



SELF- INSTRUCTIONS TO IMPROVE ATTENTION AMONG BEHAVIORAL DISABILITY CHILDREN IN GIRLS' SCHOOLS IN RAFHA, KSA

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ABSTRACT

The current study aimed at finding out the effectiveness of self –instruction program in improving attention among girls pupils with emotional and behavioral disorder in primary schools in Rafha Province in the Kingdom of Saudi Arabia, The research design was quasi- experimental with pretest – posttest and follow-up test. The total number of the sample was (20) students aged between (6-8) years put into two groups the control group (10) students and the experimental group (10) students. Twenty two – sessions program was implemented, and a prior, post, and follow-up assessment was conducted. The findings of the study emphasized the effectiveness of the program of self – instruction based on improving attention among pupils with emotional and behavioral disorder. There were statistically significant differences between the mean scores of the members of the experimental group and the control group on the scale of impaired attention after application of the program due to the training program (self-instruction). There were no statistically significant differences between the mean scores of the members of the experimental group on the scale of impaired attention in the two dimensional; post and follow-up assessment one month after the end of the program.

Keywords: *Self-instruction, Emotional and behavioral disorders, Attention disorder.*

INTRODUCTION

The problem of attention is considered one of the acute disorders that are common in children of primary school age and has an impact on the educational process (Mohammed, 2019). Therefore, an intervention must be taken to address this problem at an early stage to reduce the effects resulting in the later stages. The difficulties they face are: difficulty in concentrating, difficulty in finishing business, not listening to what they are told, and their actions are weak. (Abdel Nasser, 2008; Askari et al., 2019). Many school children suffer from attention disturbance, which entails additional burdens facing teachers, that requires searching for appropriate treatment to address these problems, and the therapeutic directions for attention disorders are multiple depending on the multiplicity of the reasons leading to it on the one hand and according to the multiplicity of researchers' interests and directions (Ibrahim 2011; Mohammed et al., 2017). Studies showed that attention disorder is a product of poor ability to self-control and self-regulation, and this means that children with attention disorder may not lack the skills and knowledge to succeed, but their problem is in self-control and self-organization, which means that they benefit from the knowledge and skills they have in time to stop their responses incorrect (Rabiner 2000).

The trend towards new theoretical interpretations to explain attention disorder as a result of poor self-regulation and the behavioral cessation of children in controlling their responses opens many areas for psychological treatment of this disorder (Abdel Fahim, 2012). Therefore, the researcher approached using the self-instruction strategy to reduce attention disturbance, and the main justification for using this strategy is the assumption that the child who can control himself in certain circumstances can generalize changes in his behavior to other conditions without treatment intervention (Meichenbaum and Goodman 1971) developed this method in the early 1970s to train children suffering from hyperactive self-control by talking to themselves (verbal self-control). (Alkhattib, 2012), and the theorists of cognitive modification of behavior believe that self-talk or self-phrases can affect the performance and emotions of individuals.

Self-instruction is defined as internal speech that directs an individual to implement behavior. Self-instruction or self-talk is defined as internal speech or self-phrases that a person may use to direct his behavior (Abu Zaid, 2016). The importance that the self-instruction strategy enjoys, starts from the internal dialogue (silent mental conversation). This dialogue creates the moment when the educated individual thinks about something or his recent hearing or silent writing or other methods of learning, such conversation is not limited to be merely an internal conversation with the self, but it goes beyond that to influence cognitive processes, as this conversation is in the form of orders and instructions directed to the self or verbal patterns and interpretations of feelings and perceptions (Meichenbaum, 1978 mentioned in (Al-Zoubi: 2006).

THE STUDY PROBLEM

The idea of this study, which revolves around improving attention through self-instructions, and the self-instruction are used to change a large and varied range of social and academic behaviors, and this is in line with the results of research and studies that deal with T self-help measures (Abu Zeid 2016)

Therefore the problem of the study is determined by answering the following main question:
How effective is a self-instruction strategy in improving attention among students with behavioral disorders in primary schools?

OBJECTIVES OF THE STUDY:

The current study aims at achieving the following goals:

1. To identify the effectiveness of the training program (self-instructions) to improve attention) for children in the Rafha schools for girls.
2. To discover the differences between the mean scores of the members of the experimental and control groups on the scale of impaired attention due to the experimental variable (training in self-instruction).
3. To discover the differences between the pre- and post-tests and the follow-up measurement on the scale of impaired attention of the experimental group.



Hypotheses -

1. There are statistically significant differences between the mean scores of the members of the experimental group and the control group on the scale of impaired attention after application of the program due to the training program (self-instructions).
2. There are no statistically significant differences between the mean scores of the members of the experimental group on the scale of impaired attention in the two dimensional and consecutive measurements one month after the end of the program.

The importance of the study

The importance of the study stems from the importance of the segment targeted by the study, which is the group of children in early childhood who are between (6-8) years old and who suffer from attention disorder.

This study is also a guide for teachers and guides on how to deal with this group of children, through preparing a training program that depends on self-instruction and can be applied by teachers and can also be used as a method of teaching, as it is also directed to them in how to identify children who suffer from low attention through providing appropriate tools and measures and training in their use

The terminology of the study

Self-instruction: is a set of modeling and exercises that involve these steps: 1) cognitive modeling; 2) overt external guidance; 3) overt self-guidance; 4) decreasing self-guidance; 5) latent self-instruction (TajrishiandAbkenar, 2015) and is defined by (Al-Khatib, 1995) is one of the forms of cognitive organization that aims to train the individual to modify patterns of self-talk, assuming that this will lead to behavior modification

Attention disorder:

Attention disorder is defined as the inability to pay attention and susceptibility to dispersal, that is, the difficulty a child encounters in focusing when carrying out an activity, or is the lack of attention to detail, or stray errors in life activities such as school work and difficulty in maintaining attention, listening, not completing tasks, failure to organize skills, losing and forgetting tools, avoiding tasks that require forgetting effort (American Psychiatric Association, 2002)

Emotional disability:

Emotional disability refers to long-term conditions that have a seriously negative impact on a child's educational performance and experience. These conditions can include academic difficulties that have no mental explanations, social concern, inability to control feelings or behaviors, unstable moods, and/or anxiety directly related to school or personal issues, while, the actual cause of emotional disturbance has not been definitively determined (IDEA).

THEORETICAL FRAMEWORK

Attention disorder:

Attention means focusing the individual on a particular stimulus and responding to it. It is a functional process in mental life that directs the feeling towards the behavioral situation as a



whole. Attention is a selective activity so that the mind is confined to one of the elements of experience, and this element becomes more visible than the rest of the other elements, which leads to an adaptation in the nervous system of the individual and becomes easy for him to respond to a special stimulus without responding to other stimuli (Almarsumi, 2011). Kirk & Chalfant (1984) considered that attention is a selective process for capturing stimuli closely related to the task and placing it in the center of emotional awareness.

Attention disorder or attention deficit syndrome is defined as the inability to pay attention and the susceptibility to be distracted, that is, the difficulty a child faces in focusing when carrying out an activity or what he is instructed of, and instructions (Mesfer, 2009). It is also defined as a progressive disorder of attention, impulsivity, and self-control that arises at an early stage of development and is not due to mental retardation or serious psychotic disorders or sensory disabilities such as deafness, for example, and the deficit of attention has multiple manifestations, including short attention time and the inability to retain attention towards the required stimuli or distraction and failure to complete missions and transfer from one activity to another before completing the first.

Attention deficit disorder is present in approximately 5% of children and 2.5 of adults in most cultures (American Psychiatric Association, 2013) cited in (Glady, 2015).

Factors of attention disorders are attributed to neurological reasons, which are brain dysfunction or delayed maturity or biochemical disorders. Flick, 1998; Barkley, 2001; and Carney, 2002 explained that attention deficit is linked to genetic factors. Beiderman et al. (1995) indicated that cultural and social influences play a major role in exacerbating symptoms. Barclay also assumed that the main problem with Attention Deficit is the weak ability to cease the behavior. This results in the deficiency of four executive and psychological and neurological executive functions for a child with an attention disorder, which is working memory, self-regulation, motivation, internalization of speech, and re-construction. Researchers emphasized that children with attention disorder suffer from the brain's behavioral inhibition system, the ability to behavioral inhibition is done through self-directed actions and target-oriented behaviors (Abdel-Fahim, 2012), and this is what the researcher addressed in the current study.

Self-instruction: -

The trend of cognitive behavior modification has emerged as an intermediate trend that combines behavioral direction and cognitive direction. Therefore, it was called the behavioral cognitive direction and the hypothesis upon which the epistemological theory is based. Enabling cognitive reorganization (Milner et al., 2015) the cognitive dimension is how perception directs behavior, and how irrational thoughts or perceptual imbalances lead to incorrectly handling things.

Thus, cognitive-behavioral therapy assumes that human thoughts and misconceptions lead to cognitive, emotional, and behavioral disorders in the sense that the main causes of emotional and behavioral disorders are her misconceptions (Hussein, et al., 2005).

What we care about here is seeing Meichenbaum with what Ellis and Beck pointed out that behavioral disorder is the result of distorted perceptions and illogical thinking, that what the individual thinks, what happens to him/her and what he/she adopts and what he/she possesses and the wills and values that determine the quality of his/her behavior and that there



are an association and an influence between the mental and cognitive side and the emotional, social, and behavioral aspects (Radhi and Abu Gula, 2012).

Meikenbaum's theory is based on the assumption that the things a person says to himself determine his actions, as the behavior of a person is affected by various aspects, not his activity, and it is directed by various configurations such as the physiological response, emotional reactions, knowledge, knowledge aspects, and social interactions of relations with others. Self-talk is one of these activities (Alasy 2014). The behavior modification at Meikenbaum includes three stages:

The first stage is called self-observation, where Meinkenbaum sees that the individual in the pre-treatment period has negative internal dialogue, imaginations, and perceptions of him/herself. The new cognitive structure makes his/her outlook differ from what it was.

The second stage starts with the use of internal dialogue. At this stage, the mentor's monitoring process is started an internal dialogue with the person about what he said to him/herself, i.e. his new internal conversation is not commensurate with his previous one as it became a positive one (Abdul Rahman, 2018).

- Meikenbaum developed his therapeutic approach (1985-1977), self-instructions training, which based on his observation that some patients used to repeat the same phrases during successive interviews to evaluate the effectiveness of treatment, where they were saying, A type of spontaneous self-talk. Meiknaum used his method of training for schizophrenia patients in a type of healthy conversation (Alshaadat, 2017). He, started from the hypothesis that "Verbal Libations". The things people say to themselves play a role in determining the behaviors that they will undertake, and that the behavior is affected by many activities that individuals generalize in the medium of different cognitive structures.

Self-Instruction: or Self-talk is an important aspect of modifying cognitive behavior. Vygotsky and Lori were influenced by theories related to self-instruction, whereby Vygotsky believed that the function of self-talk may guide a person's behavior, and Lori observed that self-talk may be used to help people control or change their behavior (Abu Zaid, 2016)

Self-instruction training:

It is a method in which individuals learn from themselves how to effectively deal with situations that have caused them trouble before by directing specific instructions for themselves by applying the principle of modeling and then imitation and self-reinforcement, where the therapist models acceptable behavior and then the mentor exercises that behavior by repeating and re-instructing in a loud voice directed "Do it yourself", and it is possible to apply self-instruction training in most types of mental disorders such as anxiety, anger, stress, etc. (Alshaadat, 2017)

Self-instructions may provide educators with strategies to address behavioral problems among students with learning difficulties or with behavioral and emotional disturbances. It may also enhance students' performance of academic tasks. It can also help students improve attentive behavior and social behaviors. Moreover, it can help individuals generalize behaviors and have self-control in different situations (Abu Zaid, 2016)

Self-instruction training steps:



According to Meichenbaum (1977) the procedure of the individual administration of self-instructional cognitive training is as follows;

1. An adult acts as a model and performs the task while using self-talk, speaking aloud (cognitive modeling).
2. The trainee performs the same task by following the instructions of the model (open external self-guidance)
3. The trainee performs the same task while speaking aloud the instructions (open self-guidance)
4. The trainee whisper instructions to himself/herself while the performance of the task (whispering self-instruction)
5. The trainee performs the task while guiding his/her performance through inner talk (silent self-instructions). During the training on the above five steps, four types of instructions are given:
 - A. Defining the problem (the subject of training or learning)
 - B. Focus attention and direct response
 - C. Self-reinforcement
 - D. Self-assessment (Al-Zoubi; 2006)'

Emotional and behavioral disorders:

There is no accepted general definition of behavioral and emotional disorders, so many definitions have emerged by psychologists and educators, and the lack of a single definition is agreed upon for reasons, which are as indicated by (Hallahan, 1982):

1. Lack of a specific definition of mental health
2. Difficulty in measuring behavior and emotions
3. Different behaviors and emotions
4. The diversity of theoretical backgrounds and philosophical frameworks that are used
5. Differing socio-cultural expectations of behavior
6. The disparity of entities and institutions that classify behavioral disorders (Yahiya, 2000).

Researchers have named many behavioral disorders and among the psychological terms that have been used as an alternative term for behavioral disorders are emotional disability, social maladjustment, non-adaptive behavior, and personality disorders (Radhi and Abugla, 2012).

Emotional and behavioral troubled characteristics

The first cognitive characteristics include as follows:

- Intelligence: The average intelligence of behaviorally and emotionally disturbed children does not exceed 90, and some of them fall into this slow-learning category. Besides, it is difficult to apply IQ tests to them, and then biased results against them do not give accurate indications of their true intelligence.
- Attention: Children are characterized by behavior disturbances, the inability to focus attention on school tasks, lack of attention to the instructions given by the teacher, distraction, and daydreaming.



Previous studies

The study of (Sattiha, 1997) aimed to modify some behavioral and cognitive characteristics of children with attention deficiency by using cognitive-behavioral therapy, learning by observation and providing remedies to help the troubled children to adapt at home and school and to provide therapeutic methods that are easy to train specialists. The basic sample included 20 children in three basic education schools in Tanta, and its results showed the effectiveness of the cognitive behavioral therapy program in modifying impulsive behavior, visual attention, auditory attention, the ability to recall, and the ability to remember among people with attention deficit (Almarsumi, 2011). In a study, Ammer (1980) aimed to identify the effect of strategies to modify cognitive behavior in improving attention during the performance of the task among students with hyperactivity. The study sample consisted of 69 pupils and students in grades six to eight with the age ranged between (11 to 16 years). They were divided into three groups each group with 23 children. The first group received training in an education strategy that provided an appropriate model for attentive behavior. The second group members received training in the technique of self-instruction, while the third group members received training combined with learning with modeling and providing instructions for the self, and the researcher used tools such as the Corners scale to estimate the teacher, Cogan test for homogenization of familiar shapes, Porteus labyrinth tests, and the sequential instruction booklet of qualitative skills chains. The results indicated that there were significant differences among the three study groups regarding the performance in the tests and measurements used in the study in the pre-measurement and the results of the post-measurement.

The performance of the third group members was better than the significant differences in the members of the first and second groups.

The Qur'an study (2006) aimed to know the effect of a cognitive-behavioral training program (self-education and self-monitoring) in the treatment of the basic symptoms of attention deficit disorder accompanied by hyperactivity among a sample of basic stage students in Jordan. The sample consisted of 100 students with impaired attention disorder accompanied by hypactivity. The study found that there were statistically significant differences between the experimental and control groups in favor of the experimental group. The results also indicated an improvement in the students in the sample individuals who suffered from attention deficit disorder.

in the study by Zhenzi 2017, the objectives were to determine the efficacy of a verbal self-instruction program and to assess which component of the program was most predictive of decreasing the symptoms of ADHD in three medical consoling centers in Hefei, China. Design: A randomized controlled clinical trial design was utilized with data before and after the program. The sample consisted of 33 ADHD children admitted to the centers. Results: The symptoms of ADHD were significantly reduced in the experimental group. Gladly (2015) examined whether self-instruction training reduces impulsive cognitive style in children diagnosed with this disorder. The study subjects were 10 children between the ages of 6 and 8, diagnosed with ADHD. The research design was quasi-experimental with pretest- posttest analysis showed a statistically significant reduction in the impulsivity percentile and number of errors, and a statistically significant increase in latency after the training.



METHOD AND PROCEDURES

The study procedures come within the framework of verification of the research goal as follows: and these procedures include the selection of a research sample and the application of a set of tools for the research sample selection. The methodology of this study included the most important statistical methods used by the researcher in data analysis.

METHODOLOGY

The researcher used the quasi-experimental method represented in the method of sample selection, which was selected intentionally and in dealing with the variables of the study according to the assumptions that seek to verify them, as it is not possible in this study to adjust all variables of the experiment tightly so the quasi-experimental was chosen.

Sample

The study sample consisted of (20) pupils with behavioral and emotional disorders who were divided into (10) pupils for the experimental group and (10) pupils for the control group. The sample was selected from five schools, and the age of the sample members ranged from 6 to 8 from the first to the third grades, who were identified by applying measures: Burks for behavior estimation and the measure of attention deficit disorder applied by the teachers (School year 1440/1441(2019/2020)).

Burkes scale of behavioral disorders to identify children with behavioral disorders as described in next figure:

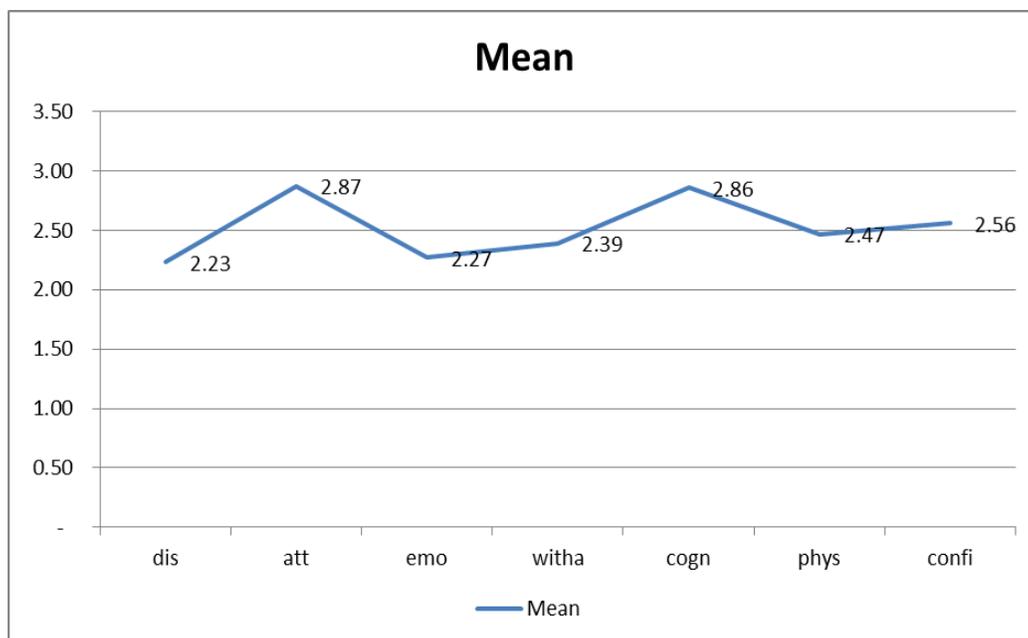


Figure 1: Burkes scale of behavioral disorders to identify children with behavioral disorders.

As shown in the diagram, the differences are as follows. The most prevalent behavioral disorders among individuals were; as follows: Attention problems and Ability deficits) while emotional disorders were least prevalent.



Study Instruments:

To achieve the goals of the study, the following instruments were used: Attention Disorder Scale, Behavioral Disorders Scale, and the Training Program.

First: Attention Disorder Scale: This scale was developed for the study guided by common measures such as Conner's behavior Scale . This scale was designed to identify the sample and is used in all stages of the study (pre, post, follow-up)

The scale contains 23 items that measure attention disorder to guide the teacher to identify students who have an attention disorder. The researcher designed the scale according to the following steps:

- Theoretical literature and previous studies
Designing the scale in its primary form, the number of paragraphs reached 25.
The scale was presented to many specialists in the field of education and psychology for arbitration.
The scale was adjusted after the arbitrators' notes.
- In the light of the opinions of the arbitrators, some items were merged and the inappropriate items were deleted. The number of items became 23.
- The scale was applied to its final form on a survey sample to examine validity and reliability.

The accuracy of the scale was calculated to ensure the validity of the scale's internal consistency, after applying it to students selected from the study population. The sample size reached (30) female pupils. All clauses of the scale were statistically significant, and this confirmed that the scale has the validity of internal consistency, as shown in Table 1.

Table 1: validity of internal consistency.

Correlation	No.								
0,400*	21	0,503**	16	0,548**	11	0,561**	6	0,728**	1
0,573**	22	0,536**	17	0,764**	12	0,484**	7	0,559**	2
0,631**	23	0,601**	18	0,509**	13	0,803**	8	0,328*	3
		0,810**	19	0,600**	14	0,395*	9	0,554**	4
		0,513**	20	0,585**	15	0,623**	10	0,612**	5

From the above table, it is shown that all scale statements have correlation coefficient degree of overall degree which indicates that it measure one feature which is attention deficit

Reliability

The stability of the scale was calculated on an exploratory sample consisting of (30) female students from the study population in the Alpha Cronbach method. The correlation coefficient reached 0.90 and the Spearman method reached 0.87. This indicates that the scale has high stability as shown in Table 2.

Table 2: Reliability in Alpha Cronbach and the Spearman method.

Number	Scale type	Number of items	Number of individuals	Reliability coefficient
1	Alpha- Cronbach	23	30	0.904
2	Spearman-Brawn	23	30	0.875

Second: Burks Behavior Rating Scale: Saudi version prepared by (Radari, 2012) to measure and diagnose behavioral and emotional disorders. It consists of 100 items distributed on 7 main fields as follows:

1. Disruptive behavior: 27 items.
2. Attention and impulse control problems: 16 items
3. Emotional problems: 17 items
4. Social Withdrawal: 9 items
5. Ability deficits: 10 items
6. The physical deficits: 10 items
7. Weak self-confidence: 10 items

Indications of the validity of the scale on the Saudi environment:

The significance of the scale validity was confirmed in its Saudi form as follows:

The content validity factor was 75%.

Factor analysis and the percentage of cumulative variations were explained.

The correlation coefficient between the degree of the paragraph and the degree of the field and the scale as a whole

Calculating the discriminative validity

Indications of the reliability of the scale: Alpha Cronbach's values ranged between 0.84 and 0.91 for domains and 0.92 for the scale as a whole.



The validity of internal consistency

In the current study, the accuracy of the scale was calculated to ensure the validity of the internal consistency of the scale, after applying it to an exploratory sample from the study community. The sample size reached (20) female pupils. Paragraphs of the scale are statistically significant and it ranged between 0.898 and 0.317 and this confirms that the scale has the validity of internal consistency.

Reliability:

The stability of the scale was calculated on an exploratory sample consisting of (20) female students from the study community in the Alpha Cronbach method. The correlation coefficient reached 0.912 and the Spearman method reached 0.935. This indicates that the scale has high stability.

Third: The training program is based on self instructions:

The main objective of the program used in the current study was to improve attention by developing attention skills among students with behavioral disorders.

Program content: the cognitive-behavioral program was designed based on self-instruction, which was based on Meichenbaum and Goodman, (1971) that the researchers expanded it and it is suitable for students with an attention disorder, and in light of previous literature and

studies, the program included activities that help to improve attention. It consisted of (22) organized sessions, each session duration ranged between (35-40) minutes. Each session was conducted in one way according to the self-instruction steps, and the self-instruction steps were in the special goals of the program, as follows:

1. The students get to know the teacher's steps while performing the targeted behavior, speaking loudly (cognitive model).
2. The students performed the same targeted behavior that the teacher did with the instructions of the teacher (external direction)
3. The students performed the same targeted behavior with accompanying self-directed instructions (self-direction).
4. The students whispered instructions during the performance of the target behavior (self-directional graded from loud to low sound).
5. The students performed the targeted behavior, accompanied by hidden self-instruction (hidden self-direction).

The validity of the program: -

The researcher verified the validity of the program by presenting it to 10 arbitrators in the field of special education and psychology.

The following table shows the details of the sessions:

Table 3: Distribution of the training plan for the program.

Session	Topic	strategies	No. of Session
First	Preapprehension	Modeling, Self-instruction Self- reinforcement	1
Second	Training in identifying incompatible ideas and positive self-talk		1
Third	Pay attention to sensual stimuli		1
Fourth	Training in listening and focusing on audio stimuli		1
Fifth	Train attention in audio stimuli by setting the direction of the sound		1
Sixth	Auditory attention training by distinguishing between sounds		1
Seventh & eighth	Visual attention training		2
Ninth & tenth	Visual attention training - completing the missing part, view an animal image and link it to a sentence		2
Tenth	Listening skills		1
Eleventh to Thirteenth	Train children on activities that require mindfulness		4
Fourteenth and fifteenth	Attention to detail		2
Sixteenth&	Skills of following the instructions		1
Seventh to nineteenth	Skill completing assignments Organizing personal & school tools & not forgetting		3
Twentieth	Conclusion and Measurement after sessions		1
Total			22

Self-instruction steps:

1. The trainer performs the targeted behavior and speaks to herself in an audible voice.
2. The student performs the task and the coach verbally directs it in an audible voice
3. The student does the job while talking to herself in an audible voice while the trainer talks to her but in a low voice
4. The student performs the task while talking to herself in a low voice and the instructor moves her lips without saying anything
5. The student performs the task only by moving the lips without making a sound
6. The student performs the task while speaking to herself in a hidden way (without moving her lips)

Modeling includes four types:

- A. Questions about the required task (such as what does the teacher want from me?)
- B. Answers to questions in the form of cognitive practice (such as I understand, that she wants me to pay attention to the lesson)
- C. Self-training during the task (for example, to focus on the teacher's speech only)
- D. Self-reinforcement (as we did, I understood the lesson).

PRESENTATION AND DISCUSSION OF THE RESULTS:

The study aimed to investigate the effectiveness of the self-instruction training program in improving attention among students with behavioral disorders in primary schools for girls in Rafha Province in the Kingdom of Saudi Arabia. To achieve this goal, the study attempted to investigate whether there were statistically significant differences between the mean scores of the members of the experimental group and the control group on the scale of impairment of attention after application of the program attributed to the training program (self-instructions).

It was also tried to investigate if there were no statistically significant differences between the mean scores of the members of the experimental group on the scale of the impairment of attention between the two dimensions: post-test and follow-up.

To achieve the validity of the assumptions, the analysis of variance was used for the repeated dual measurement as shown in Table 4.

For data analysis, variance analysis was used to measure the differences between the experimental and control groups in the pre, post and consecutive standard

Table 4: Two way Analysis Variance for repeated measurement.

Source	Sum of squares	Degrees of freedom	Average Squares	F	Probability value	Conclusion
Periods	3187.600	2	1593.800	74.490	.000	There Defference
Groups *Periods	2796.133	2	1398.067	65.342	.000	Interaction
Error	770.267	36	21.396			



From the above Table, it was shown that the median percentage of interaction between periods and groups is statistically significant. To determine the interaction, the averages and the following diagram were used.

From the figure 2,below it appears that the experimental group scores before the experiment (53.6) decreased in the dimensional measurement to (22.1), and in the follow-up keep the decline with an average of (24.6), while there was no decrease in the control group, as their average score remained 53, 52.2, and 51.8 in pre-test post-test, and follow-up measurements, which indicates the experience was effective in reducing attention.

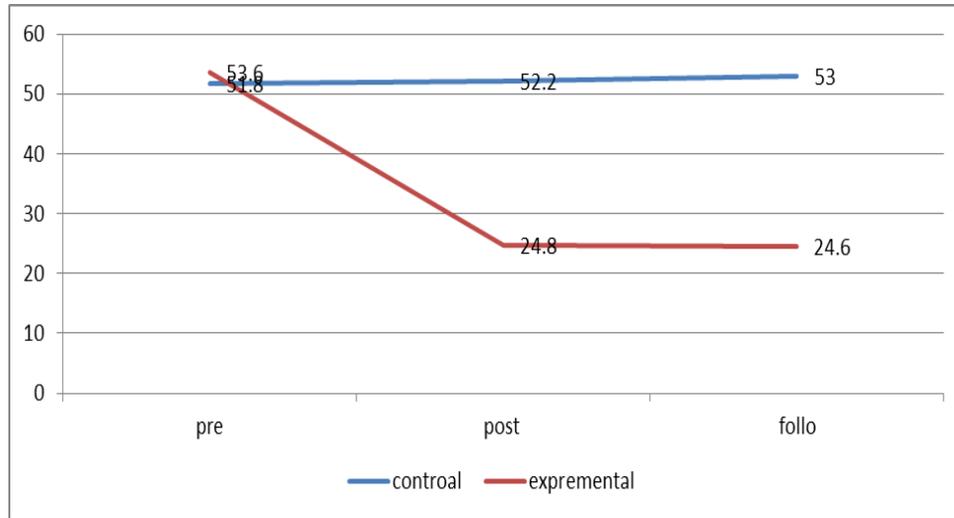


Figure 2: The scores of exeperment and control group: pre-post-follow-up tests.

From the figure below, it appears that the experimental group scores before the experiment (53.6) decreased in the posttest (22.1), and in the follow-up keep the decline with an average of (24.6), while there was no decrease in the control group, as their average score remained 53, 52.2, and 51.8 in pretest, posttest, and follow-up test, which indicates the experience was effective in reducing attention.

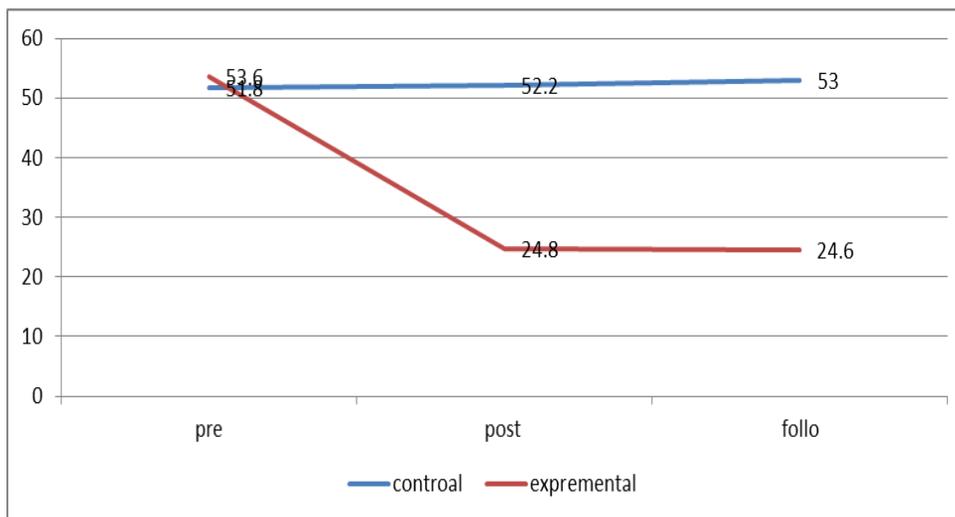


Figure 3: The, scores of exeperment and control group: pre-post-follow-up tests.

This confirms the benefit of the presented program for female students and the effectiveness of the methods used to reduce attention deficit and improve the level of attention for them, and these results are consistent with previous studies and research such as Sattiha, study (2011) that aimed to modify some behavioral and cognitive characteristics of children with attention disturbances using cognitive-behavioral therapy and learning by observation and proven its effectiveness, and a study by Ammer (1980) that aimed to identify the impact of behavior modification strategies in improving attention and used training in self-instruction technique and proven its effectiveness, and the Qur'an study (2006) that used a cognitive-behavioral training program in treating basic symptoms of attention deficit disorder accompanied by hyperactivity and the results indicated improvement in the level of attention.

It is possible to explain and discuss the result of the first assignment in the light of the results of the participation and regularity of female students in the experimental group in the program sessions and that the methods used are meaningful in the lives of these students, which made them more enthusiastic, interactive, understanding, and keen to take full advantage.

Among the activities and techniques used are self-instruction, modeling, and self-reinforcement, which was developed by Meichenbaum and Goodman in 1971, which was contributed to self-control through self-speaking and thus to increase focus and attention.

The success of the program can also be traced back to the active role that the trainer played for the experimental group, as her success in familiarity with the behavioral cognitive model based on self-instruction reflected on her control of the group's management positively and the acquisition of competencies that enabled her to make a change in attention behavior.

It can also be explained by the result of the second hypothesis, which states: There are no statistically significant differences between the mean scores of the members of the experimental group on the scale of impaired attention between the two dimensions: post-test and follow-up test.

As shown in Table 4 and Figure 1, the experimental group scores before the experiment (53.6) decreased in the dimensional measurement to (22.1), and in the follow-up measurement, they maintained the decrease with an average (24.6), while there was no decrease in the control group, as their mean scores remained 53, 52.2, and 51.8 in the pre-, post-, and follow-up measurements of the experiment, respectively, which indicates the experience was effective in reducing attention disorder.

The researcher explains this result that the program and the techniques used proved to continue to improve the level of attention in the follow-up stage so that what the student gained from positive behaviors through the program's sessions and what the program provided from an educational environment closer to reality enabled them to keep the impact of learning in addition to the sincere desire and demand from participants learn what helps them improve their attention.

In sum, we can say that the current study agreed with many of the results of previous studies, which indicated the effectiveness of programs based on the cognitive-behavioral model in improving attention, whether those studies targeted samples from people with behavioral disorders or any other category of special education.



Study recommendations:

These educational recommendations and applications include:

1. Urging teachers to use self-instruction as a strategy to teach to gain attention and academic skills
2. Urging teachers to use activities that increase attention in the classroom
3. Urging researchers to conduct more studies using self-instruction to confirm their effectiveness

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