A SURVEY ON EFFECTIVENESS OF PLAY THERAPY ON MENTAL EFFICACY OF FIRST GRADE EDUCABLE MENTALLY RETARTED STUDENTS

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Abstract:
Background: Children who are mentally retarded due to lower average intellectual functioning, delays in physical-mental growth, attention & concentration, social adjustment, emotional and cognitive skills. In this research, we aim to study the effectiveness of play therapy on the ability of mental efficacy, visual perception, visual memory, attention & concentration and social adjustment of boys & girls educable mentally retarded students in Neyshabour city.

Materials and Methods: This is a quasi-experimental research study (pretest - posttest design with control and follow-up test). To this end, 60 first-grade boys and girls educable mentally retarded (based on the revised Wechsler test scores) were randomly selected and then randomized into two experimental (n = 30) and control (n = 30) groups. Initially, testees completed the Bender Gesacht, Benton, KLT and social Adjustment tests. Then, the experimental group studied play therapy intervention during the thirteen sessions of forty-five-minute basis, but the control group did not receive any education. At the end of play therapy period and two months later, both groups were tested once more.

Results: The results showed that play therapy significantly increased visual perception, visual memory and attention & concentration of testees.

Discussion: Play therapy in addition to excitement and entertainment for children can enhance the mental efficacy of educable mentally retarded students.

Key Words: play therapy, visual perception, visual memory, attention and concentration, educable mentally retarded

Introduction
Since human being has started his social life, the issue of those who were unable to coordinate themselves with the society was discussed. So far, many definitions for disability or mental disorder presented but the most comprehensive definition that already existed is defined in the fourth edition diagnostic and statistical manual of mental disorders (American psychiatrist board) that includes the following criteria: a) general intellectual activity or intelligence quotient significantly below average that includes the intelligence quotient of seventy or below (approximately two standard deviations below its mean); B) significant limitations of adaptive actions at least in two areas of skills including: communication, self-care, family life, social and interpersonal skills, how to use public facilities, managing person itself, educational proactive skills, health and safety, and C) before 18 is its time. (1)

Mental disorder board of America (2) consider mental disability as lower performance in all cognitive tasks that simultaneously reveals in problems and deficiencies in adaptive manners and this manner happens at the time of physical, mental and psychic growth. Children with mental disability due to intelligence and intellectual performances are below average, delay in mental and dynamic growth, concentration and attention, social compromise, cognitive and emotional skills. Mental and intellectual disorders cause them to have some problems in concentration, perception, balance, momentary stimuli control and memory. (3)

Although, different senses of hearing, physical and touchable at the stage of perception in children with mental disorder play important role, but usually visual perception is the main intermediate for learning in this stage. Usually, a child that encounters mental disorder has a lot of problems in Cognitive abilities, explanation and paraphrase of data and compare them with main data has significant problems. Cognitive abilities are important in effective and efficient performance of people in learning areas of mental-physical, cognitive and emotional.
Problems of visual perception, including misdiagnose of picture from background, poor understanding of spatial relationship, visual-physical disharmony and misunderstanding of pictures. Thus, visual perception abilities for learning and achievement are particularly important. Having visual skills is a strong criterion for progress in reading in the first class (4).

Reading a text starts from the time of concentration and ends when the eyes begin to recede it after getting visual information. Among this, visual perception is important in starting the text so that many children who are mentally retarded come across more or less serious disabilities (5). Visual memory is important in recognition and recall visual alphabet written, numbers and visual vocabularies, development of spelling and written language skills. This memory is very important for doing homework, sorting shapes, calculating math problems, and learning how to use games and instruments. Children who have problems in visual memory of letters, probably are not successful in writing. These children can talk, read and rewrite but can’t recall or reproduce. The influence of visual memory on writing and dictation is in the way that children try to recall the sequence of words and captures it, but they are incapable of fulfilling this task (6).

The importance of learning is obvious. Before learning, children must learn to pay attention to what is happening. Diverting attention to something is a particular problem for children who are mentally retarded. Attention span between these children is lower than condition they can divert attention to something and they are unable to pay attention to various aspects of a duty (7). One of the factors that could influence on students’ cognitive performance, mental and achievement is perceptual-physical activities, play and exercise. Play is the first move that children are interested in. Kids through game will achieve important results. In game, children before learning through thinking, learn things through touch and perceive. Running simple games improve physical-cognitive growth (8 and 9).

Vigotsky believed that game is a guiding source for mind growth of children (10). Play is an enjoyable and wonderful activity. Playing is an instrument for the expression of emotions, relationships, describing experiences, revealing wishes and mental self express and play therapy is a method that help children solve their own problems and consequently play explain this reality that play for a child (normal or abnormal) is something intrinsic(11). From Piaget view, children’s play and play therapy have a vital role in intelligence growth of children. Piaget says that human intelligence growthrough two related processes. During the game, various forces grow such as the child’s agility, memory, attention, concentration, perception etc. During the game, child’s personality will shape a lot of changes occur in his characteristics. Play; increase curiosity, innovation power and touch objects feel facts personally and experience realities.(12, 13). Play and therapeutic-educational use was one of the principals of hypothesize and clinical activity and educate children (especially about children with mental retardation). Nervous-muscular perceptual - cognitive growth are behosen of games that started from initial reflexes, continued with exercise and converted to more complicated processes (14, 15, 16). Rezayian(16) reported the efficiency of five weeks computer games on attention capacity of children. Yousefi(17) during the research Study found that games has a significant effect on physical development of mentally retarded children.

Ghanaee and others(18) considered the impact of education of rhythmic move on function of numeral of students who suffers from learning disorder. The results show that numerical memory of students has improved meaningfully.

Mohammadi(19) during a research entitled "The study of the opinion of school teachers about impact of play in learning and social-emotional development of students with mental retardation" showed that there is a significant relationship between play and learning of mentally retarded children and play increase social- emotional growth of children who are mentally retarded. Amiri (20) showed that physical activities and organizing can impact on normal and mental retarded children. Ashgaryneka(15) showed Applications of training -relieving Iran traditional games in education and rehabilitation of children with special needs. In his research, he mentioned games that could increase visual perception, visual memory, attention & concentration of students with special needs.

Borich(21) stated that successful teachers are those who use several strategies for teaching to mental retarded students and one of these strategies is using play therapy. Selman (22) in a study entitled "A survey on effect of physical activity and play in mental development of preschool children" showed that measure of mental development (visual perception) in children who played educational games are more than kids who did not play in these activities. Sheikh and colleagues (23) in a research stated that there is a meaningful relationship between perceptual- physical capability and mental development (visual perception). Ghanavizchi(24) in a study the positive effects of rhythmic activities in performance of homework reminded and facilitate learning (visual perception) in children with mild mental retardation. Sene and colleagues(25) studied the impact of physical activity and games on growth of mental abilities (visual perception) preschool boys. The results of this study showed that development of mental abilities of test group children than control group is significant. Rasooli(26) showed effectiveness of play in fostering mental faculties (visual perception) exceptional children educable. The results were significantly positive.
Akhvast (27) during a study indicated that educational games can facilitate teaching - learning process (visualmemory) in educable mentally retarded students. During a research Determined that dendrites include branches that increase surface area on neurons. This increase in size can enhance momentum that improve performance of brain and also increase learner's ability in the learning environment educational games can be essential component in increasing the size of neurons and synaptic connections in the brain. In this study it was found that components of learning (visualmemory) when playing educational games are affected dendrite growth (Wolfe, 2001) (27). Kashibuchi and Sakamoto (28) during a research showed that educational games enhance the Memorizing the materials inretarded Students. Borden and Baird (29) showed that educational games can be powerful on learning (visualmemory) of students. Findings imply that games not only have impact on brain structure, but also through biological processes, conflicts with new Stimulus and over time effect on brain itself. Therefore, play and creating situation of the Neurological Stimulation can perform an important role in enhancing cognitive development (visualperception) to children with mental retardation (Reynolds et al, 2009) (15).

Rezazadeh (30) for reducing the severity of symptoms attention deficit disorder - hyperactivity used educational games. The results showed that educational games causes significant reduction of symptoms of attention deficit along with hyperactivity inestees. Rezazadeh and colleagues (1386) in their research examined the effectiveness of educational games mind concentration on reducing the severity of symptoms of attention deficit-hyperactivity disorder, combined type. The results showed that (Parent and teachers evaluate) Educational games significantly reduced the severity of symptoms associated with attention deficit - hyperactivity disorder in the experimental group. Sarlak (31) showed that movement therapy and play can reduce problems of children 7 to 11 years old with attention deficit – hyperactivity. Jannati et al (1387) showed the effectiveness of play therapy based on cognitive - behavioral approach on the severity of hyperactivity disorder along with symptoms attention deficit boys 9 to 11 years old. Mazhurk et al (32) examined the effect of play along with music on five children with attention deficit / hyperactivity. The results showed that play along with music has positive effects on social behavior problems. In general, the results suggest that such a play with music is helpful for children with Attention deficit disorder - Hyperactivity.

Since children disorder and issues related to children with special needs is a multidimensional phenomenon and somehow it is neurological, cognitive, social, cultural and emotional and from view point of abnormal growth in outbreak of the nervous system disorders and especially brain, play an important role (Morton 2006) (33), so educational and remedial programs are necessary. Therefore, such a study with different instruments and different examples of past research may provide necessary information to educators of children with mental retardation and demonstrate role of play and play therapy in increasing mental capacity. Therefore, this research is important because we can use games for enhancing mental capabilities of mentally retarded children.

Materials and Methods
This is a semi-experimental trial type (pre-test - post-test and follow-up test with control group). Statistical populations in this research consist of all educable boys and girls students who are mentally retarded in Neyshabour schools. Samples of research consisted of 60 students who had an IQ of 55 to 65 and randomly selected from 100 children who had been tested by the Wechsler Intelligence Test and randomly divided into experimental (n = 30) and control groups (n = 30). At the beginning of sampling, students who were not interested in participating in this research or were expected to be unable to continue play therapy sessions or any of the above conditions were excluded from the sample. Also, students who had another disorder (such as autism disorder) and mental retardation of them was secondary were excluded from the study design.

Measuring Tools
1- Wechsler Revised Intelligence Scale for Children (WISC-R). This scale includes twelve subscales. Six verbal subscales consists of general information, similarities, arithmetic, vocabularies, comprehension and understanding, non-verbal, numerical and six subscales include complete pictures, images sequence, cubes, set of images, adjustment of signs and labyrinths which of these two subscales labyrinths and numerical memory have storage capacity. Shamim in 1385 by using a sample of 1400 children who were 6 to 13 years old standardized this scale in which reliability of retest of this test is 44% to 94% (average 73%) and concurrent validity using correlation scores the practical part of the Wechsler scale scores 74% was reported (34).

2- Test of visual-physical perception Bender Gestalt. This test is designed to assess visual-physical perception being used. The test retest reliability in a sample of normal subjects between 24hr, 0/70 has been reported. The test retest reliability of this test in terms of age and interval runs from 0/52 to 0/90 is reported. Concurrent validity of visual-physical perception (mnd =0/65) developmental test of visual perception Frasting (mdnr=0/47) shows a moderate level of validity (Marnat, 1990) (35).
3- Retention-visual Benton test. This test is used to assess visual perception, visual memory and the ability to making-visual, all three forms (E, D, and C) and four performance method (A, B, and C, D). Each form includes ten projects and each project contains one or more shapes. In performing A test subject asked to look at the card. After 10 seconds, the card is removed and the participants should take anything that is seen on the card. A chronometer or clock is used to set the time. Reliability of A is about 0/85. Benton validity has been confirmed in several studies. These studies have shown that at least in certain conditions, this test can be used as clinical criteria (Nicholls,1963;Kruhelm&Schuling,1963,Stern, 1969). Scoring of this test is objective and based on precise principles and agreement between scorers about total score is too high(=0/95). There are two types of scoring methods in relation to the testees performance. One correct drawing of the adequacy and efficiency which measure performance and the other is wrong scores that measure certain types of testee errors (36).

4 – KLT test. This test measure the attention & concentration in mentally retarded children that has been Invented by three psychologists named Kettler, Laurent &Thireuand includes eight tick mark subscales, cubes, unreasonable sentences , general information, Red cubes, keeping balance, space perception and joining pieces. In this study,for assessment of attention span tick mark subscale was used. This subscale has a number of squares is small size each of which squares with an appendage in one of the sides or corners and testee should find one of the squares from six rows of 40. After the test, the numbers of true and false are counted. The test-retest reliability of the subscales is reported 0/73. Validity on other subscale correlation between 60 to 70 %.(37).

5 - Social Adjustment Scale: This scale contains 90 questions that evaluate six different domains of social adjustment (socialforms, social skills, anti-social interests, family relationships, school relationships and social relations). Reliability coefficient of this scale through Cronbach's alpha is equal to 0/686. The test -retest reliability coefficient of 86 normal students in Tehran is equal to 0/54 andusing equation number 20 Kuder - Richardson formulas is estimated to be 0/81 (Rastegaran, 38). Based on studies,validity coefficient of social adjustment in California in groups of 237 to 712 people using the Spearman -Brown formula for social adjustment scale is about 0/87 to 0/91. These coefficients for the secondary test scales are in the range of 0/60 to 0/87 and the total scores are in the range of 0/92 to 0/93(Boru,1960, as quoted by the Mullahs,39).

**Procedure**

First, 60 testees among 100 mental retarded students of preliminary school in Neyshabour has been selected and randomly assigned to two experimental and control groups. Bender-Gestalt Test, Benton and KL TAs pretest in sample group performed. Then, experimental group received play therapy during thirteen sessions over five weeks (the first two weeks two sessions and in the next three weeks three sessions per week)in two groups(girls and boys). Purpose of the initial meeting was to meet and communicate with other students. Secondto fifth meeting was held with the aim of increasing the focus on games and these games played: "Heart of Stripe, full basket, throw away the plastic rings around vertical wood etc ". Purpose of the sixth to ninth meeting was visual memory reinforcement during games like: "Dominoes, dooz, hide and seek what I touched etc" was used. During tenth to thirteenth meeting was held with the aim to strengthen visual perception games "and games like (hopsotch), designed cube, puzzle, search and find, dominoes etc" was used. After the experimental period, and two months later, testees were tested again and at the end the results were analyzed by spsssoftware.

**Methods of data analysis**

In this study, descriptive statistics (mean and standard deviation) and inferential statistics (test for equality of variance, one way analysis of variance, t-test of dependent and independent groups, one way analysis of variance with repeated measures and Scheffe's test ) was used . The analysis was performed with SPSS software.

**Research Findings**

**Table 1**

As can be seen from calculated t (t=0/162) with degrees of freedomdf=58 from t criterion (t=2/763) in the level 0/05 is smaller and significance level was calculated (0/872)bigger than 0/05. Therefore, concluded that the "difference between the two groups in mean Wechsler test" is not significant. According to the collected information and with regard to the lack of significant differences between the means, it is concluded that there is no meaningful difference in experimental and control groups of the Wechsler IQ test and consistency and pattern in experimental and control groups are confirmed.

**Table 2**

The first hypothesis of this study indicated that "play therapy increases the ability of visual perception of mental retarded male and female students". To investigate this hypothesis, the scores obtained from the Bender-Gestalt Test performances were considered as the main indicator. Given the normality of observations, we are allowed to use the test repeated measures design.
In analysis of variance in testees, the effective tested assumption is that between all variables there is hardly equal correlation. To evaluate the consistency of variances, CroitMachly test \((0/995)\) with degrees of freedom \(df=2\) value of K Square \((0/264)\) is estimated, and according to the significance of this statistic \((P<0/05)\) the assumption of alignment of variance is rejected. These results show heterogeneous of testees and groups at different stages of the evaluation in questionnaire of Bender-Gestalt.

Table 4
According to these results, it is concluded that the comparative means between variant of visual perception and in three stages of evaluation are significantly different. Also, the comparison of mean values in the control group and the three stages of evaluation are significant differences. According to the data, and considering the significant differences between the means, the researcher concluded that the claims about the "effectiveness of play therapy training on visual perception abilities of male and female students educable mentally retarded" is confirmed.

The second research hypothesis was that "play therapy on visual memory capacity is an effective educable mentally retarded male and female student." To investigate this hypothesis, K, L, T scores obtained from the test run was considered as the main indicator.

Table 5
In analysis of variance in testees, the effective tested assumption is that between all variables there is hardly equal correlation. To evaluate the consistency of variances, CroitMachly test \((0/995)\) with degrees of freedom \(df=2\) value of K Square \((40/092)\) is estimated, and according to the significance of this statistic \((P<0/05)\) the assumption of alignment of variance is rejected. These results show heterogeneous of testees and groups at different stages of the evaluation in questionnaire of Bender-Gestalt.

Table 6
According to these results it is concluded that the comparative averages in visual memory variable and in three stages of evaluation are significantly different. According to the data, and considering the significant differences between the means, the researcher concluded that the claims about the "effectiveness of play therapy focusing on enhancing the capabilities of male and female students that believed they are educable mentally retarded." To examine this hypothesis, the scores obtained from the Benton test was considered as the main indicator.

Table 7
In analysis of variance in testees, the effective tested assumption is that between all variables there is hardly equal correlation. To evaluate the consistency of variances, CroitMachly test \((0/894)\) with degrees of freedom \(df=2\) value of K Square \((6/382)\) is estimated, and according to the significance of this statistic \((P<0/05)\) the assumption of alignment of variance is rejected. These results show heterogeneous of testees and groups at different stages of the evaluation in questionnaire of Bender-Gestalt.

Table 8
According to these results it is concluded that the comparative averages in attention & concentration and in three stages of evaluation are significantly different. According to the data, and considering the significant differences between the means, the researcher concluded that the claims about the "effectiveness of play therapy focusing on enhancing the social adjustment of male and female students that believed they are educable mentally retarded." To examine this hypothesis, the scores obtained from performing social adjustment questionnaire, were considered as the main indicator.

Table 9
In analysis of variance in testees, the effective tested assumption is that between all variables there is hardly equal correlation. To evaluate the consistency of variances, CroitMachly test \((0/939)\) with degrees of freedom \(df=2\) value of K Square \((3/559)\) is estimated, and according to the significance of this statistic \((P<0/05)\) the assumption of alignment of variance is rejected. These results show heterogeneous of testees and groups at different stages of the evaluation in questionnaire of social cognitive (total score is criterion).

Table 10
According to these results it is concluded that the comparative averages in social adjustments variable (total score) and in three stages of evaluation are significantly different. According to the data, and considering the significant differences between the means, the researcher concluded that the claims about the "effectiveness of play therapy on increasing social adjustments (total score) of male and female students educable mentally retarded" is confirmed.
Conclusion
The first research hypothesis stated that "play therapy is effective on visual perception of male and female mentally retarded students." The results of this research showed that the level of visual perception of test group after play therapy has increased. Findings of this research are coordinated and aligned with the results of AsghariNekah(15); Rinolds et al (2009 , 15 ); Salman ( 22 ); Rasooli(26); Sene et al (25); Sheikh et al (23); and Mohammadi’s researches. In this way, Eskooling showed that combination of physical exercise and activities within the game somehow make academic achievement(40).

Visual perception is a reason on the ability to recognize or change what is seen and has a major role in academic learning, especially ability to read in first grade. In reading, eyes focused on the written and when the eyes got visual information get distance of it. At this moment, the most subtle actions occur as a partial or complete and visual perception is the most important ability to start reading. Many students who are mentally retarded have problems in this case. In addition to problems in reading, these students have problems in tasks that require visual discrimination of letters and words. In this research, the games has been used that could solve some of these problems and enhanced the visual perception of educable mentally retarded children. For example, in "Hopsotch" which was used to enhance the visual perception, child must choose the house, estimate distance and during spring (while he maintains balance on one foot), be careful not around her foot on the line. Therefore, students in all stages are visualizing, planning and implementing the program. According to the important role of visual perception in learning of mentally retarded students and due to the effectiveness of play therapy intervention in increasing testees visual perception in this research can state that play therapy can reduce partly the above-mentioned problems and improve visual perception of testees.

The second research hypothesis suggests that "play therapy is effective on visual memory of educable mentally retarded girl students." The results indicated that play therapy enhances the efficacy of the visual memory of educable mentally retarded female students. The results was aligned with Amiri(20); Ghanaei et al(18); Kashibuchi and Sakamoto(28); AsghariNekah(15); Borich(21); Wolf(2001); Burden; P. Byerd(29); Akhvast(27); Ghanavizchi(24). Align with results obtained from Eisenberg&Kaizenbery research(2003), it was found there is a positive relationship between play and learning (visual memory) of students. In fact, the study showed that games can improve visual memory, perception, attention, creativity, divergent thinking, emotion, and language development.(41)

The weakness of visual memory is the main cause of spelling errors and writing problems in mentally retarded students. In these cases, the student is not able to recall the letters in the word. Correct transcription of words can help students partly but this help is not necessarily transferred to the other cases. So, it is better to strengthen the child's visual memory and one way is using the games. For example, domino to boost visual memory was considered. In this game student using cards must set the points to six and in each step with retaining the previous step select a card which has more than a point. In all these steps, students use their visual memory in forming series. Confirmed these results with other studies on the use of play therapy to improve visual memory educable mentally retarded female students in the. With regard to effectiveness of play therapy in increasing visual perception of testees, it can be said that play therapy reduce the above-mentioned problems partly and improve visual memory of testees.

Third research assumption indicates that "play therapy is effective on attention & concentration of educable mentally retarded girl students." The results showed that after a period of play therapy, attention & concentration of experimental group has increased. The result of this research is coordinated and aligned with Reza zadeh et al (42); Reza zadeh (30); Sarlak (31); Jannatian et al (41); Mazhurk et al (32); Asghrynehak (15); Rezayian (16); Blaine (43) investigated the effect of play therapy in solving problems of children who suffer from attention deficit. He said, in a seven-month period, Play therapy on the amount of attention of children have a positive assessment. Also, Moore (44) in order to increasing the skills of attention of children with attention deficit used an eyes practicing. The results showed that over time Impulsivity of eyes in these children decrease but attention & concentration and listening skills has increased. One of the most common problems that reduce the effectiveness of mentally retarded students in school is lack of attention. When a student fails to focus on the task plan and cannot look at teacher or keep his look, the guidelines will fail. On the other hand, working on a particular task, set the head, a facial state, be alert, execute the instructions and successfully function represents the student's attention. In general, a task that is base of learning is attention. If students want to learn, they must focus on the learning task. Brief attention span of children is one major problem that causes different problems in mentally retarded children. For example, in game of filled basket, during the match students should focus on basket and its place and then with attention & concentration put the nuts into the basket. In all these steps, students should be able to maintain their concentration; otherwise will be out of the game. According to these results, we can say that play therapy can reduce the extent of these problems and improve attention and focus on testees.
Comparison of means show that the average scores of pre-test and post-test scores, post-test and follow-up as well as social adjustment questionnaire in the experimental group is lower than the control group. Therefore, the use of play therapy to enhance the social adjustment of mentally retarded male and female students are learning is useful and effective.

Adjustment has a wide range of aspects such as family, peers and society and depends on several factors. From past, researchers have long sought to identify factors that they can control and manipulate these variables and the factors such as educational methods, and the attitude of peer believes, family and the education. Moore (2000) in his research used an eye exercises which was like a game. The results showed that over time Impulsivity children's eyes dropped and the focus will increase. Blaine (2000) in his study reported the efficacy of play therapy on children's social adjustment. Barlow (1985) showed that play therapy and cognitive - behavioral therapy for enhancement of the social adjustment of educablementally retarded students.

Ferni (2001) during a research showed that play is an ideal option for interaction between school and the game of children. GndvnValrych (2005) showed that games enhance social interaction and cognitive skills are improving. Dagrt (2006) showed the effectiveness of play therapy on the development of pre-operational and children concrete operation in the experimental group. Mishen (2006) in a research showed that the physical training and sport is one of the most effective ways of communication skills, sensational-physical, social and increasing self-esteem in children. Bourne Hyde (2006) argues that play therapy can play a major role in the socialization of children and achieving emotional goals. In Brown's study (2000) it was found that the students in experimental group due to receiving play therapy showed a significant increase in interactions with other children. Rayneh (2000) and Jones (2001) showed the effectiveness of play therapy in mentally retarded students of fifth grade. These findings are Coordinated with current research.

In general, the adjustment includes different aspects. In addition to the above, behavioral and emotional problems resulting from the structural characteristics of the family, the process of integrating the interactions of family members pathology, the impact of individual processes and the interactions between parents and children are among the factors that affect social adjustment. Therefore, based on the results of the researches in this study and results of this research it can be concluded that game of therapy in addition to excitement and entertainment for children, can enhance the mental abilities and social Adjustment in educable mentally retarded students. Regarding to this fact that this research can be a preliminary study on the effectiveness of play therapy on the ability of the educable mentally retarded male and female students, in no doubt, in some ways have some limitations. Small sample, the effect of pre-test, the difficulty of movement, regarding to the grade of the particular age group, conditions of study, the lack of assessment and treatment was limitations of this research.

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