, 2005).

Of different methods of therapies for children, game therapy is one of the most noticeable and applied methods. Numerous researches and psychologists, for several decades, have used this method to treat a wide range of problems and disorders. And have affirmed this kind of therapy (Barton and *et al.*, 2005) in game therapy. The child has the opportunity to express his/her painful emotions and internal problems and exhibit them through playing games (M Axline, 1990).

Game therapy is effective on learning, self – control, responsibility, acclaim, respect, self – acceptance and accepting others, developing social skills, self – esteem, and depression and anxiety reduction (Baggerly and Parker, 2005).

According to Jerald cognitive – behavioral game therapy are effective on and helpful for the children's social skills growth and the other cognitive – behavioral adjusting strategies (Ghaderi and *et al.*, 2006).

### **Research Article**

The results of the research by Ba'edi (2001) showed that cognitive behavioral game therapy has been effective on reducing the aggressiveness of the children afflicted by behavioral disorders. In another research by Mahmoudi and colleagues (2006) which has been conducted in Kerman, the effect of game therapy on the children who were rescued the earthquake of Bam was investigated and it was revealed that game therapy can reduce the symptoms of behavioral disorders. The results of another research on the effectiveness of cognitive – behavioral game therapy on the severity of the symptoms of over activity/deficiency of affection revealed that game therapy can be used as an effective method of treatment for such children (Jenation, 2008).

Another research was done on assessing the effectiveness of cognitive – behavioral game therapy on the children suffering from behavioral disorders in Tehran. The results of this research showed that there was a significant difference between the scores of the pre test and post test for aggressiveness for experiment group (Ghaderi and *et al.*, 2006).

In addition, in a research on the effectiveness of cognitive - behavioral game therapy on reducing the children's behavioral problems it was known that cognitive – behavioral game therapy leads to reducing the children's behavioral problems (Zare and Ahmadi, 2007).

The findings of the research by Mohammadi (1999) revealed that game therapy results in developing the social – affective growth and the learning of the retarded children in primary school in Zanjan.

The therapists acquaint the children having weak social or an affective skill with more adjusting behaviors through game therapy (Pedro – control and Reddy, 2005).

The aim the present research was to investigate the effectiveness of cognitive – behavioral game therapy on developing the social skills of the retarded children in Ilam.

### **MATERIALS AND METHODS**

The method of this research is semi – experimental, pretest – posttest type with control group. The statistical universe of the research includes low – grade defective students who were studying in the exceptional school of special education for trainable mentally retarded children in Ilam. Of these children 32 were selected with the mean age of 9 and studying in grade 2 in primary school through availability sampling method. The selected sample was then divided into two 16 – member groups (one experiment and one control group). Both of the groups had a pretest. Then the experiment participated in 12 one – hour game therapies. The therapies had been designed based on the cognitive – behavioral approach and in accord with Rivier's suggested therapy design (2006). The content of the games was so designed that the children have the greatest role in the game and the therapist play a directing role during the sessions. In the end each of the groups had a posttest.

#### **Instrument**

Social skills inventory (Thomas and *et al.*, 1996). This inventory is used for evaluating special backgrounds of the retarded children's social skills. It has 24 items which sequentially are behaviors relating to environment, relating to others, relating to the self and relating to the task. In addition, this inventory has 24 items each of which having 3 to 14 sentences. The score of this inventory varies from 140 to 420. The score of 140 means the optimized performance of all skills. If none of the skills are performed, then, the score of 420 is obtained. The content validity of the present research was 0.90 and the reliability coefficient through test – retest was 0.91.

### **RESULTS AND DISCUSSION**

This section deals with the finding of the research. In order to this, first of all the descriptive characteristics of the statistical universe are given and then the findings are dealt with. The results of table 1 show that the mean of post test for experiment group was lower than the mean of the posttest for control group. In order to find if the pretest variances of both experiment and control group have significant differences, the covariance test analysis has been used.

**Research Article**

**Table 1: The mean and the standard deviation of depression of experiment and control group in pretest and post test**

Group	Test	N	M	SD
Control	Pre test	16	307.06	54.46
	Post test	16	319.25	51.60
Experiment	Pre test	16	309.56	55.36
	Post test	16	377.56	

For analyzing data, covariance analysis has been used (this is usually used in pretest – post test design). In this design, before the subjects are exposed to experiment conditions, have a test. The same test is conducted after the subjects are exposed to experiment conditions. The results of covariance analysis are provided in table 2. Moreover, the results of Levin test, with the presupposition of the equality of the variances of pre test, were calculated which were not significant. Therefore, the results of covariance analysis are supported.

**Table 2: Covariance analysis of the scores of social skills**

	SS	df	MS	F	Sig
Pre test	22316.50	1	23316.50	21.34	0.001
Group	26616.24	1	26616.24	24.35	0.001
error	32782.38	29	1092.75		

The results of table 2 shows that after adjusting the scores of pretest, there was the significant effect of factor between the subjects ( $P= 0.001$ ,  $F=24.35$ ). In other words, compared to control group, the social skills of the retarded children who participated in cognitive – behavioral game therapy (experiment group) has increased significantly.

**Discussion**

The aim of this research was to investigate the effectiveness of cognitive – behavioral game therapy on developing the social skills of the retarded children in Ilam city. The results of this research revealed that cognitive – behavioral game therapy results in promoting the social skill of the retarded children which is indicative of the effectiveness of this training of these children's social skills. These results are in line with other researches (Ghaderi & et al, 2006; Ba'edi, 2001; Mahmoudi-e Ghara'e, 2006; Janatyan, 2008; Zare and et al, 2007; Mohammadi, 1999; Pedro – Carol & Reddy, 2005).

khomarlou (1996) introduces the game as an element of cognitive – intellectual development, and Ahadi and Bani – jamali (2001) say that playing games is an important process for releasing growth – related stresses. Oliver, in a research on mentally retarded children showed that game therapy helps these children to do their tasks more successfully. The reason of this, according to Oliver, is these children's better scores on intelligence tests, as mentally mental deficiency not only includes the mental functions which are lower than the average, but also leads to inability to response social wants. Game therapy makes changes in mental function growth which, through mental training, can effect the mentally retarded children's adjusting behaviors.

Game therapy provides the opportunity of knowing the social surrounding for this child. Some of the devices and appliances and playthings, too, lead to natural feelings and emotions such as joy, anger, pleasure, and so on.

Regarding the effect of cognitive – behavioral game therapy on developing the retarded children's social skills the consultants, psychiatrics, and teachers are suggested to use this program as a therapy and as a reinforcing factor for social skills of these children in both therapeutic and training institutions.

## **Research Article**

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