

# The Effect of Self-control Program on Mentally Retarded Students' Aggression

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**ABSTRACT:** The purpose of this research was to study the effect of self-control program on mentally retarded students' aggression. In this study, all students over 13 years from exceptional school of Kosar in Shahindej (West Azarbaijan province) were selected and the students were divided into two groups of 13 people after performing mentally retarded children Aggression Questionnaire of Bahrami, Davarmanesh and Qezelsoflou (2008) in pre-test and the experimental group was trained for a month with a self-control program. Post-test was performed for two groups and the data analyzed by analysis of covariance was used. The results showed that the aggression of the students in the pretest had a significant different from the post-test ( $P < 0.001$ ). The present research showed that the aggression self-control program for the students with mental retardation tested reduced and increased, respectively.

**Keywords:** Self-Control Program, Aggression, Mental Retardation.

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## INTRODUCTION

Aggression in people with intellectual disabilities is a behavior or set of behaviors learned. One learns to aggress towards others to achieve the desired results. This means that aggressive behavior in terms of function the outcome that follows comes in contact (Fox and Meindl, 2007 quoted by Brosnan & Healy, 2011). Aggression refers to the issues related to adolescence period. Every day, young people are seen in schools which they will be disciplined as a result of conflict, fights and aggressive behavior and they are faced with the reactions of those schools of the authorities. The aggressive teens do not have the power for their harness and they violate the customs and morals of the society in which they live. In most cases, teachers have clashed with them and this case results in corporal punishment and summons of the parents and their movements sometimes lead to people harassment resulting in expulsing from school. What causes the aggressive behavior has been of interest to researchers are adverse effects on the behavior of the individual as well as unpleasant effect on internal mental states (Ellis, 1998). For children with intellectual disabilities according to their specific limitations compared to normal children, it can be expected that more aggressive and non-compromised behaviors are appeared. Due to various constraints that often arise from their cognitive limitations, they face with several failures and the consequence of all these are the lack of success and failure which is the beginning of an aggressive species in different types (Afrouz, 2004). Self-control is a significant internal mental phenomenon which people are able to resist against temptations and prevent from action on their impulses. However, if it is possible that there are many reasons resulting in increasing the aggressive motivations, but with this description, the reason of the anger is often failure or lack of self-control (Baumeister, 1997; Gottfredson & Hirschi, 1990). Hypotheses are those that the failure or low self-control forces to

aggressive activities when the aggressive impulses are excited. The studies narrate the unity between self-control and aggression. Murphy and Eisenberg (1997) have shown that children with weak trends in self-control have had a lot of fierce conflicts with others and they had hostile reactions on playing with dramatic dolls in comparison to other children. Kruger, Caspi, Murffi, With & Luber (1996) have shown that low self-control and conflict behaviors among boys have not matured and there are new matured. Other studies have shown that the children who have low self-control have most of aggressive behaviors (Kochanska et al., 2000). Therefore, the purpose of this research was to study the effect of self-control program on mentally retarded students' aggression.

## MATERIALS AND METHODS

The research method was quasi-experimental with pretest - posttest design and control group. The population includes all students over 13 years from exceptional school of Kosar in Shahindej (West Azarbaijan province). In this research, 26 people among the students (13 years and above) who in the aggressive questionnaire obtained high and low grades, respectively were selected as a sample and they were divided into two control and experimental groups. In the stage of the study, after the presentation of preliminary explanation about measuring tool and the purpose of the test, how to answer test for participants was described in detail. On ethical considerations, after obtaining the consent of the people and the necessary awareness, they were assured that information received in this research will be used and will be protected from any abuse. The experimental group was trained for a month with a self-control program. After the intervention meetings, both groups were retested. To measure the variables of the research, the questionnaires were used as follows.

**Aggressive questionnaire:** to measure the aggression of subjects, the aggressive questionnaire was used including 20 questions and these questions were mentioned according to diagnostic criteria of DSMIV and also based on what were listed in psychology texts and always (4), most of time (3), sometimes (2) and never (1) were regulated in a scale of four numbers. To determine the validity of the structure, first, the questionnaire was conducted on 219 people of the students of the first grade in five schools from central regions and south Tehran through interviewing with their mothers. In analyzing the data from the initial implementation of the questionnaire, the reliability of this questionnaire was calculated 0.65 and solidarity of each question with the whole question 0.29 and 0.60. The children who obtained the score 45 or more from this questionnaire were regarded as the children with the aggressive behaviors (Seyyedi, 2000).

**Program protocol:** The protocol has been borrowed from self-control scale of Kendall and Wilcox (SCRS) at the University of Minnesota and this program was trained for a month (12 sessions) for the students in the experimental group and in the last session, a student who obtained more point was admired (quoted by Safari Dehkharghani, 2008). The program and skill taught is as follows:

1. **Self-learning education:** the student is taught to perform homework through his verbal guidance and provide verbal feedback for himself. In other words, this method teaches the students to speak with them appropriately and they deal with measuring their performance and verbal guidance of their behavior.

2. In the early 1970s, Black Word created a very similar manner to self-learning education called verbal mediation training. In this way the students were asked to compose to response to the questions about themselves and their behavior. These students learn to see the behavioral consequences of their behavior and encourage verbally themselves.

3. **Self-monitoring:** the students monitor on their performance about a certain behavior or set of behaviors and record them. In this way the students are taught that record their time in some activities.

4. **Self-reinforcing:** In this section the students are taught to reinforce themselves for appropriate verbal behaviors and reward. Self-reinforcing the student like enhancing the teacher results in increasing the behaviors reinforced.

According to the general comments about this program, the skills such as listening to the teacher, participate in group discussions, homework, personal hygiene, not harassing peers helping peers etc., are taught to the students to reinforce verbally and in each meeting that was held for the group, the behavior of the student was studied (according to the observations performed in the classroom, yard and home). At the end of the program, the student who could control their behavior to best practices and obtain more point was encouraged. For statistical analysis, multivariate analysis of covariance was used. In all analyses, the significance level of  $p < 0.05$  was considered.

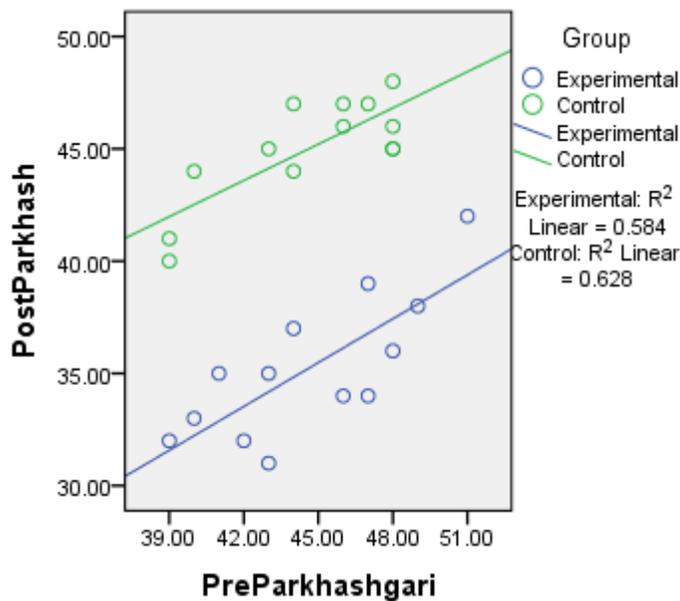
**RESULTS**

Table 1 shows the mean and standard deviation of the pre-test and post-scores in the variable of the aggression. The mean and standard deviation of the aggression pre-test in the experimental group are 44.61 and 3.68, respectively. The mean and standard deviation of the aggression post-test in the experimental group are 35.92 and 3.13, respectively. Also, the mean and standard deviation of the aggression pre-test in the control group are 44.15 and 3.45, respectively and the mean and standard deviation of the aggression post-test in the control group are 45.00 and 2.34, respectively.

**Table 1.** The mean and standard deviation of the aggression in pre-test and post-test based on the group.

Variable	Test times	Experimental group		Control group	
		Mean	SD	Mean	SD
Aggression	Pre-test	44.61	3.68	44.15	3.45
	Post-test	35.92	3.13	45.00	2.34

Menua was used to investigate the effect of self-controlling program to reduce the aggression in male students with mental retardation. To study the interaction between the groups and the lack of pre-test scores, the same assumption of the slope of the regression was examined. According to the results ( $F = 0.289$ ,  $P = 0.59$ ), this hypothesis was confirmed. Therefore, it can be concluded that there was no any interaction between the groups and the pre-test. To verify the existence of synchronous linear relationship between the variables and the dependent variable, the following scatter plot was used.



**Figure 1.** The scatter plot between the covariate and dependent variable.

Since the slope of the regression lines is parallel, therefore, it can be concluded that there is a linear relationship between the covariate and dependent variable. To investigate the assumption of equality of variance groups, Levene test was used that the results are mentioned in Table 2.

**Table 2.** The results of Levene's test to study the equality of the variance in the dependent variables.

Variable	Ratio F	Degree of freedom of numerator	Degree of freedom of denominator	Sign.
Aggression	1.693	1	24	0.206

According to Table 2, Levene test shows the assumption of equality of the variance of the groups, because ratio F observed is not significant. Kolmogorov-Smirnov test results showed normal distribution of the data ( $p > 0.05$ ). Table 35 shows that each of three criteria of test statistic indicators about different groups of the variables is significant. Therefore, two groups are different at least in one of the variables. Following-up test is presented in Table 4.

**Table 3.** Multivariate analysis of covariance.

Variables / indicators	Statistics of criteria	Value of statistics	Ratio F	df hypothesis	df error	P
Group	Pylayy	0.920	126.121	2	22	0.001
	Wilks	0.80	126.121	2	22	0.001
	Hotelling	11.464	126.121	2	22	0.001

The results of analysis of covariance indicate that the groups have significant differences in the total score of the aggression. This means that the intervention taken place results in improving the above dimensions in the experimental group compared to the control group (Table 4).

**Table 4.** Following-up test (the analysis of the covariance of the effect of the group on the aggression).

Source	SS	df	MS	F	Sign.
Group effect	620.346	1	620.346	190.908	0.001
Pre-test effect	109.570	1	109.570	33.720	0.001
Error effect	74.738	23	3.249		
Total	42645.00	26			

## DISCUSSION AND CONCLUSION

The purpose of this research was to study the effect of self-control program on mentally retarded students' aggression. The results showed that self-controlling program led to reducing the aggression in mentally retarded male students. The results of the present study are consistent with the findings of Sadatpour and Mansour (2003), Hashemi (2010). Also with the study of Baumeister and Duval (2007), Gottfredson and Hirschi (1990) and also with the studies of Kochanska et al (2000) who showed that children at an early age who had little self-controlling, had less power to their control and the results of the study of Murphy and Eisenberg (1997) showed that children with poor self-regulation (who were rated by their teachers) involved with more children. To explain the results, it can be argued that because of restrictions on their cognitive faculties, mentally retarded child who also imposes other restrictions grapples with major issues which include concessions problem with people and their environment and this problem occurs because they have inadequate understanding of the situations and rules and regulations in force in their lives and their misunderstanding leads to the successive failure and finally in multiple failures and this results in behavioral disorders and lack of compatibility with a wide range which one of the most important of them is the aggressive behaviors and they are adventitious and in many cases, they are a response to failures which their detection is sometimes inevitable. That is why the behavioral disorders in mentally retarded children compared to normal children are very impressive and this is where the various methods of therapy and behavior modification arise. The goal of most intervention programs and therapy practices are change or modify maladaptive behaviors in children that one of these programs is self-control training. Self-controlling program with an emphasis on self-management skills educates the students to have the best type of behavior in different situations with full knowledge and control of the behavior. The aggressive behavior in adolescents is a common problem that needs attention is increasingly all over the world and research on effective solutions has created a major challenge for specialists and theorists. The aggression has an adverse effect on children's growth process. What have been important for the researchers to the aggressive behaviors are the adverse effect on interpersonal behavior and also the undesired effect on inner and mental states of people (Ellis, 1998, quoted by Hashemi, 2010). The aggression is the behavior which its aim is to harm themselves or others. In this definition, intent is important; this means that an abusive behavior is aggressive if this is performed purposefully and deliberately to hurt others or themselves (Baron, 2010). The aggression has negative impacts including injury, harm, harmful attacks to themselves and others, unexpected death

and risk behaviors may be followed (Jentery, 2007). The results of the studies of scholars such as Jaren Brett (2000), Barton Haim (2003), Meyer Daikon, Adelson (2004) indicated that the aggression included prevalent physical, mental and social disorders and resulted in problems such as frustration, loneliness, social maladjustment, ignoring the rights and interests of others, ulcers, migraine, hypertensive disorders, depression, anxiety (quoted by Strachan, 2007). According to the results obtained from this study which indicated the program had been effective in reducing aggression among students with intellectual disability, this program can be performed in exceptional and normal schools and in high school I and II, as well as for the primary, but by more pursuing.

#### **Conflict of Interest**

The authors declare no conflict of interest.

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