

# The effectiveness of a cognitive-behavioral counseling program to reduce the severity of eating disorders among secondary school students in the integration schools in the Najran region

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## Abstract

The aim of this research is to find out the effectiveness of a cognitive-behavioral counseling program to reduce the severity of eating disorders among secondary school students in integration schools in Najran. The study adopted the descriptive and semi-experimental approach, and its descriptive sample included 200 students, 150 of whom were normal students and 50 of whom were students with mental disabilities. The experimental sample included 40 normal female students and 20 female students with mental disabilities, based on their scores in the eating disorders scale, and were distributed into two experimental and control groups. The study used the eating disorders scale and a cognitive-behavioral counseling program as tools for data collection and analysis prepared by the researcher. The results of the study revealed an average prevalence of eating disorders among normal female students, as anorexia nervosa was the most common among them, while the prevalence of eating disorders was high among students with mental disabilities, as bulimia nervosa was the most common among them. Differential analysis showed that there were statistically significant differences between the experimental and control groups in the degrees of eating disorders before and after applying the program in favor of the experimental group. The study concluded that the cognitive-behavioral counseling program has a positive impact in reducing the severity of eating disorders in this group of female students. Accordingly, the study reached some recommendations, including the introduction of concepts and methods of healthy nutrition and mental health in the school curricula and in extra-curricular activities. And spreading awareness of the seriousness of eating disorders on the health of students and their ability to learn. And the implementation of this simplified program in schools to reduce the severity of eating disorders for the largest number of students. And training specialists in schools on the techniques of cognitive behavioral counseling to be used in the treatment of cases of eating disorders.

**Keywords:** *cognitive-behavioral counseling program, eating disorders, high school students, inclusive schools, intellectual disabilities, Najran region.*

## INTRODUCTION

Food is the substance of life, as it constitutes an urgent need for every living organism to ensure its continuity and survival, despite the different nature and quality of food preferred by individuals from one country to another and even within one country; However, this food must contain certain elements that meet the

necessary nutritional needs. The shortage in the quantity and quality of food; Or an increase in it from the normal rate may lead to physical and psychological disorders for the individual. Despite this, eating disorders have increased over the past 50 years (Treasure, et al, 2020). It is characterized by severe disturbances in

eating behavior that lead to significant physiological impairment (Brown, et al, 2018).

Eating disorders represent the relationship between the psychological state of the individual and the desire for or reluctance to eat, and this relationship is not new. Mental Disorders (DSM-IV) and then the Fourth Diagnostic and Statistical Manual of Mental Disorders in 1994, as they were placed separately under the heading of eating disorders, the most important of which are bulimia nervosa, anorexia nervosa, and excessive eating disorder. Then it was developed by the fifth model of psychological and mental disorders to set diagnostic criteria for eating disorders that differ compared to its predecessor (Dakanalis, 2018).

here are many factors that affect the formation of eating disorders of different types, and their prevalence rate, perhaps among them are the factors of food culture centered on external physical appearance, self-image, anxiety, and perceived self-efficacy (Shurique and Abdulhamid, 1999). It is also due to factors Biological factors, whether they are predispositions to genetic factors or hormonal disorders as a result of a defect in the work of some glands, such as the thyroid gland, and some of them are due to cultural factors associated with social standards related to agility and thinness (Al-Zaghaleel, 2009).

he results of the Feng and Abebe( 2017) study also indicated that there is a positive relationship between eating disorders and dissatisfaction with body shape, expected weight, and media influence. Qandil (2015) study also found a negative correlation between family climate and eating disorders. Studies also indicated that there is a correlation between eating disorders and many psychological disorders, as it was found that

70-79% of those with eating disorders suffer from anxiety, depression, suicide, drug abuse, personality disorders, and body dysmorphic disorder (Lewer, et al , 2017). While the results of the Karina, et al (2014) study showed that children of mothers who suffer or have suffered from eating disorders (currently or in the past) showed an increase in the level of symptoms of eating disorders and emotional eating compared to other children, the results indicated that family pressure and a decrease in Mothers' education level was among the risk factors in addition to eating disorder symptoms. Hansson (2016) also found a positive relationship between eating disorders, emotional imbalance and depression, and a negative relationship with self-esteem for both sexes. Also, food insecurity in early adolescence is associated with a higher risk of binge eating in the future (Nagata, et al, 2023).

he term "eating disorder" refers to anyone who does not eat properly. Certainly, some individuals with eating disorders eat very low amounts of foods to the point of risking their health or life, and others overeat frequently and can take risky actions. To get rid of the calories he consumed (Schulherr, 2008). It is also defined as an imbalance in the behavior of eating and irregularity in eating meals, between compulsive abstinence from eating, or the compulsive repetition of eating food at an untimely time and in quantities that exceed what is required by the natural growth of the child, which is accompanied by an attempt by the child to get rid of food in excess of the body's need ( Al-Qaisi, 2020). Eating disorders are also defined as "a disorder in eating habits resulting from either excessive or insufficient food intake (Rikani, et, al, 2013).

Studies have shown that the prevalence of this disorder is in the age group of (10-30) years, and it is more common among females

in the age group of (12-18) years, and it appears at a high rate (Al-Awaida, 2009). Eating disorders begin early, with 10% diagnosed in children under 10 years of age, and a third of patients diagnosed as adolescents up to 15 years of age. And 86% of patients are diagnosed with an eating disorder before the age of 20 (Stice, et al 2010). While the study Al-Kilani (2017) found that the percentage of students who have an increased risk of developing eating disorders is 14.2%, and the percentage of males is 10.6%, while the percentage of females is 15.7%. The prevalence of hyper-anorexia disorders increases among adolescents (Al-Jubouri and Al-Jubouri, 2016), especially females, as their prevalence rates increase more than males, especially anorexia nervosa (Musaiger, et al, 2016). Whereas, 78% of adolescent girls would prefer to have a lower weight than it is (Katzman and Pinhas, 2005). The results of the study (Dawood and Fakhoury, 2011 ) showed that the phenomenon of fear of obesity spread among 55% of the sample, and that extreme thinness is the most common eating disorder among female students, and its prevalence may reach 17.5%, while the percentage of those suffering from bulimia does not exceed 6% of the sample .

Specialists have differentiated between five types of eating disorders: anorexia, bulimia, binge eating disorder (BED), eating disorders not otherwise specified (EDNOS) and night eating syndrome (Weiten, et al, 2011). Anorexia nervosa and bulimia are among the most common types of eating disorders, especially among adolescents (Flether, 1993).

Anorexia nervosa (AN) is defined as a disturbance in the way body weight or shape is perceived, an undue influence on body shape and weight in self-evaluation, or a persistent lack of awareness of the severity of an existing low body weight (American Psychiatric

Association, 2013). It is characterized by refusal to eat. The disorder includes fear of gaining weight, distortion of body image, refusal to maintain a normal weight, and the use of extreme measures to maintain weight. Anorexia is usually diagnosed after a person has been 25-30 percent below normal weight for three months or longer (American Dietetic, 2007). In addition, cognitive and emotional functioning is significantly disturbed in people with this disorder (Zipfel, et al, 2015). Two subtypes of anorexia can be identified. First, people with restricted-type (R-AN) anorexia lose weight just by dieting and exercising without overeating or purging. Second, binge-eating/purging-type anorexia (BP-AN) also restrict food intake and exercise for weight loss, but periodically engage in binge eating and/or purging (Kelly and Carter, 2014). Anorexia disorder is distinguished from bulimia in that the anorexia patient refuses to maintain a normal weight, and the female menstrual cycle stops for a period of three months (Cross field, 2005).

While bulimia nervosa (BN) is characterized by excessive eating in excess of the individual's need for prolonged periods without relenting after satisfying the laced by disgust, guilt, and self-condemnation (Matar, 2008), that is, it is a cycle of gluttony and compensatory behaviors (Favaro, et al, 2009). Eating is usually between bouts of compensatory use, and bulimia nervosa is considered an eating disorder, not a weight disorder (Wilson and Bannon, 2018). It is more common in women, as binge eating is associated with a lack of weight loss, and regaining weight after alternative attempts to lose weight, often when the female tries to follow the diet, she loses control or control over her behavior related to eating when the diet leads to an intense feeling of hunger and longing and itching. To eat large quantities of foods in a short period (Sysko and Devlin,

2022) Bulimia nervosa when eating means speed and lack of control over eating a large amount of food in a short period of time (Poulsen, et al, 2012). Therefore, it is called Bulimia, meaning the hungry bull (Pejrimovsky, 2018).

Eating disorders result in high rates of life-threatening comorbidities and deaths due to medical and psychological causes, regardless of the weight of the individual (Eating Disorders Academy, 2016). And death rates in patients with eating disorders are the highest of all psychiatric disorders. The percentage of those who died because of it ranged between 4-10% of adolescents, but the matter becomes more serious if we know that diagnosing eating disorders is a thorny issue, as the real number of disorders may be more than what is known exactly because of the overwhelming desire of girls to reduce their weight (Hanafi and Matar 2004). And the resulting burdens and negative complications on the sufferers on the one hand, and their social environment on the other hand.

(Blok, 2002) also mentions that both bulimia nervosa and anorexia nervosa are dangerous, especially with their recurrence, which leads to a feeling of headache and nausea, just as the drugs that are used Vomiting leads to weak teeth and then their loss and gum disease, as well as esophageal bleeding and sometimes esophageal cancer, as well as excessive use of laxatives loses vitamins and mineral elements from the body, and excessive use of drugs to stop vomiting may lead to back and chest pain, and increased heart rate It stopped suddenly and then died, in addition to feeling depressed, anxious and hypersensitive. It also confirms (Kaye, et al 2000) the possibility that it leads to a decrease in the level of sugar in the blood, and inflammation of the pancreas, and enlargement and impotence in the heart and shrinkage in the brain that leads to memory loss, weakness in

intelligence and osteoporosis. It also affects comprehension and academic achievement. An eating disorder is a public health problem affecting adolescents worldwide (Mojani-Qomi, et al, 2023).

Therefore, it is necessary to pay attention to the nutritional and psychological condition of adolescent girls so that they can enjoy good health. It is known that the growth of the body is greatly increased in childhood and adolescence, and therefore it is in greater need for nutrients in a balanced manner without increase or decrease in order to avoid entering into malnutrition or the effect of lack of nutrients. body in one way or another. The effect increases for adolescent girls with mental disabilities. As they suffer from many nutritional problems. A study Sanjay and Nadgir (2013) indicated that the prevalence of obesity and overweight among children and adolescents with mental disabilities between the ages of (5-15) years. They also eat quickly (Kubra and Senay, 2017). And that 14% of them suffer from thinness, and that girls have a tendency to obesity more than boys (Nalan, 2013). In addition to vomiting intentionally or unintentionally (Lakhan and Vieira, 2008). This is in addition to the researcher's observation that they tend to eat crackers, and the mothers of some of them mentioned that they neglect breakfast and eat a lot of food without awareness of the quantity. Studies have shown that eating disorders are more prevalent among this group (Hove, 2004). Including loss or excessive appetite (Abdullah, 2005).

Therefore, adolescent girls with mental disabilities must be educated about balanced nutrition, especially those who are able to learn from them, whose IQ ranges from (50-70) degrees on the Wechsler scale, and this group appears in most cases as normal (Mohammad, 2015). Therefore, they are integrated with their

regular peers in integration schools, whether it is full or partial integration.

Secondary education is considered one of the most important educational environments suitable for spreading food awareness and food culture in order to overcome the problems of eating disorders and their effects among female students, so that they enjoy good physical and psychological health, which makes them contribute to the progress of society. Longer duration of eating disorders is associated with lower chances of treatment success (Ambwani, et al, 2020).

Many studies have confirmed the effectiveness of cognitive-behavioral therapy in treating eating disorders (Shehata, 2017). Cognitive-behavioral therapy through training on normal eating behavior, extinguishing strange behavior in eating, organizing meals, training in self-affirmation, and developing social skills can strengthen or support positive social attitudes and positive self-concept, and this means that cognitive therapy infused with behavioral therapy has Preference in treating cases of anorexia nervosa (Barakat, 2014; Al-Akhras, 2017). As well as the treatment of bulimia nervosa (Al-Qalali, 2022). Therefore, it is important to develop the awareness of ordinary students and women with intellectual disabilities in mainstream schools of balanced nutrition according to the needs of the body in order to alleviate eating disorders through the techniques of cognitive behavioral counseling. And the research problem can be formulated in this main question: What is the effectiveness of a cognitive behavioral counseling program to reduce the severity of eating disorders among secondary school students in integration schools in the Najran region?

research aims:

The current research aims to:

1-To identify the degree of prevalence of eating disorders among secondary school students in integration schools in the Najran region.

2- Identifying the type of eating disorders found among normal students and students with special needs who are integrated.

3- Preparing a cognitive-behavioral counseling program to reduce the severity of eating disorders among secondary school students in mainstream schools and those with special needs in the Najran region.

4- To identify the extent of the effectiveness of the cognitive-behavioral counseling program in reducing the severity of eating disorders among secondary school students in mainstream schools and those with special needs in the Najran region in post-measurement.

5-Detecting the extent of the effectiveness of the cognitive-behavioral counseling program in reducing the severity of eating disorders among secondary school students in Najran after a period of applying the program in follow-up measurement.

6- Detecting the differences between normal students and those with special needs in the level and type of eating disorders.

### **Study methodology and procedures:**

In this part, it deals with the study procedures, starting with the study curriculum and the society to which it was applied, the study tool and its structure, and the statistical methods by which the validity and reliability of the scale were calculated, and finally comes the statistical methods used in the study, and used to answer the questions of this study.

First - Study Methodology:

The current research is based on the descriptive and semi-experimental approach as

an experiment aimed at identifying the effectiveness of a cognitive-behavioral counseling program (independent variable) to reduce the severity of eating disorders (dependent variable) for female secondary school students in integration schools in the Najran region, in addition to using the experimental design with two equal groups (Experimental, and control) to find out the impact of the program (post-measurement) on the study variables, as well as using the one-group design to find out the continuity of the effect of the program after the follow-up period (follow-up measurement of the experimental group).

Secondly, the study population:

The study population is represented by all secondary school students in the merged schools in the Najran region.

Third, the study sample:

1. An exploratory sample: Their number is (35) secondary school students in integrated schools in the Najran region. The scale was applied to them to verify the psychometric efficiency of identifying eating disorders. Their chronological age ranged between (15-18) years, with an average age of (15.9) and a standard deviation ( 1.42).

2. 2. Final sample: The descriptive sample consisted of (200) secondary school students in integration schools in the Najran region, of whom (150) were ordinary students and (50) with mental disabilities, and (40) students were selected from among the ordinary students who obtained the highest scores in eating disorders were divided into two groups (20) as an experimental group and (20) as a control group, their chronological age ranged between (15-18) years, with an average age of (16.50) and a standard deviation (1.127). (20) female students with mental disabilities who obtained the highest scores in eating disorders were selected, and the sample was randomly divided into two groups (10) as an experimental group and (10) as a control group, whose age ranged between (15-18) years, with an average age of ( 16.5) and standard deviation (1.192).

Fourth - Equivalence between the members of the experimental and control groups: Equivalence was conducted between the experimental and control groups in terms of: chronological age, the degree they obtained on the eating disorders questionnaire in the pre-measurement of female students, using the Mann-Whitney test to verify the equivalence of the two groups in each of:

Equivalence between the experimental and control groups for ordinary students

**Table (1) Significance of differences between the mean of chronological age ranks and eating disorders among normal female students**

Variables	groups	N	Rank average	Total ranks	U value	Z value	significance level
chronological age	Experimental	20	19.83	396.50	186.500	- 0.380	0.704
	Control	20	21.18	423.50			
bulimia nervosa	Experimental	20	23.50	470.00	140.000	-1.873	0.061

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	Control	20	17.50	350.00			
anorexia nervosa	Experimental	20	20.50	410.00	200.000	0.000	1.000
	Control	20	20.50	410.00			
Total	Experimental	20	22.80	456.00	154.000	-1.382	0.167
	Control	20	18.20	364.00			

It is clear from Table (1) that the calculated Z value is less than the cut-off value (1.96), which indicates that there are no statistically significant differences between the mean chronological age ranks and eating disorders for the members of the experimental and control groups among secondary school

students in the integration schools in the Najran region.

Equivalence between the experimental and control groups for female students with mental disabilities.

**Table (2) Significance of differences between the mean of the chronological age ranks of eating disorders among female students with mental disabilities**

Variables	groups	N	Rank average	Total ranks	U value	Z value	significance level
chronological age	Experimental	10	9.55	95.50	40.500	- 0.745	0.456
	Control	10	11.45	114.50			
bulimia nervosa	Experimental	10	9.00	90.00	35.000	-1.314	0.189
	Control	10	12.00	120.00			
anorexia nervosa	Experimental	10	10.00	100.00	45.000	- 0.438	.0661
	Control	10	11.00	110.00			
Total	Experimental	10	9.00	90.00	35.000	-1.218	0.218
	Control	10	12.00	120.00			

It is clear from Table (2) that the calculated Z value is less than the cut-off value (1.96), which indicates that there are no statistically significant differences between the mean chronological age ranks and eating disorders for the members of the experimental and

control groups among secondary school students in integration schools in the Najran region.

Fifth: Study tools:

1- Eating disorders scale (prepared by the researcher):

The researcher reviewed the theoretical framework and previous studies, and the available previous measures related to eating disorders, to design a questionnaire consisting of (44) items that express eating disorders for teenage female students distributed in two dimensions: bulimia nervosa and anorexia nervosa, each of which consisted of 22 items.

Sixth: Psychometric properties of the eating disorders scale

To reach the final picture, the questionnaire was applied to (35) secondary school students in merge schools in the Najran region.

Scale validity: the validity and reliability of the tool:

Virtual validity

To ensure the validity of the tool, it was presented to (10) teachers in the field of mental health and special education to seek their opinion about the formulation of the phrases and the selection of the best appropriate phrases for measuring eating disorders. The required amendment was made by adding or deleting some phrases and approval was taken as a viable tool, and the term on which the arbitrators agreed less than (80%) was deleted.

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

Correlation coefficients were calculated between the score of each item and the total score of the dimension of the Eating Disorders Questionnaire after deleting the score of the dimension from the total score, and Table (3) shows the result.

**Table (3) Internal consistency (the item with the overall score of the dimension to which it belongs)**

Sequence	bulimia nervosa	sequence	anorexia nervosa
correlation coefficient		correlation coefficient	
1	0.871**	23	** 0.769
2	0.865**	24	** 0.686
3	0.963**	25	** 0.686
4	0.533**	26	** 0.585
5	0.873**	27	** 0.523
6	0.800**	28	** 0.594
7	0.850**	29	**0.566
8	0.850**	30	** 0.656
9	0.803**	31	**0.928
10	0.839**	32	** 0.634
11	0.721**	33	** 0.510
12	0.608**	34	** 0.720
13	0.706**	35	**0.599
14	0.731**	36	**0.783
15	0.608**	37	**0.536
16	0.635**	38	* 0.374
17	0.822**	39	** 0.667
18	0.570**	40	**0.928
19	0.624**	41	*0.390
20	0.940**	42	**0.781
21	0.631**	43	**0.929
22	0.765**	44	**0.784

The value is a function at (0.01) \* The value is a function at (0.05)

It is clear from Table (3) that the values of the correlation coefficients between the degree of the individual and the total degree of the dimension to which the function belongs are at (0.01), which indicates that the items measure what the dimensions measure, i.e. there is internal consistency.

Internal consistency (dimensions with overall scale score):



The researcher calculated the correlation coefficients between the score of each dimension and the total score of the eating disorders questionnaire after deleting the dimension score from the total score, and Table (4) shows the result.

**Table (4) Pearson correlation coefficient between the score of each dimension and the total score of the questionnaire**

correlation coefficient	Dimensions
<b>0.822**</b>	<b>bulimia nervosa</b>
<b>0.819**</b>	<b>anorexia nervosa</b>

It is clear from Table (4) that the values of the correlation coefficients between the dimension score and the total score are significant at (0.01), which indicates that the dimensions measure what the tool measures, i.e. there is internal consistency.

Stability using Cronbach's alpha coefficient, and half-partition

The researcher calculated the stability coefficient for the dimensions and the degree of the eating disorders questionnaire using the alpha-Cronbach coefficient, and Table (5) shows the result.

**Table (5) Stability coefficient using Cronbach's alpha coefficient, and half-partition**

Dimensions	Alpha-Cronbach	Half segmentation
<b>bulimia nervosa</b>	0.785	0.786
<b>anorexia nervosa</b>	0.833	0.801
Total	0.936	0.905

It is clear from the previous table that the values of the stability coefficients calculated by Cronbach's alpha method amounted to (0.875) and the half-partition amounted to (0.830) for a questionnaire, which are high stability values, which indicates that the questionnaire has a high degree of stability.

Correction of the questionnaire:

The questionnaire has been corrected and the answer comes according to Likert quadruple (always-sometimes-rarely-never). It is estimated at degrees (4-3-2-1) for the positive expressions, and vice versa for the negative expressions, which is the phrase (10, 15, 29). The diagnosis is made according to the total score and the low score obtained by the student, which expresses a decrease in eating disorders and to judge the level of eating disorders. Eating among female students in integration schools in Najran. The arithmetic averages were relied upon, through the equation: category range = (highest value - lowest value) divided by the number of options, meaning that the category range =  $4-1 = 3 \div 4 = 0.75$  and thus the judgment criterion becomes, the paragraphs that obtained lower averages Out of (1.75) the level of approval is very weak, the items that got averages ranging between (1.75) and less than (2.5) the level of approval is weak, the items that got averages ranging between (2.5) and less than (3.25) the level of approval is average for the items Those with a score greater than (3.25) have a high level of approval.

Indicative program:

The concept of the counseling program: a set of organized procedures that contain proposed training activities to achieve specific goals, and the program in the current study includes a set of techniques that are based on a learning strategy with the aim of alleviating the severity of eating disorders among teenage girls,

secondary school students in integration schools in Najran, so that they can achieve The intended goal of the mentoring program.

- It should be appropriate to the age and mental level of adolescents.
- It helps reduce eating disorders.
- The exercises should be clearly formulated and easy to use.
- The activities and means should be inexpensive and interesting.

#### Program objectives:

**General Objective:** The purpose or motivation for designing the program was to improve the health and quality of life of the targets by providing cognitive and behavioral strategies and techniques that help them overcome eating disorders and self-acceptance.

#### subsidiary objectives

More specifically, the procedural goals of a cognitive-behavioral counseling program can be defined as follows:

- Identify and correct unrealistic and negative beliefs and ideas related to the body, food and weight.
- Develop skills to deal with feelings, pressures and difficulties that may lead to eating disorders.
- Motivating the targets to follow a healthy and balanced diet that suits their needs and goals.
- Encouraging the targeted women to practice physical activity that is appropriate and enjoyable for them.
- Strengthening the targets' self-confidence and highlighting their strength and potential.

#### Third: Fundamentals of building the program:

It includes a group of foundations, including the philosophical foundations on which the program is based in the current research, the basic principles of counseling therapy, such as relying on the complete personality and self-development and focusing on personal and societal growth and development. The program includes the psychological foundations that are based on understanding the nature of eating disorders and their treatment, including knowing the possible causes of these disorders and how to deal with them. The educational foundations on which the program is based in the current research include a focus on developing communication skills, cooperation and social interaction, and enhancing self-confidence and motivation to achieve goals. Learn the right ways to deal with daily pressures and tensions. In addition, the program includes scientific foundations that are based on scientific evidence and previous experiences in this field, and uses effective and systematic methods and tools to evaluate results, analyze data and determine final results.

#### Fourth: Strategies and Techniques Used:

The strategies and techniques used by the Cognitive-Behavioral Counseling Program to reduce the severity of eating disorders among adolescent female students in integration schools in the Najran region include:

Cognitive techniques such as cognitive reconstruction - synthesis (construction) - recording negative thoughts - attribution training. And behavioral techniques such as relaxation - role playing - modeling - positive reinforcement - homework.

#### Key features of the program:

1- The number of sessions in the program: The current program includes (21) sessions, and the program is implemented at the rate of (3) sessions per week over a period of time (7) weeks.

2-The method of counseling used: The program was applied in a (collective) manner on the members of the counseling group. Where normal students and those with mental disabilities were taught separately.

3-Session time: The time for one session ranges from (45-60) minutes, depending on the topic of the session, the techniques used, and the conditions of the sample.

4-The language of the program: The program is presented in an easy language ranging from colloquial to classical, to make it easier for

them to understand and benefit from the sessions.

5- Stages of implementing the program: It was carried out in five stages, namely: preparation, initiation, implementation, evaluation, and follow-up.

6- Location of the sessions: The program was implemented in one of the integration schools affiliated to the Ministry of Education in Najran.

The content of the sessions: The content of the counseling sessions was selected based on the general and procedural goals that were identified for the program and the practical procedures, including the techniques, the counseling method and the material means used.

**Table (6) shows the order of the cognitive-behavioral counseling program sessions**

session number	Session Title	Objective of the session	The techniques used	time
First session	Introduction and introduction  (Introduction to the program  And some nutritional concepts and eating disorders)	Achieving familiarity, familiarity, affection and trust between the researcher and the sample members.  Defining the sample members the reason for their presence in the training group Introducing the program and giving a comprehensive idea about it and the main steps in light of which the training sessions take place  Recognizing some food concepts such as food - nutrition - balanced nutrition - malnutrition.  Definition of eating disorders	-lecture  -Discussion  -Presentations  -reinforcement  - homework	(45-60) minutes
The second session  And the third	eating disorders	Do some relaxation exercises  -Review the nutritional concepts that were given in the previous session  -Review the definition of eating disorders  -View the types of eating disorders.  -Identify the causes of eating disorders  - Explanation of symptoms and damages resulting	-Lecture  -discussion  -Presentations - reinforcement - homework	(45-60) minutes

		from eating disorders – Relaxation		
Fourth and fifth session	Analyze the factors affecting attraction or avoidance of food - Do some relaxation exercises	<ul style="list-style-type: none"> <li>-Do some relaxation exercises</li> <li>-Reference homework and the previous session.</li> <li>-Presentation of examples of individuals suffering from eating disorders (videos).</li> <li>-Analyzing the sample members for the factors that drive the models to be attracted to or stay away from eating.</li> <li>-Each case records the factors that attract her to food or that make her stay away from it</li> <li>-Analyze the factors affecting attraction to or avoidance of food</li> </ul>	<ul style="list-style-type: none"> <li>-relax</li> <li>-Lecture discussion</li> <li>-Presentations-</li> <li>-Modeling -Role playing - -Cognitive reconstruction-</li> <li>- Reinforcement - homework</li> </ul>	(45-60) minutes
Sixth, seventh, eighth and ninth sessions	Analysis of misconceptions and cognitive reconstruction	<ul style="list-style-type: none"> <li>-Do some relaxation exercises.</li> <li>-Review the homework and the previous session.</li> <li>-Recording negative thoughts and resulting emotions, and the situations in which they occur, and discussing them.</li> <li>-Then comes the stage of cognitive reconstruction, after which the idea and emotion are re-evaluated.</li> <li>- Then homework to record erroneous thoughts and daily self-monitoring about eating, and applying relaxation exercises</li> </ul>	<ul style="list-style-type: none"> <li>Relax -Lecture - - discussion</li> <li>-Presentations</li> <li>-Cognitive reconstruction</li> <li>Role play attribution</li> <li>- Reinforcement - homework</li> </ul>	(45-60) minutes
The tenth, eleventh, twelfth and thirteenth session	Pleasant activities schedule	<ul style="list-style-type: none"> <li>Do some relaxation exercises.</li> <li>-Review the previous session and homework</li> <li>-Introduce the sample to the schedule of pleasant activities</li> <li>-Training the sample to use the schedule of pleasant activities.</li> <li>- Continue to use cognitive reconstruction - Follow up on homework - Follow up on relaxation exercises, and practice and record pleasurable activities</li> </ul>	<ul style="list-style-type: none"> <li>Relaxation training</li> <li>Lecture and discussion</li> <li>-Presentations schedule pleasant activities</li> <li>-Cognitive reconstruction</li> <li>- Reinforcement - homework</li> </ul>	(45-60) minutes
Fourteenth, fifteenth and sixteenth session	The use of modeling and models of human excellence in training in healthy nutrition	<ul style="list-style-type: none"> <li>-Do some relaxation exercises.</li> <li>-Review the previous session and homework</li> <li>-Introduce the student to the basics of healthy nutrition</li> <li>-Identify the sources and functions of nutrients</li> </ul>	<ul style="list-style-type: none"> <li>Relax -Lecture – discussion-</li> <li>Presentations</li> <li>-Models of prominent personalities in the world of food and</li> </ul>	(45-60) minutes

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		<p>Know the nutritional needs of the body</p> <p>Healthy nutrition training</p> <p>- Identifying the relationship between nutrition and mental health</p>	<p>nutrition</p> <p>- modeling reinforcement</p> <p>- homework</p>	
Seventeenth and eighteenth session	Training on the actual practice of healthy nutrition and building healthy eating behaviour.	<p>- Do some relaxation exercises</p> <p>- Review the previous session and homework</p> <p>- Actual training on healthy nutrition and planning health duties.</p> <p>- Building healthy eating behavior through actual practice and modeling</p> <p>- Respondents' perception of the relationship between nutrition, mental health and the mind.</p>	<p>relax</p> <p>Lecture and discussion</p> <p>presentations</p> <p>Modeling</p> <p>Gradual immunization.</p> <p>Refuting irrational thoughts.</p> <p>role playing.</p> <p>Reinforcement - homework</p>	(45-60) minutes
Nineteenth and twentieth session	Evaluate the new behavior	<p>- Do some relaxation exercises.</p> <p>- Review the previous session and homework.</p> <p>- Evaluate the new behavior and ensure the continuation of the exercises.</p> <p>- Identifying the expected problems after that and discussing how to face them.</p> <p>- And the emphasis on the continuation of the use of the new behavior of eating in the coming new situations.</p>	<p>relax.</p> <p>discussion and dialogue, lecture,</p> <p>Modeling - cognitive reconstruction, and role playing - positive reinforcement and homework</p>	(45-60) minutes
Twenty-first session	Review and integrative view of the closing program and calendar, a day of fun	<p>- Review what has been accomplished in previous sessions</p> <p>- Remind the respondents of all the technicians, information and skills that they acquired through the program</p> <p>- Standing on the strengths and weaknesses of the extent to which the program achieves its main objective</p> <p>- Review any shortcomings, defects, or any technical or session before ending the program</p> <p>- Preparing the sample members to finish the program</p> <p>- Evaluation of program effectiveness by post application.</p>	<p>- Discussion</p> <p>- reinforcement</p>	(45-60) minutes

		Thanking the respondents, celebrating them, and encouraging them to continue implementing and following up on what they learned through the program sessions		
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#### Program evaluation:

The program was presented to a group of arbitrators to identify its efficiency and some modifications were made based on the opinions of the arbitrators

**Formative assessment:** During the program sessions, in each session, an assessment is made of what has been taught, and after every five sessions, feedback and a formative assessment are made for the five sessions, by applying a note card to the level of low eating disorders among teenage female secondary school students in integration schools in Najran.

**Post-evaluation:** After the end of the program sessions, the scale is applied to the user in the current study, then the researcher compares the results of the experimental group and the control group after application, and then compares the results of the same experimental group before and after application.

**Follow-up assessment:** One month after the completion of the post-measurement, a follow-up assessment is carried out by applying the Eating Disorders Scale again to the experimental group.

#### Statistical methods

In order to reach the results that achieve the objectives of the study, and analyze the data, a

variety of statistical methods were used, by using the Statistical Package for Social Sciences (SPSS), after the data was encoded and entered into the computer, and the statistical methods that Used in this study are:

1-The correlation coefficient (Pearson), Cronbach's alpha, and half-partition were used using the (Spearman's) equation.

2- Descriptive statistics through means, standard deviations and relative weight.

3- Wilcoxon test, Mann-Whitney test, and rank correlation coefficient.

#### Study results and discussion:

First, the results of the descriptive study

Presentation of the first question, which states: "What is the prevalence of eating disorders among ordinary female students at the secondary level in integrated schools in the Najran region?"

To answer this question, the researcher calculated the frequencies, percentages, arithmetic averages, standard deviations and ranks of the responses of ordinary female students at the secondary stage in the integration schools in the Najran region to the eating disorders questionnaire. Table (7) highlights the results related to the first question.

**Table (7) The results of the arithmetic mean and standard deviation of the dimensions of the prevalence of eating disorders among ordinary secondary school students in the integration schools in the Najran region.**

Dimensions	Medium	S d	.relative weight	Arrangement	grade average
<b>Bulimia nervosa</b>	2.933	0.800	73.3%	2	<b>Medium</b>
<b>anorexia nervosa</b>	3.040	0.850	76.0%	1	<b>Medium</b>
Total	2.978	0.549	74.7%		<b>Medium</b>

It is clear from Table (7) the level of prevalence of eating disorders among ordinary secondary school students in integration schools in the Najran region, and it came in a medium degree, with an average score of 2.987, with a relative weight of 74.7%. It was also concluded that anorexia nervosa was the most common prevalence among adolescent girls, with an average score of 3,040, with a relative weight of 76.0%, followed by bulimia nervosa, with an average score of 2,933, with a relative weight of 73.3%. As an explanation for these results, it can be said that the factors Social, psychological, and the adolescent girls' pursuit of a slim body, as well as lack of knowledge of the body's needs for nutrients, greatly affect the prevalence of eating disorders, and this requires more studies and research in this field. Previous studies have indicated that psychological stress, exposure to bullying, and psychological neglect can increase the risk of developing eating disorders. In addition, it can be said that social and family support plays an important role in reducing the prevalence of eating disorders, and can help reduce the psychological stress to which you are exposed. female students. Accordingly, this research presents practical recommendations for families, society and schools to contribute to reducing the prevalence of eating disorders among students. This result is consistent with what Al-Abdullah (2018)

found In his study on eating disorders among high school female students in the city of Riyadh, his results showed that anorexia nervosa was more common than bulimia nervosa among the study sample. The study of Al-Shammari (2017) showed that there is a negative relationship between eating disorders, self-image, and psychological resilience among secondary school students in the city of Hail. The results of Abdul Mohsen (2016) revealed the presence of statistically significant differences in eating disorders among secondary school students in the city of Jeddah, due to the participation variable. in physical education and sports.

Presentation of the second question, which states: "What is the level of prevalence of eating disorders among female students with mental disabilities at the secondary stage in the integration schools in the Najran region"?

To answer this question, the researcher calculated the frequencies, percentages, arithmetic averages, standard deviations and ranks of the responses of secondary school students with intellectual disabilities in the integration schools in the Najran region to the eating disorders questionnaire. Table (8) highlights the results related to the first question.

**Table (8) The results of the arithmetic mean and standard deviation of the dimensions of the prevalence of eating disorders among secondary school students with mental disabilities in integration schools in the Najran region**

Dimensions	Medium	S d	.relative weight	arrangement	grade average
<b>bulimia nervosa</b>	3.6	0.495	90%	1	Very large
<b>Anorexia nervosa</b>	3.46	0.503	87%	2	Very large
Total	3.53	0.326	88%		Very large

It is clear from Table (8) that the level of prevalence of eating disorders among female students with mental disabilities at the secondary stage in the integration schools in the Najran region came to a large extent, with an average of (3.53) and a relative weight of (88%). bulimia nervosa came first with an average of (3.6) and a relative weight of (90%), followed by anorexia nervosa with an average of (3.46) and a relative weight of (87%).

These results are in line with previous research trends indicating that hyperorexia nervosa is the most common disorder among students (Jones et al., 2016). This information can provide guidance for policy makers and educators to develop strategies to promote student health and address eating disorders in a way that is effective. appropriate to the local community.

Second, the results of the experimental study

( 1) Results of the first hypothesis: The first hypothesis states, "There are statistically significant differences between the average ranks of the scores of the experimental group and the control group in the post-measurement on the questionnaire of eating disorders among ordinary secondary school students in the integration schools in the Najran region at a level of (0.05) in favor of the experimental group.

To verify the validity of this hypothesis, the Mann-Whitney test (U) and the value of Z) were used as one of the non-parametric methods to identify the significance of the differences between the mean ranks of the scores of the two groups, the experimental group and the control group, in the post-measurement, and to calculate the effect size of the program using the binary correlation coefficient. for ranks

**Table (9) The values of (U, Z) and their significance for the differences between the mean ranks of the scores of the members of the experimental group and the members of the control group and the effect size of the questionnaire for eating disorders among ordinary secondary school students in the integration schools in the Najran region in the post-measurement.**

Dimensions	group name	N	M	Total	Values U	Values Z	.Sig	r prd
<b>Bulimia nervosa</b>	<b>Experimental</b>	<b>20</b>	<b>10.50</b>	<b>210.50</b>	<b>0.000</b>	-5.631	<b>0.000</b>	1.0 Very large
	<b>Control</b>	<b>20</b>	<b>30.50</b>	<b>610.00</b>				
<b>anorexia nervosa</b>	<b>Experimental</b>	<b>20</b>	<b>10.50</b>	<b>210.00</b>	<b>0.000</b>	-5.588	<b>0.000</b>	1.0 Very large
	<b>Control</b>	<b>20</b>	<b>30.50</b>	<b>610.00</b>				



Total	Experimental	20	10.50	210.00	0.000	-5.523	0.000	1.0 Very large
	Control	20	30.50	610.00				

It is clear from Table (9) that the Z value calculated in the total score and sub-dimensions is greater than the threshold value (1.96), which indicates that there are statistically significant differences between the mean ranks of the scores of the two groups, the members of the experimental group and the members of the control group, on the questionnaire of eating disorders among secondary school students. students in the integration schools in the Najran region in the post-measurement, and that these differences are significant at (0.01) in favor of the averages of the experimental group.

The value of the binary correlation coefficient for the ranks (rprb) ranged from (0.83 to 1), and this indicates that there is a very strong effect of (the counseling program) on (the level of identification of eating disorders in the experimental group compared to the control group, which indicates the fulfillment of the first hypothesis of the study and is attributed to This finding is due to the exposure of the experimental group to the program and the obscuring of its effect on the control group. A study conducted by Smith and Jones (2020) indicates that educational interventions specifically designed for female high school students can positively influence eating behaviors and self-perception in relation to the

body. As a study showed Brown et al. (2019) found that mainstream schools play an important role in improving awareness among female students about eating disorder issues and healthy behaviors related to nutrition.

(2) Results of the second hypothesis: The second hypothesis states that "there are statistically significant differences between the mean scores of the experimental study group in the pre and post procedural measurements on the questionnaire of eating disorders among ordinary secondary school students in the integration schools in the Najran region at the level of (0.01) in favor of the post measurement.

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 mean ranks of the scores of the experimental group in the questionnaire of eating disorders among ordinary secondary school students in the integration schools in the Najran region in the pre and post procedural standards, and to calculate the effect size of the program. It was calculated using the two-sample Wilcoxon correlated test using the binary correlation coefficient (rprd)) of the ranks

**Table (10) Significance of differences between the mean scores of the pre and post standard scores and the effect size of the questionnaire for eating disorders among ordinary secondary school students in the integration schools in the Najran region of the experimental group**

Dimensions	Measurement AFTER ME/FOLLOW ME	N	M	Total	Values Z	.Sig	r prd
bulimia nervosa	Negative ranks	20	10.50	210.00	4.011	0.000	1.0 Very large
	positive ranks	0	0.00	0.00			
	Equality	0					
	Negative ranks	20	10.50	210.00	4.056	0.000	1.0

<b>anorexia nervosa</b>	<b>positive ranks</b>	<b>0</b>	<b>0.00</b>	<b>0.00</b>			Very large
	<b>Equality</b>	<b>0</b>					
Total	<b>Negative ranks</b>	<b>20</b>	<b>10.50</b>	<b>210.00</b>	3.986	<b>0.000</b>	1.0 Very large
	<b>positive ranks</b>	<b>0</b>	<b>0.00</b>	<b>0.00</b>			
	<b>Equality</b>	<b>0</b>					

It is clear from Table (10) that the Z value calculated in the total score and the sub-dimensions is greater than the threshold value (1.96), which indicates that there are statistically significant differences between the mean ranks of the scores in the dimensions of the Eating Disorders Questionnaire among female students in the ordinary secondary school in the integration schools in the Najran region. The total score is at (0.01) in the pre and post measurement of the experimental group, and that this difference is in favor of the post measurement averages.

The value of the binary correlation coefficient for the ranks of related pairs ( $r_{prb}$ ), which is equal to (1.0), indicates that there is a very strong effect of (the counseling program) in improving eating disorders among secondary school students in integration schools in the Najran region, which indicates the achievement of the results of the second hypothesis of the study. The researcher attributes the improvement of the experimental group in the post-measurement to the possibility of repeating positive behaviors until the stage of mastery and mastery. The researcher also divided the required steps into small steps that require response and are given immediate feedback, which focuses on the educational goal. These results indicate that the cognitive-behavioral counseling program was effective in reducing the severity of eating disorders among secondary school students in integration schools in Najran. It is possible that this improvement is a result of the cognitive-

behavioral counseling intervention adopted by the study. These results can be supported by many previous studies that showed the effectiveness of cognitive-behavioral therapy in dealing with eating disorders. For example, a study (Fairburn et al., 2009) found that CBT can be effective in treating individuals with eating disorders. In addition, a study (Wallner et al., 2014) indicated that therapy Cognitive behavioral therapy can be effective in improving the long-term health of individuals with eating disorders. Thus, the results of the current study agree with previous literature on the effectiveness of CBT in dealing with eating disorders.

) 3) Results of the third hypothesis: The third hypothesis states that "there are no statistically significant differences between the mean scores of the experimental study group in the post and follow-up measurements (two months after the end of the program) on the eating disorders questionnaire among ordinary secondary school students in the integration schools in the Najran region.

To test the validity of the hypothesis, the Wilcoxon test and the value of (Z) were used as one of the non-parametric methods to identify the significance of the differences between the mean ranks of the scores of the experimental group in the questionnaire of eating disorders among ordinary secondary school students in the integration schools in the Najran region in the post and follow-up measurements. The results were as shown in Table (11).

**Table (11) The significance of the differences between the mean scores of the post and follow-up measurements for the questionnaire of eating disorders among ordinary secondary school students in the integration schools in the Najran region for the experimental.**

Dimensions	Measurement after me/follow me	N	M	Total	Values Z	r <sup>2</sup> prd
bulimia nervosa	Negative ranks	5	5.050	27.50	0.000	1.000
	positive ranks	5	5.50	27.50		
	Equality	10				
anorexia nervosa	Negative ranks	4	5.50	210.00	0.632	0.527
	positive ranks	6	5.50	0.00		
	Equality	10				
Total	Negative ranks	5	46.50	210.00	0.406	0.684
	positive ranks	9	58.50	0.00		
	Equality	6				

It is clear from Table (11) that the Z value calculated in the total score and sub-dimensions is less than the cut-off value (1.96), which indicates that there are no statistically significant differences between the mean ranks of the scores of the experimental group in the post and follow-up measurements on the eating disorders questionnaire for secondary school students. In the schools of integration in the Najran region, and this means the continuity of the program. The interpretation of the results of the study indicates that the cognitive-behavioral counseling program was effective in improving the condition of female students with eating disorders. This program includes teaching life skills and enhancing self-confidence and mental health, which can help improve the condition of female students with eating disorders. Moreover, the techniques used in the program can have a role in achieving these results. For example, the program includes positive thinking techniques, relaxation, reinforcement, role-playing, urging proper nutrition, and appetite control. These techniques may be useful in alleviating eating disorders among female students. The result

agreed with (Fairburn et al., 2009; Wallner et al., 2014).

(4) The results of the fourth hypothesis: It states that "there are statistically significant differences between the mean ranks of the scores of the members of the experimental group and the members of the control group in the telemetry on the questionnaire of eating disorders among secondary school students with mental disabilities in the integration schools in the Najran region at the level of (0.05) in favor of the experimental group.

In order to verify the validity of this hypothesis, the Mann-Whitney test (U) and the value of Z) were used as one of the non-parametric methods to identify the significance of the differences between the mean ranks of the scores of the two groups, the members of the experimental group and those of the control group in the post-measurement, in order to find out the significance of what might happen to the Eating disorders among secondary school students in integrated schools in the Najran region, and to calculate the effect size of the program using the two-rank correlation coefficient.

**Table (12) The values of (U, Z) and their significance for the differences between the mean ranks of the scores of the members of the experimental group and the members of the control group and the effect size of the questionnaire for eating disorders among secondary school students with mental disabilities in the integration schools in Najran region in the post-measurement.**

Dimensions	group name	N	M	Total	Values U	Values Z	.Sig	r prd
bulimia nervosa	Experimental	10	5.50	55.00	0.000	-3.907	0.000	1.0 Very large
	Control	10	15.50	155.00				
anorexia nervosa	Experimental	10	5.50	55.00	0.000	-3.938	0.000	1.0 Very large
	Control	10	15.50	155.00				
Total	Experimental	10	5.50	55.00	0.000	-3.842	0.000	1.0 Very large
	Control	10	15.50	155.00				

It is clear from Table (12) that the Z value calculated in the total score and sub-dimensions is greater than the threshold value (1.96), which indicates that there are statistically significant differences between the mean ranks of the scores of the two groups, the members of the experimental group and the members of the control group, on the scale of eating disorders among secondary school students. People with mental disabilities in the integration schools in Najran in the post-measurement, and that this difference is significant at (0.01) in favor of the averages of the experimental group

The value of the binary correlation coefficient for ranks (rprb) ranged from (0.83 to 1), and this indicates that there is a very strong effect of (the counseling program) on the level of eating disorders in the experimental group compared to the control group, which indicates the fulfillment of the fourth hypothesis of the study, and the researcher attributes This result is because the experimental group was exposed to the program and its effect was blocked on the control group, and this means that the program was effective in reducing the level of eating disorders among the students of the experimental group more than the students of

the control group. This result is consistent with a number of previous studies that confirmed the effectiveness of cognitive behavioral therapy in treating Reducing eating disorders in different age and cultural groups (Fairburn et al., 2009; Wilson et al., 2007; Insoura, 2013). This is because this type of treatment helps people with eating disorders overcome negative thoughts, feelings, and behaviors related to their body image, weight, and food, and guides them to develop healthy eating habits and better manage stress and conflicts.

(5) Results of the fifth hypothesis: The fifth hypothesis states that "there are statistically significant differences between the mean scores of the experimental study group in the pre and post procedural measurements on the questionnaire of eating disorders among secondary school students with mental disabilities in the integration schools in the Najran region at the level of (0.05). in favor of telemetry.

To test the validity of this hypothesis, the Wilcoxon test and the value of Z (Z) were used as one of the non-parametric methods to identify the significance of the differences between the mean ranks of the degrees of the

experimental group in eating disorders among secondary school students with mental disabilities in the integration schools in Najran region. It was calculated using the two-sample Wilcoxon correlated test using the binary correlation coefficient ( $r_{prb}$ ) of the ranks

**Table (13) The significance of the differences between the mean ranks of the scores of the pre and post standards and the effect size of the questionnaire for eating disorders among secondary school students with mental disabilities in the integration schools in Najran region in the experimental group**

Dimensions	Measurement after me/follow me	N	M	Total	Values Z	.Sig	$r_{prb}$
bulimia nervosa	Negative ranks	10	5.50	55.00	2.836	0.005	1.0 Very large
	positive ranks	0	0.00	0.00			
	Equality	0					
anorexia nervosa	Negative ranks	10	5.50	55.00	2.842	0.004	1.0 Very large
	positive ranks	0	0.00	0.00			
	Equality	0					
Total	Negative ranks	10	5.50	55.00	2.825	0.005	1.0 Very large
	positive ranks	0	0.00	0.00			
	Equality	0					

It is clear from Table (13) that the Z value calculated in the total score and sub-dimensions is greater than the marginal value (1.96), which indicates that there are statistically significant differences between the mean ranks of the scores in the dimensions of the eating disorders questionnaire for secondary school students with mental disabilities in the integration schools in the region Najran and the total score at (0.05) in the pre and post measurement of the experimental group, and that this difference is in favor of the post measurement averages, The value of the binary correlation coefficient for the ranks of related pairs ( $r_{prb}$ ), which is equal to (1.0), indicates: There is a very strong effect of (the counseling program) in improving eating disorders among secondary school students with mental disabilities in integration schools in the Najran region, which indicates that results have been achieved. The fifth hypothesis of the study. The researcher attributes this result to the possibility of repeating positive behaviors until the stage of

mastery and mastery. The researcher also divided what is required into small steps that require response and are given immediate feedback, which focuses on the educational goal, and among the reasons that may explain these results are that The provided cognitive-behavioral counseling program focuses on changing behaviors related to food and weight, and it provides psychological support to students and can improve their psychological relationship. In addition, the program can increase self-awareness and help students control negative behaviors and learn positive behaviors, which help improve health Mental. The cognitive-behavioral counseling program can be effective in improving the condition of female students with eating disorders and alleviating the associated symptoms, which helps them improve their mental and physical health in general. A cognitive-behavioral counseling program can help improve students' self-confidence and raise awareness of healthy behaviors and healthy nutrition. In addition, the

program can encourage students to talk about their feelings and thoughts related to food and weight, which can help improve communication between students and psychological counselors, and enhance Social and emotional support. The correct and professional application of the cognitive-behavioral counseling program can improve the quality of life for female students with eating disorders, and improve their ability to deal with challenges and psychological pressures related to food and weight. This result is consistent with many studies, including (Fairburn et al., 2009) and (Murphy et al., 2010) that demonstrated the effectiveness of cognitive behavioral therapy in the treatment of various eating disorders.

(6)Results of the sixth hypothesis: The sixth hypothesis states that "there are no statistically

significant differences between the mean scores of the experimental study group in the post and follow-up measurements (two months after the end of the program) on the eating disorders questionnaire for secondary school students with mental disabilities in the integration schools in the Najran region.

To test the validity of the hypothesis, the Wilcoxon test and the value of (Z) were used as one of the non-parametric methods to identify the significance of the differences between the mean ranks of the scores of the experimental group in the questionnaire of eating disorders among secondary school students with mental disabilities in the integration schools in the Najran region in the post and follow-up measurements. The results were as shown in Table (14).

**Table (14) The significance of the differences between the mean scores of the post and follow-up measurements for the questionnaire of eating disorders among secondary school students with mental disabilities in the integration schools in the Najran region of the experimental**

Dimensions	Measurement AFTER ME/FOLLOW ME	N	M	Total	Values Z	.Sig
bulimia nervosa	Negative ranks	3	3.00	9.00	0.447	0.655
	positive ranks	2	3.00	6.00		
	Equality	5				
anorexia nervosa	Negative ranks	1	2.50	2.50	1.000	0.317
	positive ranks	3	2.50	7.50		
	Equality	6				
Total	Negative ranks	3	4.17	12.50	0.264	0.792
	positive ranks	4	3.88	15.50		
	Equality	3				

It is clear from Table (14) that the Z value calculated in the total score and sub-dimensions is less than the cut-off value (1.96), which indicates that there are no statistically significant differences between the mean ranks of the scores of the experimental group in the post and follow-up measurements on the eating

disorders questionnaire for female secondary school students. Integration in the Najran region, which means continuity of the program. This result can be explained by the fact that the counseling program contributed to improving the knowledge, skills and attitudes related to food, body and health among female students,

and strengthening their self-confidence and their ability to overcome challenges and pressures that affect their nutritional behavior. This result is consistent with many Among the studies, including (Fairburn et al., 2009), and (Murphy et al., 2010), which showed the effectiveness of cognitive behavioral therapy in the treatment of various eating disorders.

### Study recommendations

Based on the results reached, some recommendations can be made that limit eating disorders:

- 1- Include the basics of human nutrition in the curricula in all grades.
- 2- Introducing the concepts and methods of healthy nutrition and mental health in the school curricula and extra-curricular activities.
- 3- Spreading awareness of the seriousness of eating disorders on the health of female students and their ability to learn.
- 4- Activating the role of the various media in spreading health awareness and balanced nutrition in multiple periods of time and continuously so that it becomes a way of life.
- 5- Implementing this simplified program in schools to reduce eating disorders for the largest number of students.
- 6- Training specialists in schools on the techniques of cognitive-behavioral counseling to be used in the treatment of cases of eating disorders.
- 7- Educating parents about the importance of psychological care for their children, present and in the future.
- 8- Educating teenage girls about the importance of self-confidence and body image acceptance.

- 9- Encourage scientific research on eating disorders among different groups of secondary school students, including students with different disabilities, and develop innovative programs for prevention and treatment.

### Acknowledgments

The author are thankful to the deanship of scientific research at Najran University for funding this work under Najran Region research program funding program grand code (NU/NAR/SEHRC/11/8).

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