

# The Effectiveness Of Cognitive Counseling Based On Mindfulness Training In Developing Achievement Motivation Among Gifted Female Students In Adolescence

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#### **ARTICLE INFO** ABSTRACT The current study mainly aimed to design a cognitive counseling program based on mindfulness exercises to develop motivation for achievement among gifted female students in adolescence. And revealing the effectiveness of the program in developing achievement motivation among gifted adolescent girls after applying the program in the post-measurement and the continued effectiveness in the follow-up measurement. The study used the experimental method due to its suitability to the objectives and sample of the study. The study was applied to (20) female students diagnosed with giftedness and enrolled in the Gifted Center in the Najran region. They were divided into two experimental and control groups, each consisting of (10) female students. The study tools were the Motivation for Achievement Scale, prepared by Al-Qabali (2009), Program Cognitive counseling program based on mental alertness training to develop achievement motivation among gifted female students in adolescence, prepared by the two researchers. After verifying the psychometric properties of the study tool and application of the program, the results reached the effectiveness of the cognitive counseling program based on mental alertness training in developing achievement motivation among gifted female students in the teenage stage. adolescence. Keywords: cognitive counseling, mental alertness, achievement motivation, gifted female students, adolescence.

# **INTRODUCTION:**

Paying attention to the gifted is one of the important matters that countries make a priority, due to the talents and abilities that the gifted possess that would contribute to the progress and advancement of these countries. The gifted and gifted are society's weapons for progress and keeping pace with scientific and technical development that increases every day, and despite the possession of gifted students For special talents and abilities, they are in dire need of many guidance programs and therapeutic interventions to help them develop their special abilities and talents and increase their motivation to work and achieve, so that they can contribute effectively to the progress and development of their society.

Adolescence represents an important stage of life that learners in general, and gifted and talented students in particular, pass through, because it is the basic gateway to entering adult life. This period also continues to include the middle and secondary stages and even the beginning of university education. This increases the interest in gifted students and Outstanding students at this age stage have an urgent need and a preventive approach to preserving their abilities and potentials, and an enriching entry point in working to develop these abilities and reach them to the maximum possible extent.

Achievement motivation is of great importance to the individual and society alike. It has received the attention of researchers in various fields of life, as its importance is not limited to the psychological aspect, but extends to include many fields such as sports, economics, and education. It expresses the individual's desire to accomplish difficult tasks, compete with others, overcome them, and overcome the obstacles he faces. He deals with ideas and things in an organized manner, and reaches a distinguished level in various fields of life. In addition,

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achievement motivation contributes to the individual achieving psychological compatibility. Because the individual who achieves achievements will likely be more self-accepting and more self-actualizing, and this will reflect positively on his social environment. Because achievement motivation will raise the individual's productivity in all areas of life, and economic growth in society, economic growth is linked to the high or low levels of achievement motivation among its individuals, and individuals with high achievement motivation are characterized by characteristics that make them distinguish themselves from others, as they are more inclined to self-confidence in their abilities. They are consistent in their studies, resistant to external pressure, and have a high level of ambition. They also work harder than others, achieve more success in their lives in various life situations, and score higher marks in speed tests, completing arithmetic and verbal tasks, problem solving, and school grades. They achieve more visible progress in society and are more realistic in seizing opportunities. (1,2). Mental alertness is one of the topics that educators are interested in, as it is one of the characteristics of a behaviorally, emotionally, and cognitively balanced personality, which supports individuals' ability to focus on the tasks they undertake. It also helps individuals focus on themselves and ignore the external stimuli around them, which improves their ability to demonstrate all their competence and skill, and thus makes them more able to meet their various needs in the academic environment, and to continue in their academic tasks. (3). Scientific studies and research have proven that mindfulness has a role in developing students' academic performance, reducing psychological and academic pressures, and developing students' organizational creativity (4). Mindfulness training directed at adolescents had a significant impact in reducing academic fatigue and symptoms of social anxiety among students (5). It was also found that mindfulness training can be used as an effective intervention to alleviate negative academic emotions and increase students' academic optimism (6)

It was shown from the study of (7) that there is a close relationship between mental alertness and achievement motivation, and that mental alertness in all its dimensions, including observation, increases students' motivation and academic achievement, and increases their positive behaviors. The study also indicated that mental awareness is important for achievement motivation. In order for students to achieve the desired achievement, they must focus their awareness on the events and educational experiences going on around them. Thus, their ability to organize themselves and determine their needs and abilities increases. The study also recommended conducting more research and studies on mindfulness and achievement motivation on other samples, such as teenage students, because there is a significant shortage in this field.

What increases the importance of developing achievement motivation among gifted men and women is that they suffer from a lack of development of this trait, and contrary to the prevailing belief that achievement motivation is innate to them, as gifted people differ in terms of their abilities and needs, failure to provide them with appropriate programs leads to a decrease in their motivation and causes them frustration and distress (8).

Given the national wealth that the destitute represents for the country, and the importance of the adolescence stage in being a prelude and preparation for students for the university stage and scientific research, and then setting out to work and benefiting society, and given that the exhausted are the daughters of today and the mothers of the future, on whom the upbringing of youth, which is the mainstay of society, depends, the current study seeks to Providing a cognitive counseling program based on mindfulness exercises to develop motivation for achievement among gifted female students in adolescence.

#### **RESEARCH PROBLEM:**

Motivation is considered the main driver and key to an individual's behavior and directs him towards success or failure. It is also considered the hidden motivation that regulates the individual's behavior and drives him to achievement. Educational institutions, such as schools and universities, seek to increase the motivation of their students to achieve success and excellence.(9) confirms that a low level of mental alertness leads to a low level of concentration, an inability to solve problems, produce alternative solutions, control anger, and feel uncomfortable. Studies also indicate that mental alertness is one of the modern indicators that improves motivation for performance and achievement in an individual's academic and professional life. Practicing mental alertness leads to a reduction in the state of anxiety and tension, and an increase in the happiness hormone in the individual, which leads to improving his immune system, and increasing the duration of attention and concentration, which leads to an increase in motivation for achievement .

Achievement motivation is considered the final outcome of the relationship between the motivations for success and avoiding the motivations for failure, as the motivations for success direct the individual towards his potential to achieve success and reach the desired goal through facing difficulties, adventure, self-confidence, perseverance, and independence, and these motivations are the motivations for courage in the individual. As for motives to avoid failure, they raise the individual's anxiety about the consequences of his undertaking to tackle various activities through fear of failure, weak self-confidence, anxiety related to starting work, and anxiety related to the future, and this represents for the individual motives of reluctance. (3). Scientists confirm that any human behavior must have a motive or motives behind it that stimulate and direct it. The achievement motive is considered one of the factors that influence the determination of the level of an individual's performance and productivity in the various fields and activities that he undertakes. It represents a force that stimulates and directs the behavior of students towards any work related to The teaching and learning processes. (10), (11) states that the motivation for achievement is one of the main motivations that are linked to the goals of school work, and helping students achieve this motivation works to activate their level of performance and achieve the most important aspects of school work motivation.

The study (12) found that increasing mental alertness skills in individuals can improve internal motivation in practicing sports and physical activity, while the (13) study found a positive relationship between mental alertness and internal motivation(14) study concluded indicated that there is a positive, statistically significant correlation between mental alertness and achievement motivation. The higher the level of mental alertness, the higher the level of achievement motivation among students.

(7) also found a statistically significant relationship between mental alertness and achievement motivation. The study of (15) found the effectiveness of cognitive therapy based on mindfulness in improving executive functions and reducing attention deficit disorder accompanied by hyperactivity among primary school students. The study (16) revealed the importance of the major role of applying mindfulness programs in improving and increasing students' achievement motivation. A study (17) shows the effectiveness of cognitive therapy based on mindfulness in reducing depression and anxiety related to stressful situations. The study of (18) found the effectiveness of an intervention based on mental alertness in improving emotional abilities and reducing negative psychological symptoms among a sample of gifted students. study (19) also found the success of the program based on mental alertness in developing the effectiveness of The creative self of gifted students.

While (20) study found the effectiveness of a cognitive counseling program based on mental alertness in improving both emotional regulation and body image among the study sample (21) found the effectiveness of a cognitive counseling program based on mindfulness. In developing positive thinking and reducing post-traumatic stress disorder among the study sample, the study (22) found the effectiveness of the program based on mental alertness in developing working memory, academic self-regulation, and motivation for achievement in secondary school students, which increases academic well-being, self-regulation, and motivation for achievement.

While (23) revealed that practicing mental alertness had a significant impact in increasing the motivation for achievement among members of the experimental group over the control group. Based on what the results of previous studies concluded, there is a positive and statistically significant correlation between mental alertness and the development and improvement of motivation for achievement. And the possibility of developing, improving or increasing students' motivation for achievement, Through the findings of (24), there is the possibility of stimulating achievement motivation or raising its level among students, by controlling the environment to which they are exposed, and the educational situations in which they are assigned or through tasks they must accomplish, or through Designing strategies and programs that build their motivation for achievement. Therefore, the current study seeks to develop motivation for achievement among gifted female students in secondary school using a cognitive counseling program based on mental alertness training.

The problem of the current research can be formulated in the following main question:

How effective is cognitive guidance based on mindfulness training in developing motivation for achievement among gifted female students in adolescence?

#### The following sub-questions branch out from it:

- 1- Are there statistically significant differences in the average ranks on the achievement motivation scale between members of the experimental group and the control group before applying the cognitive counseling program based on mental alertness training?
- 2- Are there statistically significant differences in the average ranks on the achievement motivation scale between members of the experimental group and the control group after applying the cognitive counseling program based on mental alertness training?
- 3- Are there statistically significant differences in the average ranks on the achievement motivation scale among members of the experimental group before and after applying the cognitive counseling program based on mental alertness training?
- 4- Are there statistically significant differences in the average ranks on the achievement motivation scale among members of the experimental group in the post and follow-up measurements?

5- Are there statistically significant differences in the average ranks on the achievement motivation scale among members of the control group before and after applying the cognitive counseling program based on mental alertness training?

# **STUDY HYPOTHESES:**

The hypotheses of the current research can be formulated as follows:

- 1- There are no statistically significant differences in the average ranks on the achievement motivation scale between members of the experimental group and the control group before applying the cognitive counseling program based on mental alertness training at a significance level (0.05)
- 2- There are statistically significant differences in the average ranks on the achievement motivation scale between members of the experimental group and the control group after applying the cognitive counseling program based on mental alertness training at a significance level (0.05)
- 3- There are statistically significant differences in the average ranks on the achievement motivation scale among members of the experimental group before and after applying the cognitive counseling program based on mental alertness training at a significance level (0.05)
- 4- There are no statistically significant differences in the average ranks on the achievement motivation scale among members of the experimental group in the post and follow-up measurements at a significance level (0.05)
- 5- There are no statistically significant differences in the average ranks on the achievement motivation scale among members of the control group before and after applying the cognitive counseling program based on mental alertness training at a significance level (0.05).

## **RESEARCH AIMS:**

The current study aimed to do the following:

- 1- Designing a cognitive counseling training program based on mental alertness exercises to develop achievement motivation among gifted female students in adolescence.
- 2- Detecting the effectiveness of the program used in developing motivation for achievement among gifted female students in adolescence in the post-measurement.
- 3- Detecting the continuity of the effectiveness of the program used in developing motivation for achievement among gifted teenage female students in the follow-up measurement.

## **RESEARCH IMPORTANCE:**

The importance of the current study lies in a theoretical and practical aspect:

A - Theoretical importance: The theoretical importance of the current study lies in:

- 1-It deals with an important stage in a person's life, which is the stage of preparation for university life, scientific research, and preparation for adulthood.
- 2-This study deals with a group that needs care and attention, which is the group of gifted people, who are the backbone of nations and their human wealth, and who are entrusted with the advancement and progress of societies.
- 3-It dealt with a vital and important topic, which is developing the drive to achieve. Therefore, there is an urgent need to help these students to develop their motivation to achieve, which has an effective impact in all aspects of their psychological, social, academic and physical lives as well.
- 4-Using it as an effective variable in activating the mind, focusing on the present moment, and sharpening positive energy is cognitive guidance based on mental alertness training.
- 5- Enriching Arab libraries with a new study that combined the development of achievement motivation, mental alertness, and gifted female students in adolescence.
- B Practical importance: The theoretical importance of the current research lies in:
- 1-The current study attempts to reveal the effectiveness of a cognitive counseling program to develop motivation for achievement using mental alertness training among gifted female students in adolescence, and the continuation of this effectiveness after implementing the program in the follow-up period.
- -2It is hoped that applying the cognitive counseling program based on mental alertness training will help develop the motivation for achievement among gifted female students in adolescence, and thus help improve their performance and relationship with others, improve their level of academic production, increase attention, and improve their other mental processes.
- -3 The results that will be produced by the current study, if its efficacy is proven, may help those caring for gifted female students in adolescence to maintain attention and focus by using mental alertness training and thus improve the processes of understanding and reasoning, processing information, academic production and effectiveness in all aspects of life.

4- It is also possible to generalize the use of the cognitive counseling program if its effectiveness is proven at different stages of development for gifted girls and other special education categories.

## **RESEARCH LIMITS:**

The current study was limited to the following limits:

**1-Objective limits:** The objective limits were limited to studying the effectiveness of a cognitive-behavioral counseling program to develop mental alertness and its effect in increasing the motivation to achieve among gifted girls in adolescence.

**2-Human limits:** The human limits of the case study were represented by gifted female students enrolled in the Gifted Gifted Center in the Najran region in the Kingdom of Saudi Arabia during adolescence.

**3-Temporal limits:** The program was implemented in the first semester of 2022-2023.

**4- Spatial boundaries:** The application was carried out in the Center for Talented Women in the Najran region in the Kingdom of Saudi Arabia.

# **RESEARCH TERMS**

**1-Mental alertness:** (25) defines it as the ability to be aware of the immediate internal or external experience, with the ability to observe and accurately describe the direct meaning it carries, without being bound by prior rulings, accepting the individual as he is, awareness, awareness, and the feeling of living the experience. In this study, what is meant is that it focuses the student's awareness on the present moment and pays attention to the stimuli present at the present time.

#### 2- Cognitive counseling program based on mindfulness training:

The cognitive counseling program based on mental alertness training used in this study is defined procedurally as: a planned and organized program in light of scientific foundations, and aims to guide and train gifted female students in the stressful stage on mental alertness strategies, with the aim of developing their motivation for achievement, through the contents of Special techniques, activities and training.

#### 3- Achievement motivation:

(26) defined it as that self-motivation and internal psychological drive that would help individuals continue their work and enhance the achievement of the goals they seek to achieve.

In this study, it is defined as: an internal feeling resulting from a need that provokes behavior directed towards achieving this need. It is the total score obtained by female students on the scale of motivation for achievement used in the study. The scores on this scale range between (15-225) degrees.

#### 4-Gifted girls:

The National Association for Gifted Children in the United States of America (27) defines gifted individuals as individuals who demonstrate levels of aptitude and competence, defined as (exceptional ability to think and learn), or merit (performance or achievement within the top 10% or less, i.e. More rarely) in one or more areas of human behavior, i.e. a structured field of activity (such as mathematics, science, language), or a set of sensory skills (such as drawing, dancing, sports).

In this study, we mean a group of gifted female students in their teenage years who were identified through mental ability tests approved by the National Center for Measurement, and who are enrolled in the Center for Gifted Girls affiliated with the Education Administration in the Najran region.

# **RESEARCH METHODOLOGY AND PROCEDURES:**

#### First: Research Methodology

The current study relies on the experimental method as an experiment aimed at identifying The effectiveness of cognitive counseling based on mental alertness training (independent variable) in developing achievement motivation among gifted female students in adolescence (dependent variable), using an experimental design with two equal groups (experimental and control) to determine the impact of the program on the variables of the study in (post-measurement). ), in addition to using a single-group design to determine the continuity of the program's effect after a period of its application (follow-up measurement of the experimental group).

Second: Research population: The study population consists of all gifted female students in adolescence who are enrolled in the Center for Gifted Girls in the Najran region in the Kingdom of Saudi Arabia and who have a low level of drive to achieve.

Third: Research sample:

The training program was applied to a sample of (20) gifted female students in adolescence who were enrolled in the Center for Gifted Girls in the Najran region in the Kingdom of Saudi Arabia. They had a low level of motivation for achievement. They were divided into two groups, one experimental and the other control, each consisting of (10) female students whose chronological age ranged from (14-18) years, with an average age of (15.4) and a standard deviation of (2.4).

# Fourth: Equality between members of the experimental and control groups:

The researchers conducted equivalence between the experimental and control groups before implementing the program, using the Mann-Whitney Test to verify the equivalence of the two groups in: chronological age and achievement motivation, and Table (1) shows this.

Table (1) Significance of the differences between the average ranks of the scores of individuals in the	
experimental and control groups in terms of chronological age and achievement motivation.	

Dimensions	Group	Rank average	<b>Total ranks</b>	U value	Z value	Sig
chronological age	Experimental	10,55	105,5	49.5	0.000	0.071
	Control	10,45	104,5		-0.039	0.971
Perseverance	Experimental	10,15	101,5	46.5	-0.265	0.796
	Control	10,85	108,5		-0.205	0./90
A goal he seeks to achieve	Experimental	9	90	35	1.1.4	0.28
	Control	12	120		-1.14	0.20
Ambition	Experimental	8,85	88.5	33.5	-1.261	0.218
	Control	12,15	121.5		-1.201	0.218
Total	Experimental	8,9	89	34	1.010	0.047
	Control	12,1	121		-1.213	0.247

It is clear from Table (1) that the Z value calculated for the total score and the sub-dimensions is less than the threshold value (1.96). This indicates that there are no statistically significant differences between the averages of the chronological age ranks and the level of achievement motivation for members of the experimental and control groups, which reassures the researchers of the homogeneity of the two samples before Program application.

Fifth: Research tools

1- Motivation for achievement, prepared by (28)

2- Cognitive counseling11 based on mental alertness training (prepared by the researchers)

These tools can be presented in detail as follows:

1- Achievement motivation scale prepared by Al-Qabali (2009)

# Description of the measure and its purpose:

The Achievement Motivation Scale was used, prepared by (28), and it consists of (45) items distributed over three dimensions. These dimensions are: (The first dimension: Perseverance, which is defined as: a high level of insistence on solving the problem during the selection stage. The idea and its aftermath. This dimension includes paragraphs represented by the following numbers: from (1-15). The second dimension: a goal that is sought to be achieved and is defined as a struggle to increase the individual's abilities to achieve excellence in different levels of activity. It includes paragraphs from (16-30). The third dimension: Ambition: It is defined as: a strong desire to succeed and achieve positive self-esteem and maintain and sustain this appreciation. This dimension includes items from (31-45). The response on the scale was designed according to a five-point Likert scale as follows (always and has 5 degrees). ), (often and has 4 degrees), (sometimes and has 3 degrees), (rarely and has 2 degrees), (does not apply and has 1 degree), and is represented numerically (1,2,3,4,5) respectively for positive paragraphs and reversed for negative paragraphs (5,4,3,2,1).

#### Psychometric properties of the scale:

# 1-Validity of the achievement motivation scale:

(28) presented the scale to specialists in psychology, psychological counseling, and special education, to ensure the appropriateness of each paragraph in it, the correctness of its linguistic formulation, clarity and appropriateness, and to ensure the appropriateness of the grading used to respond to the paragraphs. He also asked the arbitrators to add or delete any phrase that may not be appropriate to the dimension. For which it was developed, from their point of view, and the paragraph that obtained an agreement rate of (80%) or more was approved. The scale in its initial form included (45) items, and in light of the arbitrators' comments, two paragraphs were amended, paragraph No. (26) and paragraph No. (38). The final image consisted of (45) paragraphs.

# 2 -The stability of the achievement motivation scale:

The stability of the scale was verified by applying it to a sample of (30) students from outside the study sample, students from Najd National Schools for Boys in the city of Riyadh in the Kingdom of Saudi Arabia, who excelled in the third intermediate grade using the test and retest method, with a difference of two weeks between the first and second application. In order to extract the Pearson correlation coefficient for the scale and its dimensions, the total score reached (0.84). The (Cronbach-Alpha) equation was also used to calculate the internal consistency stability of the scale. The total value of (Cronbach-Alpha) for the scale reached (0.86), which is an acceptable value for the purposes of the study.

# Psychometric properties of the achievement motivation scale in the current study:

Internal consistency validity was calculated by applying it to (40) gifted female students in adolescence by calculating the Pearson correlation coefficient between the scores of each item and the total score of the scale after deleting the score of the item from the total score of the scale. The correlation coefficient was also calculated between the score of each item. The dimension and total score of the scale were explained in Table (2).

Persevera	nce	A goal he see	eks to achieve	Ambition	
Sequence	correlation	Sequence	correlation	Sequence	correlation
_	coefficient		coefficient		coefficient
1	0.874**	16	0.541**	31	0.642**
2	0.863**	17	0.552**	32	0.653**
3	0.852**	18	0.563**	33	0.664**
4	0.841**	19	0.574**	34	0.675**
5	0.830**	20	0.585**	35	0.686**
6	0.819**	21	0.596**	36	0.697**
7	0.808**	22	0.607**	37	0.708**
8	0.797**	23	0.618**	38	0.719**
9	0.786**	24	0.629**	39	0.730**
10	0.775**	25	0.640**	40	0.741**
11	0.764**	26	0.651**	41	$0.752^{**}$
12	0.753**	27	0.662**	42	0.763**
13	$0.742^{**}$	28	0.673**	43	0.774**
14	0.731**	29	0.684**	44	0.785**
15	0.720**	30	0.695**	45	0.796**

**Table (2)** Correlation coefficients between each score and the total score for the dimension to which it belongs after deleting the item score for the achievement motivation scale

\*\* Correlation coefficients at (0.01) level \* Correlation coefficients at (0.05) level.

It is clear from Table (2) that all items in the achievement motivation scale have positive and statistically significant correlation coefficients at (0.01), ranging between (0.720 and 0.874). This means that the scale has a high degree of validity.

Internal consistency (the item with the total score of the dimension to which it belongs)

Internal consistency validity was calculated through the scores of the standardization sample (survey) by calculating the Pearson correlation coefficient between the score of each dimension of the scale and the total score of the scale after deleting the dimension score from the total score) and showing this in Table (3)

**Table (3)** Correlation coefficients between the score of each dimension of the scale and the total score of the scale after deleting the dimension score from the total score, n=(40)

Dimensions	correlation coefficient
0.754**	Perseverance
0.841**	A goal he seeks to achieve
0.802**	Ambition
	1

\*\* function at the level of significance (0.01)

It is clear from Table (3) that the values of the correlation coefficients are high and significant at the level of (0.01), which indicates the validity of the scale.

Stability of the scale using two methods (Cronbach's alpha) and the split-half method

The Stability of the study tool was calculated using the alpha -Cronbach coefficient and the split-half method, which is shown in Table (4)

	<i>.</i>	8001	, , , , ,
Sequence	Dimensions	Alpha-Cronbach	Half segmentation
1	Perseverance	0.851	0.867
2	A goal he seeks to achieve	0.883	0.892
3	Ambition	0.897	0.905
Total		0.899	0.887

Table (4) Stability coefficients of the study tool using (alpha -Cronbach ) coefficient, n=(40)

It is clear from Table (4) that the reliability coefficients are high and are greater than (0.7), which gives a good indication of the reliability of the tool, and accordingly the scale can be used in the current study.

Scale correction: The scores were distributed on a scale of (5) answers, for each of the statements, which are (always, often, sometimes, rarely, never (does not apply). Each of these five answers has a specific score that the student gets when he chooses this answer, as in the following table.:

the answer	Always	Often	Sometimes	rarely	Never
Grade	5	4	3	2	1

Reverse it on negative expressions (1-2-3-4-5).

Cognitive counseling program based on mental alertness training

What is meant by the guidance program in the current study is that it consists of organized steps aimed at developing the motivation for achievement among gifted female students in adolescence at the Center for Giftedness in the Najran region, by following the techniques of cognitive counseling based on mental alertness training. The techniques of mental alertness are based on the practice of focusing on the present and accepting ideas. Feelings and behaviors without controlling, evaluating, or interacting with them.

General planning of the program: The program planning process included determining the general and procedural objectives and practical procedures for implementing the program, which include the initial preparation of the program and the guiding techniques used in it, its time frame, the number of sessions and the duration of each session. The place of implementation, the required tools, and the procedures for evaluating the program. The program was prepared by reviewing many books and references that dealt with achievement motivation, cognitive guidance based on mental alertness, and studies that dealt with the development of achievement motivation and mental alertness among gifted women.

## THE IMPORTANCE OF THE PROGRAM:

- 1- The program works to develop the motivation for achievement among gifted female students in adolescence, as motivation is considered the main engine and key to an individual's behavior and directing him towards success. It is also considered the hidden motivation that regulates the individual's behavior and pushes him to achieve, to reach success and excellence. Achievement motivation is considered one of the factors that influence determining the level of an individual's performance and productivity in the various fields and activities that he undertakes, and it represents a force that stimulates and directs the individual's behavior towards any work related to the teaching and learning processes.
- 2-The program uses mental alertness training, and the results of previous studies have indicated that practicing mental alertness leads to reducing the state of anxiety and tension, and increasing the happiness hormone in the individual, which leads to improving his immune system, increasing attention span, and concentration, and that mental alertness has A positive impact on achievement motivation, as it helps students focus and be more organised, which leads to increasing their ability to plan the future and strive towards achieving their goals.
- 3-The program uses cognitive counseling, and the results of previous studies have proven the effectiveness of cognitive counseling in achieving the goal for which it was used, especially based on mental alertness. Cognitive counseling focuses on mental processes and says that many psychological and behavioral responses depend on the wrong intellectual beliefs that the individual forms about himself and the surroundings. Here, treatment depends on changing concepts, in addition to the program addressing a segment of a high degree of importance, namely gifted girls in adolescence.

#### **PROGRAM OBJECTIVES:**

First: The general goal of the program: It is to employ cognitive counseling techniques and strategies based on mental alertness training to develop motivation for achievement among gifted female students in adolescence. Second: The preventive goal: It consists of working to provide members of the experimental group with some cognitive, emotional, and behavioral methods derived from theories of psychology in general, and the existing theory of cognitive counseling and mental alertness, on which the program is based, which enables them to develop motivation for achievement. Which leads to achieving psychological and social harmony, a feeling of self-confidence, and self-actualization, to achieve success and success.

Third: Procedural objectives: The procedural objectives for each session of the program are represented, which are achieved through constructive work during the sessions using techniques and cognitive counseling strategies based on mental alertness, to develop motivation for achievement among the study sample. It is shown in the program session plan.

Fourth: Emotional goals: They included developing self-confidence and the ability to challenge difficulties and confront difficult and frustrating situations, developing and strengthening positive thoughts and beliefs, and promoting and encouraging the development of motivation for achievement through cognitive guidance based on mental alertness.

## The foundations on which the program is based:

- **1- General principles:** These include the ability of human behavior to be modified and changed using appropriate guidance and therapeutic intervention, and the possibility of predicting it. The right of the sample members to express their desire or refusal to participate in the program or to stop it at any stage of it. Participations are accepted without restriction or condition. Care must be taken into account. Their religious and intellectual authority should not be infringed upon, and their right to guidance and counsel should be taken into account.
- **2- Philosophical and theoretical foundations:** This means the scientific theory on which the program is based (psychoanalysis behavioral cognitive humanitarian... or other). This program is based on the foundations, principles and techniques of the theory of cognitive counseling based on mental alertness.
- **3- Psychological and educational foundations:** It includes taking into account both the general characteristics of growth and the demands of growth at the stage that the study sample individuals are going through.
- **4- Physiological foundations:** It is concerned with knowing the impact of physiological aspects on the behavior of individuals, especially what relates to the nervous system and the endocrine system.
- **5- Social foundations:** It is taking into account that man is a social being by nature who tends to benefit from all societal resources in order to enhance and satisfy his needs for social interaction, and to develop all aspects of his personal mental, psychological, and social...etc. Each member of the sample has social and religious beliefs, values, and ideas that must be respected and not infringed upon.

#### Methods and techniques used in preparing the program:

Mindfulness means focusing awareness on the present moment, and paying attention to your feelings, thoughts, and the environment surrounding you at the present time with a kind of acceptance, so that you do not dwell on the past, and do not become preoccupied with looking to the future, thus losing your awareness of the present moment. Mindfulness is simply working to increase awareness of sensory stimuli, noticing breathing, senses, and thoughts. The thoughts that cause us anxiety are often related to the past or future, and mindfulness means being more aware of the present moment. It protects you from being immersed in thoughts that cause you stress, and enables you to transcend control. Negative thoughts, so you will be able to recognize your feelings well without making judgments, and then deal with them.

#### Among the techniques used to develop mental alertness in the program are the following:

- 1-The flow of thoughts strategy: The goal of the strategy: This strategy aims to: facilitate passive observation of internal events and their flow that are provoked by verbal stimuli, and facilitate metaconsciousness, decentering, attentional independence, and low conceptual processing.
- 2- Meditation strategy: The goal of the strategy is to: bring the trainee to mental and physical relaxation, by focusing attention to achieve a purpose or goal. The word meditation in the English language is derived from the Latin word Meditari, which means integration into the thinking process and also means concentration. One's thinking about something, or thinking and contemplating something. Meditation is the training of awareness, or training of the mind. Instead of leaving our minds alone, we can train them to focus.
- 3-The strategy of experiencing the present moment without issuing judgments: The main goal of this strategy is to focus on the internal feelings and perceptions as they are in the present, immediate moment without issuing judgments, and we are not looking for anything specific, as it allows the group members to live the experience and deal with each situation as it is. Now, without complications or making value judgments about whether the event is stressful or non-stressful, acceptable or unacceptable. This strategy is to meditate by being fully aware of the present moment.
- 4-Body awareness strategy: This strategy aims to: identify how the body reacts to stressors in life. Most people are more aware of the weather, the time, or their bank balances, and are equally unaware of the presence of tension within their bodies or their personal reaction to stress. The body registers stress long before the conscious mind does, and muscle tension is the method the body uses to make its owner... He realizes that he is under pressure, and body awareness is the first step toward recognizing and alleviating pressure.

This strategy includes basic exercises: (internal awareness versus external awareness - awareness during daily life - scanning parts of the body - unleashing the body)

5-Mindful Walking Strategy: This exercise involves walking in a way that involves observing your surroundings, your environment and/or your internal mental state. It is different from normal walking because you are not focused on achieving a goal, but rather it is just walking.

Second: Techniques and strategies for cognitive guidance: These include:

Lecture and discussion - awareness and insight - self-monitoring - analysis of thoughts - stopping thoughts - cognitive reconstruction - mental imagination, role playing - modeling - and homework.

# Main features of the program:

- 1- Number of sessions in the program: The current program includes (15) sessions to develop motivation for achievement among gifted female students in adolescence, using cognitive guidance based on mental alertness. The program is implemented at three sessions per week over a period of (5) weeks and a follow-up period after a month and a half. almost.
- 2- The counseling method used in the program: The program was implemented in a group manner, except for the sessions during which training on the technique of relaxation took place individually.
- 3- Session time: The time of one session in the program ranges from (45-60) minutes.
- 4- Program language: The program is presented in an easy way, a mixture of colloquial and classical Arabic to facilitate understanding.
- 5- Stages of program implementation: The program was implemented in five stages:
- A- Preliminary stage: This stage includes obtaining the necessary approvals and permits to conduct the program, going to the place chosen for the practical application of the program and meeting the sample members, giving them a comprehensive idea about the program and its importance, and determining the schedule for the program sessions. How to proceed with the program and determine the individual and group sessions.
- B- The stage of building the mentoring relationship and starting the program: It included building the mentoring relationship and unconditional acceptance between the two researchers and the members of the experimental sample and between each other, presenting a lecture on motivation for achievement, a lecture on cognitive guidance, mental alertness, and increasing the awareness of the sample members that their presence in the program is important for development. Their mental alertness.
- C- Implementation or guidance intervention phase: This phase included applying the program's techniques and strategies and training participants on them throughout the sessions.
- D- Program termination stage: This stage included an integrated and comprehensive review and view of the program and celebrating the program's completion with the participants. And applying program evaluation tools (post-measurement).
- E- The follow-up stage: It included following up on the participants, communicating continuously with them, ensuring the continued impact of the program after its completion, and then conducting the follow-up evaluation (sequential measurement) after a month and a half of the post-measurement.
- 6- Tools used in applying the program: A computer a projector CDs or flash drives containing video clips according to the sessions audio clips of soothing music for relaxation sessions a session evaluation form, a program evaluation form.
- 7- Methods used in evaluating the program: The following methods were followed in evaluating the program:
- Pre-evaluation: where the two study scales were applied; (A measure of achievement motivation for intimidated female students in adolescence), on members of the experimental and control groups.
- Continuous evaluation: This is done at the end of each session to ensure that the sample members benefit from the session and their response to the exercises and content presented in the session.
- Post-evaluation: This was done after the completion of the program sessions, to ensure the effectiveness of the program and the techniques used in developing the motivation to achieve among gifted female students in adolescence.
- Follow-up evaluation: This was done about a month and a half after the post-application, in order to ensure the continued effectiveness of the program in what it was designed for.

session	Session title	Objective of the session	Techniques and methods used	Session	Session
number				type	time
1	Familiarization	Welcoming and getting to know the	Lecture - discussion and	Collective	60-90
	and preparation	members of the experimental group,	dialogue - reinforcement		minutes
	for the application	getting to know the members of the			
	of the cognitive	experimental group and each other,			
	program and the	agreeing on the date of the sessions, the			
	actual application	place of implementation, and instructions			
	of the study tool	for the program sessions, applying the			
		pre-measurement of the study tool.			
2	Motivation for	Introducing the students to what is meant	Lecture - discussion and	Collective	60-90
	achievement and	by the concept of achievement motivation,	dialogue - reinforcement -		minutes
	mental alertness.	the importance of achievement motivation	homework		

Table No. (5) shows the sessions of the cognitive program based on mindfulness

2	Misadaptive	on the individual and society, and ways to develop achievement motivation. Introducing the students to the concept of mental alertness and the importance of mental alertness and its role in counseling, psychological treatment, and the psychological and mental health of the individual. Introducing sample members to the	Lecture -Discussion - Listening	Collective	60-90
3	behaviors and their impact on various areas of life	behaviors that people use to adapt to the inadequacy scheme Explaining the three main schemes for inadequacy, which are (overcompensation - surrender - avoidance), and clarifying the impact of using inadequacy schemes on a person's life.	-Analysis of ideas Awareness and insight - Self-monitoring- Cognitive reconstruction - Reinforcement - Homework	Conective	minutes
4	Relaxation training	Welcoming attendees and a quick review of the homework and the previous session, defining relaxation and its importance to the body, training in relaxation exercises and methods, which are breathing exercises. - Muscle relaxation, mental relaxation	Lecture, relaxation techniques, awareness and insight – stopping thoughts, mental imagery, reinforcement, modeling – and homework.	Individual	90 minutes
5	Mindful walking training to develop motivation for achievement	Welcoming attendees and reviewing the previous session and homework. Train the sample to walk in a way that involves observing their surroundings in their environment and/or their internal mental state. It trains them to focus on the experience of walking, the movement of the body, their feeling when standing, and the subtle movements that maintain their balance.	Lecture and discussion, awareness and insight, self- monitoring, stopping thoughts, role playing - modeling, mindful walking strategy, homework.	Collective	60-90 minutes
6-7	Training on the flow of thoughts strategy	Welcoming attendees and reviewing the previous session and homework Training in observing negative internal events and their flow, which are provoked by verbal stimuli. The sample members should be trained to monitor their negative thoughts and watch what is going on in the mind without actively engaging in thought processes. Gradual training from neutral words to words that help in developing motivation. To accomplish	Lecture , Discussion Awareness and clairvoyance, self-monitoring, analysis of thoughts - stopping thoughts, mental imagination, cognitive reconstruction - flow of thoughts strategy - reinforcement - homework.	Collective	60-90 minutes
8-9	Practice connecting with the present moment (non- judgmentally)	Welcoming attendees to review the previous session and homework. -Training sample members to focus on	Lecture, discussion - Awareness and clairvoyance - The mental palm. Self- monitoring, training Mindfulness activities - Mindfulness activities - Body scanning meditation - Silent walking - Breathing meditation Reinforcement - Homework	Collective	60-90 minutes
10-11	Meditation strategy training	Review of the previous session and homework - training to bring sample members to physical and mental relaxation by focusing attention on achieving a purpose. .Training the mind or awareness to focus without criticizing one thing and not another.	Lecture – discussion- Enhancing the meditation- strategy - awareness and clairvoyance, self-monitoring, stopping thoughts, muscle relaxation, and mental imagery- homework	Collective	60-90 minutes
12-13-14	Body awareness training	Review previous session and homework Educating sample members about the way the body deals with pathogensTraining sample members to differentiate between internal awareness and external awareness, training sample members to apply the strategy. It includes internal awareness versus external awareness - awareness during daily life - scanning the body - unleashing your body	Lecture - discussion and dialogue, body awareness strategy, awareness and insight, self-monitoring, analysis of thoughts, stopping thoughts, cognitive restructuring, role playing - modeling - and homework.	Collective	60-90 minutes
15	Comprehensive	A comprehensive review of the program	Techniques as needed	Collective	60-90

,	study tools - setting the date for the post-		minutes
post-measurement	measurement application of the study tools.		

Seventh: Statistical methods used in the study: In an effort to reach results that achieve the objectives of the study and analyze the data, a group of various statistical methods were used, by using the Statistical Package for Social Sciences (SPSS), after the data was coded and entered into the computer, and statistical methods The ones used in this study are:

- 1- To calculate the psychometric properties of the scale, the Pearson correlation coefficient, Cronbach's alpha, and split-half using the Spearman equation were used, with the aim of verifying the validity and reliability of the scale.
- 2- Mann-Whitney test, Wilcoxon test, and binary rank correlation coefficient in order to verify the study hypotheses regarding the impact of the program on the level of achievement motivation among participants.

#### **RESULTS AND DISCUSSION**

Results of the first hypothesis: It states: "There are statistically significant differences at the level of significance  $(\alpha \leq 0.05)$  in the average ranks on the achievement motivation scale between members of the experimental and control groups in the post-measurement".

To verify the validity of this hypothesis, the Mann-Whitney (U) test and the Z value were used as one of the nonparametric methods to identify the significance of the differences between the average ranks of the students' scores in the post-measurement in order to determine the significance of what may happen to the motivation to achieve among gifted female students in The stage of adolescence, and to calculate the size of the program's effect, the researchers relied on the binary correlation coefficient (r prd) in the case of the Mann-Whitney test for two independent samples.

**Table (6)** The significance of the differences between the average scores of the post-measurement and the effect size for the experimental and control groups in the measure of motivation for achievement among gifted

Dimensions	Group	М	Total	value (U)	value (z)	Sig.	r prd
Perseverance	Experimental	15.5	155	0.000	-3.797	0.000	1.000
	Control	5.5	55				very big
A goal he seeks to	Experimental	15.5	155	0.000	-3.791	0.000	1.000
achieve	Control	5.5	55.00				very big
Ambition	Experimental	15.5	155	0.000	-3.790	0.000	1.000
	Control	5.5	55				very big
Total	Experimental	15.5	155	0.000	-3.791	0.000	1.000
	Control	5.5	55				very big

female students in adolescence.

It is clear from Table (6) that the Z value calculated for the total score and the sub-dimensions is higher than the threshold value (1.96), which indicates that there are statistically significant differences between the average ranks of the scores of the experimental and control groups on the achievement motivation scale for gifted female students in adolescence in the post-measurement. In favor of the experimental group, this indicates high motivation for achievement among the experimental group.

Based on what was reached as a result of the first hypothesis, it can be said that the cognitive counseling program based on mental alertness training has an impact or effectiveness in developing the motivation for achievement among gifted female students in adolescence. This was demonstrated by the female students' scores on the achievement motivation scale and the difference between the scores of the experimental and control group in the score. The overall score for the scale and their scores in its sub-dimensions (perseverance, a goal to be achieved, and ambition) were in favor of the experimental group. The researchers attribute this result to the strategies and techniques that were used in the cognitive program based on mental alertness training. It is the flow of thoughts strategy: which aimed to: facilitate the negative observation of internal events and their flow that are provoked by verbal stimuli, and facilitate metaconsciousness, decentering, attentional independence, and low conceptual processing. The meditation strategy: which helped bring the trainees to mental and physical relaxation, by focusing attention to achieve a goal. Or some goal, what. Meditation is the training of awareness, or training of the mind, to focus. The strategy of experiencing the present moment without making judgments: which helped to: focus on the internal sensations and perceptions as they are in the present, immediate moment without making judgments, that is, meditation. By being fully aware of the present moment, Body awareness strategy: which worked to identify how the body reacts to the causes of stress in life, as the body registers stress long before the conscious mind does, and muscle tension is the method that the body follows to make its owner realize that he is under pressure and awareness. The body is the first step toward recognizing and alleviating stress. Mindful walking strategy: This exercise included walking in a way that involved the students observing what was around them at home and/or their internal mental state. It differs from normal walking because they are not focused on a goal to reach, but rather walking only. In addition to the techniques and strategies for cognitive guidance: which included lecture and discussion - awareness and insight - self-monitoring - analyzing thoughts - stopping thoughts - cognitive restructuring - mental imagination. Play Role – modeling – and homework. This is consistent with the results of previous studies in the presence of a positive and statistically significant correlation between mental alertness and the development and improvement of achievement motivation, and that a decrease in mental alertness leads to a decrease in achievement motivation, and what studies have found of the possibility of developing, improving or increasing achievement motivation among students using... Various programs and interventions. An example of these studies is study (9), which confirmed that a low level of mental alertness leads to a low level of concentration, an inability to solve problems, produce alternative solutions, control anger, and feel uncomfortable. And the study by (16), which concluded the importance of the significant role of applying mindfulness programs in improving and increasing students' achievement motivation, and the study by (20), which found the effectiveness of intervention based on mindfulness in improving emotional abilities, and the study of (29), which found that there is a positive, statistically significant correlation between the level of academic adaptation and achievement motivation among the study sample. The study recommended involving students in developing assistance programs to advance the educational process, and clarifying the role of achievement motivation in students' lives. And study (31) found a relationship between mental alertness and academic progress among the study sample, and (37) which found that there is a relationship between mental alertness and the level of psychological adjustment and self-efficacy among academically outstanding and non-excellent students in the secondary stage, and study (32). Which found the effectiveness of a counseling program based on mental alertness in reducing anxiety among the study sample, and the study (39) which found a statistically significant relationship between self-regulated learning and achievement motivation among the study sample, And study (34) found the effectiveness of the existing program used in developing achievement motivation among the study sample, the study of (38), which found the effectiveness of mental alertness training in reducing symptoms of psychological depression, and the study of (30), which found the effectiveness of the program used in developing achievement motivation., and the study of (8). To the effectiveness of the program used in developing achievement motivation among linguistically gifted kindergarten children, (22) found the effectiveness of a program based on mindfulness in developing working memory, academic self-regulation, and motivation for achievement in high school students, which increases their academic well-being, self-regulation, study (14) Which found a relationship between mental alertness, and motivation for achievement. And achievement motivation, test anxiety, and the cumulative GPA of female early childhood students at university, and the study of (4), which found an effect of the dimensions of mental alertness on organizational creativity among the study sample. And the study of (33), which concluded that the training program based on mental alertness was effective in reducing perceived stress among the study sample and continued effectiveness in follow-up measurement, And the study of (36), which found the effectiveness of cognitive therapy based on mindfulness in reducing intellectual stress in adolescents with emotional problems, and the effectiveness of the program continued during the follow-up period.

Results of the second hypothesis: It states that "there are statistically significant differences at the significance level ( $\alpha \le 0.05$ ) in the average ranks on the achievement motivation scale among members of the experimental group in the pre- and post-measurements."

To test the validity of this hypothesis, the Wilcoxon test and the Z value were used as one of the non-parametric methods to identify the significance of the differences between the average ranks of the experimental group's scores on the measure of motivation for achievement among gifted female students in adolescence and its dimensions in the pre- and post-measurements. To calculate the size of the program's effect, a coefficient was used. Pairwise correlation (r prd)) if the Wilcoxon test for two samples is related.

**Table (7)** Significance of the differences between the average ranks of the experimental group's scores in the pre- and post-tests and the size of the effect for the level of motivation for achievement among gifted female students in adolescence.

Dimensions	Measurement /	Ν	Μ	Total	value (z)	Sig.	r prd
	before / after						
Perseverance	negative ranks	0	0	0	-2.805	0.005	1.000
1 et sever ance	Positive ranks	10	5.5	55			very big
	Equality	0					
A goal he seeks	negative ranks	0	0	0	-2.807	0.005	1.000
to achieve	Positive ranks	10	5.5	55			very big
	Equality	0					
Ambition	negative ranks	0	0	0	-2.809	0.005	1.000
	Positive ranks	10	5.5	55			very big
	Equality	0					

Total	negative ranks	0	0	0	-2.810	0.005	1.000
	Positive ranks	10	5.5	55			very big
	Equality	0					

Table (7) indicates that there are statistically significant differences between the averages of the bicycle ranks in motivation for achievement among gifted female students in adolescence in the pre- and post-measurements in the experimental group in favor of the post-measurement.

This result can be explained by the fact that the guidance program based on mindfulness techniques and activities was effective in developing motivation for achievement among gifted female students in adolescence. This is because this program used exercises and techniques that help improve focus, attention, memory, and control of emotions, increase awareness of oneself and the present moment, and accept feelings and thoughts without judgment or criticism. This program also helped change the students' perception of themselves and the future, and strengthened their strengths, capabilities, and positive aspects. This program also helped develop female students' abilities to imagine, create, and solve solutions, and to open new horizons for learning and knowledge. This program also helped improve the students' abilities to express their feelings and ideas in different artistic ways, and to demonstrate their talents and potential. Thus, these activities created a warm, encouraging and stimulating educational environment for gifted female students in adolescence, and contributed to improving their motivation for achievement. The two researchers attribute this result to the fact that the activities used in the program helped develop achievement motivation for gifted female students in adolescence. A number of strategies and techniques were used in the cognitive program based on mental alertness training, represented by the flow of thoughts strategy, the meditation strategy, the strategy of experiencing the present moment without making judgements, and the body awareness strategy, which included a group of exercises (internal awareness versus external awareness, awareness During daily life, scanning body parts, unleashing the body), Mindful walking strategy: In addition to techniques and strategies for cognitive guidance: which included lecture and discussion - awareness and insight - self-monitoring - analysis of thoughts - stopping thoughts - cognitive restructuring - mental imagination, role playing - modeling - and homework. These activities helped stimulate enthusiasm and passion for gifted female students in adolescence, and contributed to developing their motivation for achievement. This is consistent with the results of previous (12), which concluded that increasing mental alertness skills in individuals can studies, such as the study improve internal motivation in practicing sports and physical activity, and the study (17) which concluded that The effectiveness of cognitive therapy based on mental alertness in reducing depression and anxiety related to stressful situations, and (13) study, which found a positive relationship between mental alertness and internal motivation. And the study of (14), which found that there is a positive, statistically significant correlation between mental alertness and achievement motivation, as the higher the level of mental alertness, the higher the level of achievement motivation among students (7) indicated that there is a statistically significant relationship between mental alertness and achievement motivation. And study (15) who fo3232333 und the effectiveness of cognitive therapy based on mental alertness in improving executive functions and reducing attention deficit disorder accompanied by hyperactivity in primary school students, and the study of (40), which found that mental alertness has a positive effect on achievement motivation, It helps students focus and be more organized, which increases their ability to plan for the future and strive towards achieving their goals. Reducing negative psychological symptoms among a sample of gifted students. study (19) concluded that the program based on mental alertness was successful and continued to be effective in developing creative self-efficacy among gifted students. The study (20) which concluded that the cognitive counseling program based on mental alertness was effective in reducing problems of emotional regulation and improving body image among the study sample, (23) found that practicing mindfulness had a significant effect in increasing the motivation for achievement among members of the experimental group over the control group. (21) study concluded that the cognitive counseling program based on mindfulness is effective. In developing positive thinking and reducing post-traumatic stress disorder among the study sample, and study (35) which concluded the effectiveness of the counseling program used in developing mental alertness and reducing academic procrastination among the study sample. The program continues to be effective in follow-up measurement, and the study recommended the need to develop mental alertness for different samples of special groups because of its role in reducing their academic procrastination.

Results of the third hypothesis: It states that "there are no statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) in the average ranks on the achievement motivation scale among members of the experimental group in the post and follow-up measurements."

To test the validity of this hypothesis, the Wilcoxon test and the Z value were used as one of the non-parametric methods to identify the significance of the differences between the average ranks of the experimental group's scores on the measure of motivation for achievement among gifted female students in adolescence and its dimensions in the post and follow-up measurements.

Dimensions	Measurement after /follow	Ν	Μ	Total	value (z)	Sig.
Perseverance	negative ranks	4	2.50	10.00	-1.123	0.261
	Positive ranks	4	6.5	26		
	Equality	2				
A goal he seeks to achieve	negative ranks	3	3.5	10.5	-1.745	0.081
	Positive ranks	7	6.36	44.5		
	Equality	0				
Ambition	negative ranks	7	4.93	34.5	-0.716	0.474
	Positive ranks	3	6.83	20.5		
	Equality	0				
Total	negative ranks	2	7.5	15	-1.277	0.201
	Positive ranks	8	5	40		
	Equality	0				

**Table (8)** Significance of the differences between the average ranks of the experimental group's scores in the post and follow-up measurements of the Achievement Motivation Scale among gifted female students in adolescence.

The results from Table (8) show that the Z value calculated for the achievement motivation scale is less than the threshold value (1.96), which indicates that there are no statistically significant differences between the average ranks of the scores on achievement motivation for gifted female students in adolescence between the post and follow-up measurements in the experimental group. This means that the effect of the mental alertness program continues.

The researchers explain this result by saying that the counseling program used was not only effective in developing the motivation for achievement among the experimental group of gifted female students in adolescence after the end of the program, but also in maintaining this effect after a period of application of the program. In follow-up measurement, the effectiveness of the program can be discussed. Experimental in light of the importance of the techniques and activities of mental alertness and cognitive counseling that were used in the program and which helped in sustaining the effect. She stated that mindfulness techniques and activities helped improve the students' abilities to concentrate, pay attention, and memory, and relieve stress, anxiety, and pressure. She also mentioned that mindfulness techniques and activities helped to increase awareness of oneself and the current moment, and to accept feelings and thoughts without judgment or criticism. She also mentioned that mindfulness techniques and activities helped change the students' outlook on themselves and the future, and strengthen their strengths and capabilities. She also mentioned that mindfulness techniques and activities helped develop the students' abilities to imagine, create, and solve, and to open new horizons for learning and knowledge.

This is consistent with the results of previous studies such as (12), (15), (40), (16), (17), (18), (19, (20), (21), (32), (34), (38), (30), (8), (23), (33), (35), (36), all of whom concluded that the programs used were effective in achieving the goal for which they were developed and that their effectiveness continued after implementation during a period of follow-up measurement.

#### **RECOMMENDATIONS:**

Based on the positive results of the study, the following can be suggested as recommendations:

- 1- Including mindfulness techniques and activities within extracurricular activities for gifted and ordinary female students.
- 2- Implementing seminars and lectures for students and parents to raise awareness of the importance of mental alertness techniques and activities in developing motivation for achievement.
- 3- Implementing the counseling program based on mental alertness techniques and activities with gifted female students in adolescence in all educational institutions that receive this category of female students.
- 4- Encouraging gifted female students in adolescence to practice mental alertness techniques and activities regularly, to increase their ability to focus, pay attention, memory, and control emotions.
- 5- Providing psychological and social support for gifted female students, especially in adolescence, to help them overcome the problems and pressures they may face in their academic and personal lives.
- 6- Involving parents of gifted female students in adolescence in the program, to increase interaction and cooperation between them, and to increase their understanding of the needs and challenges of their daughters.
- 7- Training those who care for gifted female students on the program's techniques and activities to apply them continuously with the female students.
- 8- Conducting other studies that use mindfulness techniques and activities in other areas of learning, thinking, and creativity, to identify their impact on various aspects of development among gifted female students in adolescence.

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