

# Obsessive Distortion of Body Image and Its Relationship to Self-Concept among Adolescent Female Students in Jordan

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## Abstract

The study aims at identifying the level of obsessive distortion of body image, the level of self-esteem concept and the relationship between them in Jordan. The study sample consists of 372 female students from 9th, 10th and 12th grades representing the percentage of 21.5% of the school students enrolled in the first school semester of the years 2020/2021 at Giza District Education Directorate in Jordan. They have been selected in the stratified random method. To achieve the objectives of the study, the descriptive correlative method has been used as well as with two scales have been developed. The validity and reliability of the two scales have been verified, then they have been applied to the study sample.

**Keywords:** Obsessive distortion of body image • Self-esteem concept • Adolescent female students

## Introduction

The adolescence phase is very important in the life of every individual in which he moves from childhood to adulthood where this phase is accompanied by physiological, social, mental and emotional changes. It affects the subsequent phases, so that it is described as the phase of problems in which the adolescent is exposed to many problems because of these changes, that occur at this phase which sometimes lead to negative effects that hinder adolescents to adapt and coincide with others. The changes that occur at this stage, which sometimes lead to negative effects that hinder adolescents' adaptation and compatibility with others [1].

The interests of the adolescent convert from material tangible things to intangible things, so that they become self-reliant instead of relying on others and the desire to be free from parental authority increases which leads to spend the most time with friends seeking for ideals [2].

The adolescents care a lot about their appearance that's due to physical changes as well as due to adolescent's knowledge that both social acceptance and self-realization are affected by general appearance of the individual explaining most of adolescent's behavior that seems strange to us, especially when they try to wear unfamiliar clothes with unusual hair styles. These are all efforts by adolescents to obtain social acceptance, by adhering to the group's standards on one hand and to achieve self-realization as a person who has rights and privileges of an adult on the other hand [3]. Adolescence is characterized by clear and continuous growth in all physical and personal manifestations, which leads to have multiple forms and images of adolescence that vary according to different cultures, different habits and social roles played by adolescents in their societies [4].

The body image is very important factor for adolescents especially girls. The attention to the body shape of adolescent girls is almost an epidemic, so that their interest in losing weight and to be thin increases, in addition to the efforts made to be in shape. This is due to parents and friends' interest, so that their viewpoint is very important to accept the shape of her body. If her physical characteristics provide her with good qualities and characteristics that make her acceptable to them, it would lead to increase her ambition to maintain those characteristics and achieve a physical image based on thinness or what is known as agility. In this case, the physical changes that occur during this period due to the puberty process are not accepted which

causes a negative view of the body that includes rejection of those physical changes and the general image of the shape, which makes a great desire to change the body shape [5].

The body image is the most important factor that affects the adolescent self-satisfaction. The negative image of the body is created because of the ideal image of thinness that the adolescent has set for herself. When the adolescent watches the pictures of models, media figures and skinny actresses through T.V channels and audio-visual media, she will make more effort to become like them. She will try to lose weight and when she cannot reach the ideal weight that she thinks, her view of her body will become negative [6].

Abd al-Rahman pointed out that adolescent girls who are criticized by their mothers because of their excess weight may follow a special diet which leads to a high rate of eating disorders and low self-concept [7]. The body image means the mental image, whether positive or negative, that the individual forms about external body and shape such as hair color and texture, gait consistency, facial features and other details related to tallness and weight [8]. The body image for the adolescents is one of the most important characteristics of self-identity which leads to maintain external appearance and control weight within the limits of society's standards which may cause eating problems for them [9].

The individuals' relationship with their bodies has an important role in refining their personality in addition to the beliefs about their selves, body image and the appropriateness of size and parts of body according to the different criteria that come from the sources of family, friends' group and various means of technology in addition to feelings about their body, whether positive feelings or negative. If dominant feelings are negative, this leads to the realization of distortion in body which increases the thinking about a defect in external appearance leading to have distorted and exaggerated view of what appearance looks like which may reach to the point of obsession about external appearance which causes a lot of disorders including eating disorders [10]. Obsessive distortion of body image is defined by American Psychiatric Association, as excessive thinking in some defects of body appearance which are just illusions of an ordinary person [11]. It is also defined as excessive thinking in body appearance which leads to have self-defeating behaviors [12].

Fayed defined it as paying attention to body weight and shape, due to

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girl's experiences which includes attention to be thin in a good way, concern about gaining weight with dissatisfaction of overweight, fear of excessive eating in exchange for physical attractiveness and working to reduce body weight to match the interpersonal relationships [13]. Individuals who suffer from body dysmorphic disorder are not only dissatisfied about their appearance but are so preoccupied and anxious that they are overwhelmed by the idea that part of their body is ugly or defective causing distress about their physical problem to the extent that it affects their social life, career and relationships. The defects that they think exist in their body, whether it is skin, hair, nose, mouth or eyebrows are only imaginary and greatly exaggerated ideas [14].

The role of advertisements about body image play appears indirectly through the formation of body ideal image far from reality with regard to thinness. Moreover, it affects directly through what is known as a defect in body image. Often, most of these advertisements are modified to remove any defect in the pictures before they are published so that they can change the shape of body in the picture which makes the beauty standards of media not always real [15].

As Graesz, Levine and Murnen point out that exposure to the media, including images of thinness, leads to have feelings of dissatisfaction about the body which causes a decrease in self-esteem and negative feelings [5]. One of the causes of obsessive distortion of body image is focusing on the external physical appearance in an exaggerated way. Body image is an important component of a healthy personality where the body image affects the individual's self-esteem and thus the concept of himself. The individual's attitude towards their body image affects behavior and thus affects interaction with others, so they begin to pay attention to their appearance which increases self-esteem [16]. The body image is the shape of what we imagine in our minds.

The image of the body has three basic implications: [17]

- Perceptual content: means how accurately the body is perceived in terms of weight and size.
- Subjective or personal content includes satisfaction about the body.
- Behavioral content: means avoiding situations that bring discomfort about the body external appearance.

The body image is one of the important sources of shaping the adolescent identity which includes him, including the structure of body and its size. The body's consistency about tallness and weight is considered as an important factor of adolescent's vision toward him in terms of contentment and acceptance [4]. Dissatisfaction with body is associated with some psychological variables such as anxiety especially social anxiety, anorexia nervosa, depressed mood as well as self-concept [18].

Mcdonald considers that the self-concept is the overall picture that the individual has about himself or how the individual views himself and the associated qualities of himself which means a set of basic behavioral patterns, traits, opinions and results that an individual forms as a result of himself observation in many different situations and experiences [19,20]. That is, the self consists mainly of two components, which are how the individual sees himself and the reflections of other people's impressions and opinions about himself.

Al-Ahmad defines the self as a complex concept which includes many psychological, cognitive, emotional, social and moral components that work in harmony with each other [21]. This concept develops during growth stages. It begins to form starting from the first year of child's life, and then it gradually increases due to the processes of maturity, experience, learning and socialization. Zahran defines the self-concept as an organized and learned cognitive formation of emotional perceptions and evaluations of individual toward himself [22]. It is considered a psychological definition of himself and it consists of the individual's coordinated dimensional thoughts about the various elements internal or external components.

The self-concept is the value that the individual gives to himself and how he feels and judges himself negatively or positively where the self-concept

has a role in guiding and motivating individuals. Self-concept is affected by a number of factors including the individual's decisions regarding choices in all life areas such as study, marriage and travel communication and social relationships. It is also affected by the individual's expectations about himself and participation in social activities.

The self-concept consists of five forms, as mentioned by Hourani [23], which are:

➤ Perceived or realistic self: This concept refers to the way in which the individual perceives himself as reality not as he desires. These individual perceptions are formed through interaction with the environment. The environment, physical and mental characters, purposeful relationships with others as well as personal and social experiences are among the basic determinants of self-formation.

➤ Social self: It is the individual's perceptions that determine the image that he believes that others in society think about him, which the individual shows through social interaction with others and acquired through contact with them. This self-perception depends on others' evaluation of individual through their words and actions towards him.

➤ The ideal self: It is called "the ambitious self". It is the state that the individual wishes to be, whether related to psychological or physical aspect or both, depending on the extent to which the control of concept of perceived self has where the perceptions that determine the ideal image that the individual would like to be like.

➤ Academic self: It refers to the behaviour in which the individual expresses himself in terms of ability to achieve and perform academic duties compared to others who perform the same duties or tasks.

➤ Temporary self: It is the self that the individual possesses for a short period and then it vanishes. It may be desirable or undesirable depending on the situations and variables that the individual finds himself toward.

## Previous studies

Judah conducted a study that aimed to find out the level of satisfaction with body image and its relationship to the reasons why young women seek plastic surgery from their point of view [24]. The study sample consisted of 150 young women who attended cosmetic clinics in Amman, the results of the study showed that there was a medium degree of the level of satisfaction with the body image of young women. The results indicated that there was a positive relationship between the level of satisfaction with body image and the reasons for young women's demand for plastic surgery. But results showed that, there are differences in the level of satisfaction with body image due to the variables of social and economic status.

Al-Zoubi conducted a study aimed at revealing the level of life quality and its relationship to self-concept and body image among women wishing to undergo weight loss surgery in Palestine [25]. The study sample consisted of 88 women who attended hospitals and specialized clinics. The results showed a high level of self-concept among women wishing to undergo surgeries, while the level of body image was low. The results also indicated that there is a positive relationship between body image, quality of life and self-concept. Also, there were significant differences in the level of life quality and body image in favor of sample members with a high self-concept, as well as that the concept of self and body image contribute to predicting the level of life quality of the sample members.

Salim conducted a study aimed at identifying the correlation between body image and self-efficacy, among a sample of second-year secondary students of public schools in Damascus governorate [26]. The study sample consisted of 356 male and female students. The study results showed that there was a positive correlation between self-efficacy and body image and there were statistically significant differences among degrees arithmetic means of research sample individuals on the body image scale due to the gender variable and in favor of males.

Pondehnezhadan and Fard conducted a study aimed at evaluating the effectiveness of schematic therapy on body image and self-concept of patients with body dysmorphic disorder [27]. The sample consisted of 10

people with dysmorphic disorder in Ahwaz city. The results showed that schematic therapy leads to an increase in body image satisfaction, raising self-concept and decreasing body schemas that are unable to adapt to patients with body disorder in the experimental group compared to the control group.

Abu Ajaj conducted a study aimed to reveal the symptoms of body image distortion and its relationship to self-esteem and borderline personality disorder among a sample of overweight people. The study sample consisted of 100 overweight individuals. The study results indicated the presence of body dysmorphic disorder in the overweight sample and showed a negative correlation between symptoms of body image distortion and self-esteem among the overweight people.

Awmidian and Rafinia conducted a study aimed to determine the effectiveness of group cognitive-behavioral therapy on disturbed body image and body dysmorphic disorder among secondary school female students [28]. The sample included 27 participants selected from a high school and they were randomly divided into an experimental and control sample. The results of the research indicated that there was a significant difference between disordered body image disorder and body dysmorphic disorder in the experimental and control group after implementing group cognitive-behavioral therapy and the follow-up phase. The results of this study indicated that cognitive-behavioral therapy was effective in reducing body image disorder in high school students and body dysmorphic disorder.

Al-Binhasawy conducted a study aimed at identifying perceived social support, body image disorder, guilt and strategies for coping with stress [29]. The study sample consisted of 550 students from Assiut University, Egypt (165 males-385 females), (296 rural-254 urban). Ages of the sample ranged between 18-23 years with sample average age. The study results indicate that there are differences of the gender variable between (males and females) on five variables. The results also found that there were significant correlations in most of them between strategies for coping with stress and perceived social support. The results indicate the possibility of strategies predictability for coping with stress, its dimensions and aspects through a set of variables (friends support, body image disorder, self-support, guilt, family support, total degree of social support).

Abbas conducted a study aimed to investigate the relationship between delusional body deformity, social anxiety disorders, obsessive-compulsive disorder and associative personality on one hand, and the relationship of each to the gender variable on the other hand, in addition to determine the prevalence of delusional body deformity among University of Jordan students [10]. The study population consisted of, The Faculties of Science and Arts at the University of Jordan, where the sample was 500 male and female students. A set of scales were applied, namely, delusional body deformity, social anxiety, the obsessive-compulsive and the correlational personality scale.

Miles conducted a study on the relationship between academic achievement and body image among undergraduate female students [30]. The sample consisted of 680 female university students from the United States of America. The results showed that high achieving female students were less concerned with their appearance compared to low achieving female students. As well as female undergraduate students who had a healthy body image were less fearful and focused on their physical appearance and the opinion of others about their appearance and female students looking for part-time work who planned to become married and mothers were more concerned with their appearance.

Bushra conducted a study aimed at identifying the prevalence of body image disorder, gender differences and the relationship between body image disorder and some personal variables (self-esteem, control center, depression) [31]. The main study sample consisted of 242 students from Assiut University (Egypt). The study reached the following results; there are no statistically significant differences between the arithmetic mean of male and female sample members on the body image disorder scale, and there is a negative statistically significant correlation of sample members on the body image disorder scale and the self-esteem scale. There is a positive

statistically significant correlation between of sample members on the scale of body image disorder and the depression scale and there is a statistically significant negative correlation between sample members on the scale of body image disorder and the scale of control center.

Al-Zoubi conducted a study entitled Feeling of happiness and its relationship to the self-concept among students of Damascus University. The study sample consisted of 450 students from Damascus University. The feelings of happiness and self-concept of students were measured. The results showed a positive relationship between happiness and self-concept and there were differences in happiness and self-concept due to gender in favor of males, and differences due to the type of college in favor of scientific colleges.

## Comments on previous studies

By viewing the previous studies, it becomes clear that the issue of self-concept level and obsessive distortion of the body image is important and it has been addressed in many modern foreign and Arab studies. These studies have paid attention to self-concept and its relationship to some variables such as quality of life and feelings of happiness [26]. Some studies dealt with body image with a range of variables such as self-esteem, depression, personality disorders, and academic achievement [30,31]. Hence the importance of this study is to enhance Arab studies and the lack of Arab environment, especially Jordanian, for such studies, which did not pay attention to the relationship between obsessive body image distortion and the level of self-concept among adolescent female students, specifically in the Giza District in Jordan.

## Study problem and questions

The body appearance is one of the main subjects of concern to many people. This appears through the individual's view of external self which is affected by the social effects of appearance. According to a report published by the World Health Organization, obesity has been increased more than double since 1980 in the world. In 2014, there were more than 1.9 billion overweight adults aged (18) and above including (600) million people are obese [32]. Bethauer indicates that Arab peoples suffer from overweight and obese with high rates among children and adolescents. Likewise, the self-concept at its different levels is considered as one of important criteria of psychological disorders. The adolescent must learn how to reorganize self-concept in proportion to the composition of his body. We find some adolescents are excessive in tallness, weight or thinness. So, this matter plays a major role in the adolescent's view of himself so that he sees himself ashamed which leads him to disappear and stay away from others. The study indicates that the individual's relationship with his body and how he perceives it plays a major role in refining his personality and determining his behavior. Since adolescence is one of the most sensitive phases, especially for females, due to the appearance of features of biological maturity as well as they have a great interest in fashion, follow-up to T.V channels and a tendency to perfection and idealism leading to have a negative effect on all aspects of adolescent's girl's personality especially in her family, school and social life. Hence, this study conducted as an attempt to identify the relationship between obsessive body image distortion and its relationship to self-concept among adolescent female students in Jordan. Specifically, the study problem is to answer the following questions:

1. What is the level of obsessive distortion of body image among adolescent female students in the Giza District Directorate in Jordan?
2. What is the level of self-concept of adolescent female students in the Giza District Directorate in Jordan?
3. Is there a statistically significant correlation at the significance level ( $\alpha=0.05$ ) between obsessive distortion of body image and self-concept among adolescent female students in the Giza District Directorate in Jordan?

## The importance of study

**Theoretical and practical importance:** The importance of the theoretical study because it is one of the few studies that dealt with the

subject of obsessive distortion of body image and the level of self-concept and the relationship between them. The importance of this study increases because it is concerned with the stage of adolescence which is an important phase due to the importance of these variables in shaping a personality and self-esteem. It is a dynamic phase has a key role in affecting the individual's personality with himself and with others through rapid changes of this phase. The theoretical importance of this study is highlighted by directing attention to an important group of society which is the phase of adolescence. It shades the lights on positive variables such as self-concept, as well as obsessive distortion of body image. This study is also important because of the lack of studies that link obsessive distortion of body image variables with self-concept for decision makers. In addition, this study opens the way for other studies which try to benefit and develop indicative programs to deal with this category.

## Materials and Methods

### Objectives

1. To identify the level of obsessive distortion of body image among adolescent female students in Giza District Directorate in Jordan.
2. To identify the level of self-concept among adolescent female students in Giza District in Jordan.
3. To identify the relationship between obsessive distortion of body image and the level of self-concept among adolescent female students in the Giza District.

### Study limits and determinants

**Time limits:** This study was conducted during the first semester of academic year 2020/2021.

**Spatial limits:** The geographical framework of the study is within Amman governorate, primary and secondary schools of Directorate of Education-Giza District in Jordan.

**Human limits:** This study has been conducted on a sample of female students in the 9th, 10th and first secondary grades at public schools in the Giza District in Jordan.

### Scales determinants

The results of the study have been determined by the students' responses to the scales tools used in the study: a scale of obsessive distortion of body image, and a scale of self-concept. There was a lack of serious interaction by some students and they were excluded and that this study has been conducted in light of Corona pandemic.

### Definition of study terms

**Obsessive distortion of body image:** This is known as preoccupation with one or more abnormalities or defects of body external appearance that cannot be noticed so that the individual performs repetitive behaviours such as examining the body shape in the mirror or mental actions, such as comparing appearance with others, which causes poor performance in various social areas so that (APA, 2013) appears clearly through fears of accumulation of fat in the body or over weight of individual. It is defined procedurally as: the degree to which the examinee obtains on the scale of obsessive distortion of body image which has been developed by researchers.

**Self-concept:** Sangeeta, Sumitra, 2012 define it as "a set of ideas, perceptions, characteristics, or qualities that an individual possesses and decides about himself" [33]. It is defined procedurally as the degree that the student obtains on the self-concept scale which has been used in this study.

**Adolescence:** It is the phase that comes between childhood and youth phases starting from puberty and ending with youth phase where it is characterized by the fact that adolescents are looking for their self-identity and accompanying physical, mental and emotional changes. Some have defined adolescence as starting from the age of twelve or thirteen according

to the culture and standards of society so that this stage is accompanied by sudden, large and rapid changes in various aspects including psychological, social, emotional and physical [1]. For the purposes of this study, the researchers have selected the ninth, tenth and first secondary grades girls at governorate schools.

### Procedures

This part deals with a description of study methodology, study population and study sample included in the study application. It also includes a description of the study tool, its validity and reliability, and presents the statistical treatment to answer the study questions.

### Study approach

The descriptive correlative approach has been used, due to its relevance to the study subject, as this approach is based on describing the phenomenon, explaining it and knowing the extent to which the variables are related to each other.

### Study population and sample

The study population consists of all adolescent female students at schools of Directorate of Education of Giza District. The number of the study population, according to the statistics of Directorate of Education for the academic year 2020/2021, is (1724), and the study population members have been distributed among ninth, tenth and first secondary grades. The study sample consisted of 372 female students from ninth, tenth and first secondary grades. They have been selected randomly. They represented a percentage of 21.5%. the scales have been applied through a link distributed to the respondents.

### Study tools

**The scale of obsessive distortion of body image:** After reviewing the educational literature and some previous scales related to study subject, the researchers have developed a scale to be used in collecting data about the level of obsessive distortion of body image [6,10,34]. The scale, in its initial form, consisted of paragraphs which have been prepared to measure obsessive distortion of body image among adolescent girls in Giza District. All paragraphs were at negative direction. A five-point Likert scale has been approved to estimate the level of paragraph.

### Validity and reliability of the study

To verify validity indicators of obsessive distortion of body image scale developed in this study, the following validity indicators have been extracted:

**Apparent validity:** To verify the validity of the obsessive distortion of body image scale in its initial form, it was presented to 10 arbitrators from faculty members specialized in educational psychology and psychological counseling with the aim of arbitrating the scale in terms of comprehensiveness of scale's paragraphs, accuracy of language, clarity of paragraphs and deletion of the inappropriate paragraphs or the suggestion of new paragraphs. The comments of the arbitrators about the scale have been taken into consideration. The scale consisted of 20 paragraphs at its initial form and accordingly the scale remained as it is in final form consisting of 20 paragraphs. The percentage of agreement is 80%. Some modifications were made to some scale paragraphs based on the observations made by the arbitrators.

**The validity of internal structure:** To verify the validity of the scale structure, it was applied to a sample consisting of 60 students within study population and outside its sample. The values of Pearson correlation coefficients have been extracted between the responses to the paragraphs and the scale total score of s shown in Table 1.

It is noted in Table 1 that, the values of the paragraph's correlation coefficients with the scale total score ranged between 0.44-0.80. The acceptance criterion for the paragraph has been adopted that, its correlation coefficient with the scale total score is not less than 0.30, which indicates that paragraphs have a good significance which indicates the validity of paragraph structure.

**Table 1.** Paragraph correlation coefficients with scale total score and obsessive distortion of body image.

Number	Paragraph correlation	Number	Paragraph correlation	Number	Paragraph correlation	Number	Paragraph correlation
1	0.80**	6	0.73**	11	0.71**	16	0.69**
2	0.77**	7	0.75**	12	0.72**	17	0.66**
3	0.71**	8	0.77**	13	0.79**	18	0.53*
4	0.56*	9	0.68**	14	0.79**	19	0.75**
5	0.54**	10	0.73**	15	0.44*	20	0.74**

\*at the significance level ( $\alpha=0.05$ ); \*\*at the significance level ( $\alpha=0.01$ )

#### Reliability of obsessive distortion of body image scale

The scale reliability has been verified in two ways:

1. The method of re-application; where the researcher applied the scale to 60 students from outside the study sample, and after two weeks, the scale was re-applied again on the same group in which the coefficient of reliability of overall scale is 0.88.

2. Internal consistency method using Cronbach's alpha equation; the reliability coefficient of the total score is 0.86. Thus, the scale has been adopted in its final form consisting of 20 paragraphs.

#### Scale correction

In order to correct the scale, a five-point Likert scale has been adopted to measure the level of obsessive distortion of body image among adolescent girls at Giza District Directorate. The answer "applies to me to a very high degree" has been given (5 marks), "applies to me to a high degree" has been given (4 marks), "applies to me to a medium degree" has been given (3 marks), "applies to me to a low degree" has been given (2 marks), "applies to me to a very low degree" has been given (1 mark). The highest score a student can get is (100), while the lowest score is (20). The means rating of eating problems level has been judged as follows:

- From (1.00-2.33) a low level.
- From (2.34-3.67) a medium level.
- From (3.68-5) a high level

#### Self-concept scale

After reviewing the educational literature and some previous scales related to the study subject [35-37], the researcher has developed a scale to be used in collecting data about the level of the self-concept scale. The scale consisted of (26) A paragraph prepared to measure the self-concept of University of Jordan students. All paragraphs took the positive direction and a five-point Likert scale has been adopted to estimate the level of self-concept included in each paragraph.

#### Validity and reliability of study scale

To verify the indicators of the validity of the self-concept scale developed in this study, the following validity indicators have been extracted:

• Apparent validity: To verify the validity of the self-concept scale, it was presented to (10) arbitrators from faculty members specializing in psychological counseling and educational psychology aiming at arbitrating the scale in terms of; the extent of the comprehensiveness of scale's paragraphs, accuracy of language, clarity of paragraphs and the deletion of inappropriate paragraphs or the suggestion of new paragraphs. The arbitrator's comments about the scale have been taken into consideration.

• Distinctive indications: To verify the scale structure validity, it has been applied to a sample consisting of 60 students from outside the study sample and within the population (Table 2).

Table 2 shows that the values of the paragraph correlation coefficients with the scale total score ranged between (0.46-0.87) and the criterion of acceptance of the paragraph is adopted at the level of significance ( $\alpha=0.05$ ), so the paragraphs correlation coefficients are acceptable .

**Table 2.** The paragraph correlation coefficient with the total score of the self-concept scale.

Number	Paragraph correlation	Number	Paragraph correlation	Number	Paragraph correlation
1	0.77**	10	0.70**	19	0.72**
2	0.46*	11	0.727**	20	0.64**
3	0.79**	12	0.872**	21	0.74**
4	0.73**	13	0.786**	22	0.56**
5	0.66**	14	0.778**	23	0.74**
6	0.69**	15	0.712**	24	0.75**
7	0.65**	16	0.80**	25	0.79**
8	0.51**	17	0.72**	26	0.61**
9	0.69**	18	0.74**		

\*at the significance level ( $\alpha=0.05$ ); \*\* at the significance level ( $\alpha=0.01$ )

## The reliability of self-concept scale

To ensure the reliability of self-concept scale, the internal consistency coefficient of the scale has been calculated according to Cronbach's alpha equation for internal consistency and the reliability of half-segmentation. It has been applied to an exploratory sample consisting of 60 female students from outside the study sample and within the population. The value of the tool's alpha Cronbach's coefficient is 0.95 while the reliability of the half-segmentation is 0.93.

### Scale correction

In order to correct the scale, a five-point Likert scale has been adopted to measure the level of self-concept among students of University of Jordan. The answer "applies to me to a very high degree" has been given (5 marks), "applies to me to a high degree" has been given (4 marks), "applies to me to a medium degree" has been given (3 marks), "applies to me to a low degree" has been given (2 marks), "never applies to" has been given (1 mark). The highest score a student can get is 130 and the lowest degree is 26 and the mean of self-concept estimation has been judged as follows:

- From (1.00-2.33) a low level.
- From (2.34-3.67) a medium level.
- From (3.68- 5.00) a high level.

### Study procedures

1. Reviewing the theoretical literature, previous studies and determining the study problem.
2. Obtaining official approvals.
3. Determine the study sample.
4. Preparing and developing study scales and ensuring validity and reliability.
5. Choosing an exploratory sample from the study populatuin and from outside its sample to verify the tools validity and reliability.
6. Applying the study tools to a sample of adolescent female students in Giza District in Jordan.
7. Coming up with the results and recommendations of the study.

### Statistical treatments

To answer the study questions, the following statistical treatments have been used:

- To answer the first and second questions, the arithmetic means and standard deviations of the students' scores have been calculated on the study scales.
- To answer the third question, Pearson's correlation coefficients for the scores of adolescent female students on the two study scales have been extracted.

## Results and Discussion

Presentation and discussion of the first question results: What is the level of obsessive distortion of body image among adolescent girls in Giza District Directorate in Jordan?

The results of the current question show that the students achieved

an medium level of obsessive distortion of body image with an arithmetic mean of 2.67 and a standard deviation of 1.03. The paragraphs also ranged between the low and medium level where the highest paragraphs are : I don't usually like how I look when I look to the mirror, I get late to do my home duties on time because I'm busy taking care of my appearance I keep asking other people about my appearance a lot. While the lowest paragraphs of obsessive distortion of body image are as follows: I keep looking at my body shape in the mirror for longer than others, I constantly check my weight because I am afraid of accumulating fat in my body and it took me a long time to choose my clothes (Table 3).

The results related to this question show that there is an medium level of obsessive distortion of body image among adolescent girls in Giza District of Amman Governorate. Also, the results show that adolescent girls take a long time to choose their clothes and they are late for school in the morning because of they are busy with arranging their appearance, it took them long time looking at their body in the mirror, they feel constant fear of gaining weight and they are disturbed to compare their tallness to other colleagues. The results of the obsessive distortion of body image scale that adolescent girls lose weight constantly for fear of accumulating fat, they constantly think about the opinion of others in their appearance, that they care continuously with their flaws despite the fact that others do not notice them, adolescent girls are concerned in comparing the appearance of their shapes with others and they continue to ask others about the external appearance of their shapes frequently. This result can be explained that adolescent girls are affected by the dictates of social directives prevailing in society which forces girls to comply with these directives and try to emulate them.

This result can also explain that the external appearance occupies a high value for adolescent girls related to social acceptance and harmony with the feminine role imposed by society and through the process of long-term socialization.

This finding can be justified by the fact that adolescent girls of the current generation are more exposed to a range of intensely diverse media than adolescent girls of previous generations; whereas, adolescent girls are subjected to special pressures through what is shown on television channels, international communications network and social media. This is confirmed by a study [38].

The researchers explain this result that the continuous media exposure contributes to the creation of a special subculture among adolescent girls related to the fact that specific physical characteristics are constantly repeated in all media outlets which affects the body image of girls. This study agrees with the study of which indicated that there is a medium level of obsessive distortion of body image while the result of this study differs from the results of study with a low level of obsessive distortion of body image [24,30].

Presentation and discussion of the results of the second question: What is the level of self-concept of adolescent girls in the Giza District Directorate in Jordan?

The results of the current question show that there is a medium level of self-concept among the students where the arithmetic mean is 3.41 with a standard deviation 0.98. The paragraphs ranged between high, medium and low levels, where the highest paragraphs of self-concept are: I have energy, vigour and vitality, I respect myself and I have the ability to make friends while the lowest paragraphs are: I am able to express myself and I see that my personality is strong, and I love my way of life (Table 4).

**Table 3.** Arithmetic mean and standard deviations of the study sample responses to the paragraphs on obsessive distortion of body image scale arranged in descending order.

no	Paragraph	Arithmetic mean	standard deviations	Level	Estimation
10	I don't usually like how I look when I look to the mirror	3.64	0.86		1
9	I get late to do my home duties on time because I'm busy taking care of my appearance	3.27	1.71		2
8	I keep asking other people about my appearance a lot	3.21	1.42		3

3	I keep getting preoccupied with a flaw in my appearance even though it hasn't been noticed by others	2.85	1.21	4
4	I'm late for school in the morning because I'm busy arranging my appearance	2.85	1.3	5
6	Keep comparing my appearance with others	2.84	0.84	Medium 6
17	I am constantly afraid of gaining weight	2.83	0.99	Medium 7
18	I get annoyed with my tallness when I compare it to the my classmates	2.8	0.85	Medium 8
7	I use a lot of cosmetics when I leave the house	2.79	1.09	Medium 9
11	my eight seems not normal despite that others says it is in right limit	2.58	1.09	Medium 10
12	My body looks too big for my tallness	2.55	1.19	Medium 11
13	I avoid attending events because I am not satisfied with my body shape	2.52	1.01	Medium 12
14	Clothes look better on others than me	2.43	1.03	Medium 13
20	I avoid taking pictures with others because of my body shape	2.43	0.85	Medium 14
16	I constantly think about what other people think of my appearance	2.39	1.11	Medium 15
19	I feel like my body shape occupies me a lot on a daily basis	2.32	1.1	Low 16
1	I feel embarrassed about my body shape	2.32	1.1	Low 17
15	It took me a long time to choose my clothes	2.3	0.92	Low 18
5	I constantly check my weight because I am afraid of accumulating fat in my body	2.22	1.05	Low 19
2	I keep looking at my body shape in the mirror for longer than others	2.21	1.38	Low 20
	Total degree	67.2	1.03	Medium

**Table 4.** Arithmetic averages and standard deviations of the answers of the study sample members to the items of the self-concept scale arranged in descending order.

no	Paragraph	Arithmetic mean	standard deviations	Level	Estimation
22	I have the ability to make friends	3.83	1.47	High	1
1	I respect myself.	3.71	1.21	High	2
23	I have energy, vigor and vitality	3.47	1.54	Medium	3
2	I am loyal in my social relationships	3.46	1.3	Medium	4
3	Others can count on me.	3.32	1.05	Medium	5
24	I am happy in my life	3.27	1.39	Medium	6
4	I accept myself.	3.26	0.84	Medium	7
5	I take things about me seriously.	3.19	1.09	Medium	8
25	I have the skill to manage and control anxiety and stress	3.18	1.41	Medium	9
26	I feel confident in others.	3.16	1.36	Medium	10
6	I like to do important things	3.01	1.42	Medium	11
7	I have beautiful, elegant and attractive look	2.85	1.71	Medium	12
8	I know how to do the things I do	2.85	0.86	Medium	13
10	I feel good about myself	2.84	1.19	Medium	14
9	I feel confident in myself.	2.84	1.09	Medium	15
11	I have specific goals for my life	2.79	1.01	Medium	16
12	I have the ability to achieve my life goals	2.76	1.03	Medium	17
13	I like to discover.	2.73	0.92	Medium	18
14	I have the ability to make decisions in my life	2.61	1.11	Medium	19
15	I can change the course of my life.	2.58	0.99	Medium	20
16	I have problem solving skills	2.55	0.85	Medium	22
17	There is something important for me to do.	2.52	1.19	Medium	23
18	I am able to express myself.	2.43	0.89	Medium	24
19	I see my personality is strong	2.3	1.38	Low	25
20	I love my way of life.	2.25	0.75	Low	26
	Total degree	3.41	0.098	Medium	
67.2	67.2	67.2	67.2	67.2	67.2

It is clear from this result that there is medium concept of adolescent students. The researchers explain that adolescent students have confidence and respect themselves. This is due to the nature of the age phase in which they live and the role of parents in family upbringing especially with the psychological changes that appear during adolescence which helped girls to know and understand themselves in better a way.

The medium level of self-concept among adolescent students can be explained by the fact that adolescent girls receive psychological, social support, confidence and take responsibility from parents and family towards themselves. They also have social acceptance, a sense of self-confidence and satisfaction with themselves through satisfaction with their external appearance and not comparing their external appearance with others. It is also can be explained by the way in which they perceive their selves as it is and not as desired, formation of realistic perceptions through their interaction with the environment and formation of positive personal and social experiences through interaction with others. In addition, it is also explained through the cultural context in which adolescent girls live by developing positive attitudes and beliefs towards themselves which leads to satisfaction and self-acceptance and supports this acceptance and satisfaction with the self-concept and the presence of an medium level of self-concept through the prominent preventive role of the educational and psychological counselor in the school by increasing awareness of self-confidence, self-acceptance and strengthening the self-concept which enhances the individual's vision of himself as well as the positive impressions of others that enhance their self-concept and not follow up with what broadcasting on social media exaggerated features and conditions that negatively affect adolescent girls.

Presentation and discussion of the third question results: Is there a statistically significant correlation at the significance level ( $\alpha=0.05$ ) between obsessive distortion of body image and self-concept among adolescent girls in Giza District Directorate in Jordan?

To answer this question, Pearson's correlation coefficient has been used to identify the relationship between body image distortion and self-concept. It is found that the correlation coefficient between obsessive distortion of body image and self-concept is (-0.65) and a significance level of 0.00. The correlation coefficient is inverse, meaning that the higher obsessive distortion of body image, the lower the self-concept of adolescent girls in Giza District Directorate, and vice versa.

## Conclusion

The inverse result can be explained that the higher the obsessive distortion of body image, the lower the self-concept of adolescent female students in Giza District Directorate in Amman that the adolescent girls who appear to have a high or medium level of obsessive distortion of body image are characterized by lack of self-confidence, a low and negative image of concept of self-esteem, shyness, social withdrawal and lack of initiative due to dissatisfaction with the appearance, external appearance, body image and body weight. This is the result of high and exaggerated standards of body image that adolescent girls must have, imposed by social media interested in cosmetic operations and the weight and extreme shape of body that adolescent girls seek irrationally, illogically and intensively. It is which affects self-concept negatively because girls are not satisfied with their body image, especially since adolescence is a sensitive phase in the adolescent's view of body image where it affects self-concept through physical comparisons among adolescent girls which leads to the dissatisfaction with body image which means the absence of an academic, social, realistic, perceptive, real, positive and effective concept. The current result agrees with the result of study which indicates that there is an inverse relationship between body image distortion and self-concept. It also differs with the results of study which indicates a direct relationship between obsessive distortion of body image and the self-concept variable.

## Recommendations

- Conducting therapeutic counseling programs to reduce obsessive distortion of body image and improve the self-concept of adolescent girls in Giza District Directorate in Amman.
- Conducting studies dealing with variables of obsessive distortion of body image distorting and self-concept on different samples of male adolescents, female adolescent and university youth according to gender, academic achievement and family communication patterns.

## References

1. Hamdi, Daoud. "Problems of Children and Adolescents and Ways to Help Them." Dar Al Fikr, Amman, Jordan (2011).
2. Selim, Maryam. "Developmental Psychology." Arab Renaissance House, Beirut, Lebanon (2002).
3. Maarouf, Safaa. "Adolescence Psychology." *Int J Rec Edu Hum Sci* 1(2020):138-152.
4. Melhem, Sami bin Muhammad. "The Impact of Eating Disorders, Social Anxiety, Obsessive Compulsive Disorder, and Self-Esteem on Body Image Satisfaction among a Sample of Adolescents in Jordan." *J Coll Educ* 23(2012): 32-1.
5. Groesz, Lisa M, Michael P Levine and Sarah K. Murnen. "The Effect of Experimental Presentation of Thin Media Images on Body Satisfaction: A Meta-analytic Review." *Int J Eat Disord* 31 (2002): 1-16.
6. Geller, Josie, Sarah J Cockell, Paul L Hewitt and Elliot M Goldner, et al. "Inhibited Expression of Negative Emotions and Interpersonal Orientation in Anorexia Nervosa." *Int J Eat Disord* 28 (2000): 8-19.
7. Abd al-Rahman, Muhammad al-Sayed. "Psychopathology (Causes-Symptoms-Diagnosis-Treatment)." Dar Qubaa for printing, Cairo, Egypt (2003).
8. El-Desouky, Magdy Mohamed. "Body Image Disorder (Psychological Disorders Series 2)." Anglo-Egyptian Library, Cairo, Egypt (2006).
9. Barghi, Ziba Irani, Ali Reza Ahmadi and Sayedeh Zahra Bahrehkazan. "Effectiveness of Lifestyle Modification Therapy on Weight Management, Body Image and Self-Esteem of Overweight Women." *IJDO* 9 (2017): 136-147.
10. Abbas, Lina Farouk. "The Manifestations of Delusional Deformation of the Body and Its Relationship to Social Anxiety, Obsessive-compulsive Disorder and Relational Personality among University Students." Amman, Jordan (2011).
11. American Psychiatric Association. "Diagnostic and Statistical Manual of Mental Disorders." Washington DC, USA (2014).
12. Veale, David. "Outcome of Cosmetic Surgery and 'diy' surgery in Patients with Body Dysmorphic Disorder." *Psychiatric Bulletin* 24 (2000): 218-221.
13. Fayed, Hussein Ali. "Body Shape and Self-esteem as Mediating Variables in the Relationship between Perfectionism and Bulimia Nervosa." *Psychol Couns J Egypt* 10 (2002): 103-51.
14. Halgin, Richard Pand Susan Krauss Whitbourne. "Abnormal Psychology: The Human Experience of Psychological Disorders ". London, UK (1997): 562.
15. Al-Awaidah, Sultan bin Musa. "The Relationship of Eating Disorders to Self-image, Anxiety, Perceived Self-efficacy, and Some Demographic Variables among a Sample of Al-ahliyya Amman University Female Students." *JJSS* 2 (2009): 276-276.
16. Qarrala, Abdel Nasser. "The effect of psychological intervention on improving the body image of post-excisional breast cancer survivors." *J Edu Psychol Sci* 21 (2020): 53-79.
17. Abdel Mawgoud, Sayed Abu Zeid. "Eating Disorders in Adolescents and Young People and their Relationship to Some Personality Variables." *Psychol* 15 (59): 163-156.
18. Fayed, Hussein. "Studies in Behavior and Personality (Depression, Panic, Eating Disorders, Suicide, Anger)." Thebes Foundation for Publishing and Distribution, Cairo, Egypt (2007).
19. McDonald, F.J. "Educational Psychology." Wadsworth Pub Co, Belmont, CA, USA (1965).
20. Kokash, Hussein. "Adolescent Self-Concept, Teacher's Message-Jordan." *J Coll Educ* 23(1978): 50-56.



21. Al-Ahmad, Ibrahim. "The Psychology of Self and Compatibility." Madbouly House, Egypt (2004).
22. Zahran, Hamed, Abdel Salam. "Studies in Mental Health and Psychological Counselling." The world of books, Cairo, Egypt (2003).
23. Hourani, Ali. "Self-concept between Childhood and Adulthood, Damascus". Dar Al-Maktabi (2004).
24. Judah, Nadia. "Satisfaction with Body Image and Its Relationship to the Reasons for Young Women's Demand for Plastic Surgery from Their Point of View." *J Educ Psychol Sci* 4 (2020): 80-99.
25. Zoabi, Manar. "Quality of Life and Its Relationship to Self-concept and Body Image among Women Who Wish to Undergo Weight Loss Operations ". Amman, Jordan (2020).
26. Selim, Hanin. "Body Image and Its Relationship to Self-efficacy in Adolescents: A Field Study on a Sample of Third Secondary Students in Damascus Governorate." *J Hum Sci* 41 (2019): 11-54.
27. Pondehnezhadan, Ayeh and Reza Johari Fard. "Effectiveness of Schema Therapy on Body-image, Self-concept, Maladaptive Schemas in Patients with Body Dysmorphic Disorder." *Middle East J Fam Med* 7 (2018): 162.
28. Omidian, Elahe and Parvin Rafienia. "The Effect of Cognitive-behavioral Group Therapy on Disturbed Body Image and Body Dysmorphic Disorder among Students." *J Res Health* 5 (2016): 288-297.
29. Al-Binhasawy, Ahmed. "Perceived Social Support, Disturbed Body Image, and Guilt as Predictors of Coping Strategies for Stress in a Sample of University Students." *Sci J Fac Arts Egypt* 49 (2014): 67-7.
30. Miles, Jennifer M. "Academic Achievement and Body Image in Undergraduate Women." Online Submission, Fayetteville, Arkansas, USA (2009).
31. Bushra, Samuel. "Body Image Disorder in a Sample of Assiut University Students." *Contemporary Education: Egypt* 78 (2008): 178-133.
32. WHO and EMRO. "Annual Report." Islamabad, Pakistan (2017): 9-12.
33. Rath, Sangeeta, and Sumitra Nanda. "Adolescents Self-Concept: Understanding the Role of Gender and Academic Competence." *Int Res Studn Psychol* 1 (2012): 63-71.
34. Smeets, Monique AM, Filip Smit, Geert EM Panhuysen and J. David Ingleby. "The Influence of Methodological Differences on the Outcome of Body Size Estimation Studies in Anorexia Nervosa." *Br J Clin Psychol* 36 (1997): 263-277.
35. Al-Tarawneh, Rudaina and Al-Hadidi Mona. "The Development of a Jordanian Image from the Second Edition of the Tennessee Self-concept Scale and Its Use to Measure the Self-concept of Persons with Visual Impairment in Jordan." *Jordan* (2014).
36. Khalil, Hassan and Al-Kubaisi Kamel. "Building a Self-scale in the Light of the Concept of Psychoanalysis with Its Three Systems (Instinctive, Realistic, Ideal) among University Students." University of Baghdad, Baghdad, Iraq (2002).
37. Hawi, Nazir S and Maya Samaha. "The Relations among Social Media Addiction, Self-esteem, and Life Satisfaction in University Students." *Soc Sci Comput Rev* 35 (2017): 576-586.
38. Sheikh Ali, Ahmed Saad Saleh. "Factors Associated with Eating Disorders among a Sample of Adolescent Girls in Amman Private Schools." *Jordan* (2005).

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