

Cognitive Dissonance and its Relationship to Social Adaptation among Gifted and Ordinary Students In Middle School

By

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Abstract:

The study aimed to determine the level of cognitive dissonance and social adaptation among middle school students, and to identify the nature of the relationship between cognitive dissonance and social adaptation and the differences between ordinary and gifted people in cognitive dissonance and social adaptation, as well as according to gender (males and females), and academic grade. The study was conducted on a sample of (176) students, including (120) ordinary students and (56) gifted students, were given a measure of cognitive dissonance and social adaptation, and the descriptive approach was used. The results of the study revealed a convergence in the level of cognitive dissonance among the ordinary and gifted students, as the level ranged between low and medium in both groups. There was a convergence in the level of social adaptation among the ordinary and the gifted in most dimensions and the total score, where the level ranged between low and medium in the two groups, except for the emotional adaptation dimension, which was moderate among the ordinary and high among the gifted, and the presence of a positive relationship between cognitive dissonance and social adaptation among the ordinary in most dimensions. While the relationship was not significant in most dimensions for ordinary people, with the exception of the emotional adjustment dimension, it was significant with the area of social and personal cognitive dissonance and the total score, and there were differences between the normal and gifted people in the field of learning and the total score of cognitive dissonance in the direction of the gifted, and there were no differences between students in cognitive dissonance. According to the academic grade, except for the personal field, there are differences between males and females in the field of learning only in the direction of the males, and there are significant differences between the gifted and the ordinary in social adaptation (dimensions and total score) in the direction of the ordinary, and there are no differences between students in social adaptation according to the grade in Dimensions of social adaptation and the total score. There were significant differences in the dimension of emotional adaptation only towards females. It was possible to predict social adaptation through the dimensions of cognitive dissonance and the total score. Through the results, a number of recommendations and proposed research were presented.

Keywords: Cognitive Dissonance, Social Adaptation, Gifted People, Middle School.

Introduction:

Gifted and ordinary students in the middle school suffer from frequent pressures, especially through the developments we are experiencing at the present time, which may affect the balance in their behaviors, cognitive balance, beliefs, and knowledge. Therefore, educational institutions seek a more profound understanding of human nature in order to find out the causes of imbalance. Cognitive balance and improving compatibility

among students because of its great importance in raising academic achievement and motivation towards learning.

Al-Lahyani (2015) believed that a person, by his human nature, strives to search for balance in his knowledge, beliefs, and behavior with each other, and that there are many reasons for this imbalance, including the presence of contradictory knowledge about a specific topic that preoccupies the individual, and makes him seek solutions to end this contradiction and reach To a state of comfort, a state of internal balance, and satisfaction with himself and his behavior, even if these solutions he resorts to are based on self-deception.

Lester & Yang (2009) pointed out that humans always seek consistency with themselves and that their feeling of contradiction is a basic motivation and driver for re-coordinating knowledge and making it consistent with each other. The term cognitive dissonance appeared for the first time by Festinger in 1957. He formulated a theory he called (cognitive dissonance) and defined it as a state that involves an individual's mental preoccupation with two topics or beliefs that are of equal importance but are contradictory in nature.

Silami (2006) defined Cognitive dissonance is a state of internal tension resulting from the individual being divided between two or several contradictory ideas. Ahmed (2019) believed that dissonance expresses the emotional state that arises when the individual is in a situation that conflicts with his opinions, beliefs, and trends and what is consistent with his positions and affects the individual's performance in many situations, especially new and unfamiliar situations.

When the individual receives information New:

A momentary dissonance may occur with the existing knowledge in the cognitive structure, affecting the individual's cognitive harmony, and this is what he may be exposed to in situations of thinking and solving difficult and complex problems.

George & Edward (George & Edward, 2009) point out that the individual's feeling of psychological discomfort resulting from cognitive dissonance causes him to undergo a psychological recovery process, which can lead to searching for information to support the belief he possesses in order to reduce the importance of the new belief that led to the phenomenon of dissonance and changing the conflicting belief Or dissonant.

An example of cognitive dissonance provided by Festinger is when a person believes that smoking is harmful to his health, yet he continues smoking. Another situation that causes cognitive dissonance is previous experience.

For example, previous experience provides the individual that standing in the rain causes getting wet, but if the individual has no previous experience with rain, He would not have cognitive

dissonance if he stood in the rain (Nurgitz, 2007; Clarke, 2018; Graham, 2019).

The importance of predicting cognitive dissonance is highlighted by the results of multiple studies on the role of cognitive dissonance in social behavior, as the study of Al-Lahyani and Al-Otaibi (2020), for example, revealed the presence of a predictive ability for cognitive dissonance with psychological conflict and anxiety among female students at Umm Al-Qura University.

Cognitive dissonance also refers to a state of disharmony between values and beliefs and attitudes, and usually leads to feelings of tension, guilt, and remorse.

Eric Stice (1992), referred to in Badawi (2003), considered that cognitive dissonance is considered synonymous with feelings of guilt.

Considering that both of them constitute a state of emotional arousal, which prompts the individual to confess or correct his behavior, or atone for it by affirming his self-image (Self-Affirming) to reduce this feeling of discomfort, and that the feeling of guilt must arise from a sense of responsibility, then A feeling of dissonance is then generated, and thus a feeling of guilt (Badawi, 2013).

Al-Bahnasawy's study (2019) indicated that a state of cognitive dissonance would affect comprehension and reception of knowledge, and may even lead to stopping the student's latent motivation in education, which is the force guiding him to integrate into the learning process and relationship with others, and thus may hinder their social harmony. , and direct them towards their goals in the future.

Qatami (2012) pointed out that the loss of a sense of harmony may occur consciously or in the depths of the individual's subconscious, causing him a clear state of helplessness and weakness, and thus affecting his effectiveness in life and his productivity. In order for the individual to be able to get rid of this state, he must have awareness of the problem. And understand its causes and impact.

Al-Otaibi's study (2015) also resulted in an inverse relationship between dissonance and self-esteem among female students at Umm Al-Qura University, which demonstrates the negative effects of cognitive dissonance on the student's psychological health, his relationship with others, and his academic performance as well.

Alwan's study (2019) also revealed the level of There is a high level of cognitive dissonance among students at Sulaymaniyah University and its rapturous relationship with polar thinking, which requires giving this phenomenon greater attention and striving to deepen our understanding of it, and thus increasing our ability to provide assistance to the student to direct the motivation generated from him towards intelligent performances, as it is a stimulating cognitive process, which pushes the student towards development. Cognitive and harmonious, and thus psychological balance.

The Study Problem:

In the context of the theoretical framework and previous studies, the problem of the study can be defined as that, given the

central role played by educational institutions in the middle stage and its importance in preparing the individual for the optimal adjustment required for life inside and outside school, which requires awareness of the cognitive and psychological problems that directly affect the student's performance in the middle stage and hinder the achievement of Its potential.

Students at that stage are the ones betting on building the future, and they are the ones receiving multiple types of shocks and pressures in the midst of these qualitative transformations that the world is witnessing today, whether from an ideological, social, or economic standpoint.

This stage is considered one of the most fluid stages in asking questions with an existential dimension, as the student has an individual tendency to interpret new situations, and tends to organize his knowledge in a way that achieves his own stability in his understanding of ideas, and directs his behavior in accordance with the values that are deeply rooted and specific to him, and this In turn, it creates a cognitive and value-based distance between him and the surrounding community, especially at this educational stage, which is considered a diverse and new environment, which may make him feel a state of cognitive dissonance, which hinders his academic and social compatibility (Williams, 2021).

More specifically, the study seeks to answer the following questions:

1. What is the level of cognitive dissonance among gifted and normal middle school students?
2. What is the level of social adaptation among gifted and normal middle school students?
3. What is the significance of the relationship between students' scores on the cognitive dissonance scale and their scores on the consensus adjustment scale?
4. What is the significance of the differences between middle school students in cognitive dissonance according to the student's status (gifted, normal), gender (males, females), and grade (first, second, third)?
5. What is the significance of the differences between middle school students in cognitive dissonance according to the student's status (gifted, normal), gender (males, females), and grade (first, second, third)?
6. Can social adaptation be predicted by the score on the cognitive dissonance scale among middle school students?

Study objectives:

The study aims to :

1. Determining the level of cognitive dissonance among gifted and normal middle school students.
2. Determine the level of social adaptation among gifted and normal middle school students.
3. Know the significance of the relationship between students' scores on the cognitive dissonance scale and their scores on the consensus adjustment scale.
4. Identify the differences between middle school students in cognitive dissonance according to the student's status (gifted, normal), gender (males, females), and grade (first, second, third).
5. Identify the differences between middle school students in cognitive dissonance according to the student's status (gifted, normal), gender (males, females), and grade (first, second, third).

6. Predicting social adaptation through the score on the cognitive dissonance scale among middle school students.

The Importance of Studying:

Theoretical importance:

1. The current study gains its importance from the characteristics of the study sample, which are middle school students, which represents an important stage in the students' lives.

2. This study is expected to provide a knowledge structure for those in charge of the educational process in the middle stage about the cognitive dissonance that every student may experience in various scientific and life fields, especially in the educational field.

3. The importance of this study lies in the scarcity of Arabic studies (within the researcher's knowledge) that have dealt with cognitive dissonance in the middle school stage.

Therefore, this study is an attempt to enrich Arab libraries with studies on this topic.

Practical Importance:

1. Educating officials in charge of middle school students' affairs about the necessity of adopting guidance and preventive programs and appropriate methods that help in developing strategies through which to create the educational climate to reduce cognitive dissonance among middle school students, through the results and information reached in this study.

2. Applying the standards prepared by the researcher to identify middle school students who suffer from cognitive dissonance and help them alleviate its severity.

The Theoretical Framework of the Study:

The concept of cognitive dissonance:

Cognitive dissonance is a state of tension, mental stress, or discomfort experienced by an individual who holds two or more contradictory beliefs, ideas, or values at the same time, or engages in behavior that conflicts with his beliefs, ideas, or values, or is confronted with new information that conflicts. With his existing beliefs, ideas, and values (Zuckerman & Kneen, 2014).

(Festinger, 1962) described it as a motivational state that arises when the individual perceives information that is mentally inconsistent with each other, and has the same importance but is contradictory in its content, which prompts the individual to make it more consistent by changing his opinions or behaviors.

It is the emotional state that is stimulated when the individual falls in a situation that conflicts with the ideas he believes, and is not consistent with his positions (Osama, 2020).

It is also a state of internal tension and contradiction that occurs when an individual embraces a belief, value, or trend that contradicts his behavior in practical reality (Atallah, 2020).

Shawkat (2016) believes that dissonance is a state of mental stress accompanied by the individual's exposure to new knowledge that conflicts with the old knowledge available to him, or conflicts with his religious and cultural constants on which he relies, or conflicts with the data of science, as a cognitive rift between what the individual believes and the data of his reality.

This situation would stimulate his need to digest this knowledge.

Theories explaining cognitive dissonance:

The analytical theory of Sigmund Freud:

Freud's analysis explains that the individual's mental activity seeks to rid him of troubling thoughts and defend the concept (ego), using defensive tricks as strategies in which to protect the individual (ego), and the individual seeks, through these unconscious defensive mechanisms, to get rid of the tension resulting from conflict.

The three components of the soul: the ego, the superego, and the id, thus restoring its psychological balance.

Example:

♣ Justification means rationalizing his failed or inappropriate actions, which conflict with society's values, in order to get rid of feelings of shame and guilt.

♣ Denial, which is not acknowledging the existence of a problem in his behavior in order to avoid feeling the pain involved in changing this behavior.

These defensive tricks appear as an irrational element in the individual's solution to the problems resulting from the contents of his consciousness by changing these contents, or preventing the information that induces dissonance in him.

Becoming a powerful cognitive part threatens self-examination (Muhammad, 2019). **Leky's theory (1969) Self-consistency in Personality:**

Lekey suggested that the human personality is organized from unique values around the self that are consistent with each other, and the individual always tries to preserve the unity of his personality and protect it from disintegration, as it is a structural unit that does not accept division, and this motivation is considered a human drive.

Basic, and Performs two Basic Tasks:

Maintaining internal consistency in the individual's mind so that his actions are consistent with his image of himself, and maintaining external consistency between the individuals' minds and the environment, that is, between their experience with the outside world and their personal interpretations of this experience (Davies; Ekwere & Uyanga, 2016).

Each individual has ideas that he believes are logical and consistent with himself, which he uses to interpret and evaluate new experiences.

While the individual deals with new situations that contradict his beliefs about himself, he does not allow the environment to change his beliefs about himself. Rather, he modifies this new experience in accordance with the ideas.

The reference to the self is that it tends toward resistance, which achieves the preservation of the self-concept and resolves the contradiction, and at the same time develops personal adaptation to the environment.

The individual who wants perfection is searching for self-consistency so that his idea of himself and the world that surrounds him is in a harmonious structure of concepts and values that... In turn, it determines his personality (Lester & Yang, 2009; Russell, 2022).

Leon Festinger's theory of cognitive dissonance focuses on how humans seek to create a state of internal consistency.

The individual facing cognitive dissonance tends toward a state of psychological discomfort, and creates within him a motivation to try to reduce this dissonance, as well as actively avoiding situations or information that may increase From a state of dissonance. (Russell, 2022)

Cognitive Dissonance and Individual Differences:

1. **Personal characteristics:** The extent to which personality types tend towards neuroticism, and his sense of humor, may play an important role in the severity of dissonance, in that change, which is considered one of the ways to resolve dissonance, may involve a feeling of pain and loss, so the individual's increased endurance may It reduces the intensity of dissonance (Al-Lahyani and Al-Otaibi, 2020).

2. **Psychological health:** Dissonance is low or non-existent in an individual who has high psychopathic and Machiavellian traits, due to the lack of emotional recognition of feelings of sadness, fear for the feelings of others, and sympathy for them, which leads to them not feeling guilty about their actions that cause harm to others, as they do not They experience feelings of remorse regarding their deceptive behavior (Murray & Wood, 2012).

3. **Maintaining self-esteem:** An individual who has positive self-concepts experiences higher dissonance when he is forced, under stressful circumstances, to act in conflict with his values, and the consequences of decisions are very important to him, because making an unwise decision conflicts with a positive self-concept. Therefore, it is noted that these individuals provide more evidence after a difficult decision to confirm their self-esteem (Al-Lahyani, & Al-Otaibi, 2020; Smallwood. & Schooler, 2015).

4. **Self-affirmation:** An individual with a high tendency to assert himself experiences less dissonance than an individual who has a low level of this trait, because this individual has more positive self-resources for him in other areas through which he demonstrates his abilities and potential, even if they are unrelated. With an attitude of dissonance that would correct his perception of his self-efficacy, such as being liked by his peers (Harmon-Jones et al, 2009).

5. **Preference for consistency:** An individual who has a stronger cognitive motivation to be consistent with his personal orientations, and to interpret reality through his own knowledge, shows higher dissonance than others and feels insulted when acting contrary to his beliefs (Harmon & Mills, 2019).

6. **Orientation to work:** The extent of an individual's interest in completing the tasks assigned to him increases the duration of his dissonance, unlike the individual who does not pay much attention to them (Harmon-Jones, 2012; Nunez; Freire; Ferradas; Valle & Xu, 2021).

Hypotheses of Cognitive Dissonance Theory:

1. All individuals are sensitive to the inconsistency between their actions and beliefs. That is, all of us can realize within a certain level of awareness that we are dealing in a way that is inconsistent with our beliefs or orientations.

2. The state of cognitive dissonance is characterized by motivational characteristics due to the psychological tension resulting from it, which prompts the individual to do everything in his power to get rid of this dissonance, through several methods.

3. The individual can resolve dissonance in several ways, some of which are simple, some of which are complex, and are affected by mental abilities, meaning that individuals have a degree of control over their thoughts, and this control varies from one individual to another (Çalışkan & Gökalp, 2020).

Sources of Cognitive Dissonance:

Cognitive Dissonance has Three Sources:

1- The conflict between what the individual believes and his ability to interpret reality based on these beliefs.

2- The conflict between the prevailing cultural pattern in society and the individual's personal position.

3- The conflict between the previous knowledge that the individual holds and the new knowledge that he is exposed to.

4- The conflict between the implicit orientation held by the individual and the permissible behavior (Elliot & Church, 2003; Al-Lahyani and Al-Otaibi, 2020).

Cognitive Dissonance Models:

1- The effort justification model:

(Festinger, 1962) indicated that dissonance occurs here through the individual's commitment to a specific chosen, but undesired, course of action, expecting to reach a desired result through it.

1- **When the individual finishes this work**, it appears to him that the result was not as desirable as It is expected, then the individual experiences a state of dissonance that is reduced by enhancing the value of the result obtained from this work, even though it was contrary to his expectations (Harmon-Jones & Mills, 2019).

2- **The induced compliance model:** (Festinger, 1962) showed that dissonance occurs here when the individual issues a written statement that cannot be taken back while there is no sufficient justification for carrying out this action.

Here, justifications must be available in order to reduce the dissonance that occurs, and the dissonance is reduced. This is through the individual changing his belief to match what he has to say (Gupta & Geetika, 2020).

3- **The model of diffusion of alternatives:** Dissonance occurs here after the individual makes an important decision that cannot be reversed.

What happens is that the negative aspects of the chosen alternative and the positive aspects of the option that was rejected stand against this decision, while the positive aspects of the chosen alternative and the negative aspects of the option that were rejected stand with this decision. (Bucher-Maluschke et al, 2020; Xu, 2018).

4- The alternative dissonance model:

through which the following two hypotheses were verified: that dissonance may occur in the individual in an alternative way, that is, as a result of his self-awareness that members of his group are engaging in behavior that is discordant with the values and attitudes he previously knew about them.

This will lead to the individual's perceived feeling of dissonance.

The intensity of the individual's alternative dissonance increases as his connection to and affiliation with his group increases, and this indicates that the occurrence of dissonance in the individual is not dependent on his direct life experiences, and that the group to which the individual belongs may be a source of dissonance for him (Jumareng & Setiawan, 2021).

This development significantly expanded the perspective of this theory, after which Glass-Ford et al. (2007) conducted experiments confirming that alternative dissonance may lead to an individual's separation from his group, and affect the extent of his belonging to it, if his group engages in behaviors that conflict with his personal values, such as justice and equality, even if he does not participate.

Personally in these works, which prompts him to reject his affiliation with them in order to get rid of this feeling of dissonance and discomfort, and that the more an individual respects human values, the more tension he experiences as a result of the alternative dissonance, and the more he is motivated to get rid of this dissonance by defending these violated values (Badawi, 2013).

Causes of Cognitive Dissonance:

1. **Cognitive and psychological status:** such as a low level of intelligence, lack of self-confidence, or the presence of impairments in the individual's mental and physical health (Williams, 2021).

2. **Cultural framing:** that is, the generality of public opinion, which imposes on the individual to think in a certain way of acceptable social behavior, and the individual is forced to obey it due to the fear of exclusion, which conflicts with the individual's free will to determine his own position on the subject and his behavior independently.

3. **The political system:** This is the contradiction that the individual experiences with a political system in which he is not convinced of its usefulness while there is no escape from submitting to it, and he is forced to accept it without discussion even though it contradicts the subject and the individual's behavior according to his original vision that it is unsuccessful and illogical.

4. **Conflict of interest:** When an individual experiences a situation in which a somewhat difficult decision was made, and the results of this decision conflicted between his personal interests and the interests of society, which requires the individual to have other alternatives and requires a cognitive process of analysis, refutation, and long discussions with oneself and others. (Abbas, 2019, Omar and Al-Jubouri, 2019).'

Factors affecting cognitive dissonance:

Qatami (2012) mentioned several factors that play a role in triggering cognitive dissonance:

1- The amount of conflicting information in the situation: The greater the amount of information available to the individual and the more diverse his culture, the greater the degree of understanding and criticism required of him. This means the greater the dissonance for the individual, and

the more limited the exposure and selection to it, the less dissonance the individual has.

2- The importance of belief and the extent to which the individual relies on it:

Religious loyalty and party affiliation, which have taken a form of knowledge for the individual, require him to determine the distance between this intellectual system in which he believes and other intellectual trends, and to determine which of them is logical, and this means increasing the individual's cognitive dissonance, while An individual who does not have affiliation or fixed beliefs will experience a state of mental dissonance weaker and less severe (Heath, 2011).

The individual's experiences:

This history of experiences makes the individual determine a preconceived pattern of mental processing of some situations and continue with it as a comfortable way of dealing with situations, but when the new experience and modern scientific data prove that this pattern has become inappropriate in dealing with this modern interactive situation, this will raise He has dissonance unlike an individual whose experiences are limited (Mowlem; Skirrow; Reid; Maltezos; Nijjar; Merwood; Barker; Cooper; Kuntsi & Asherson, 2016).

3- Motivation: If the direction of motivation is towards openness to experience and the desire to build a human civilization, this will lead to greater cognitive dissonance, and thus will push towards the production of creative, creative ideas, while closing in on oneself and focusing on its assertion, hostility in thinking, and the exclusion of others will reduce the occurrence of dissonance among people. The individual (Ruiz & Tanaka, 2001; Hollis, 2013).

The study of Atallah (2020) indicated that the nature of dissonant facts, the extent of their susceptibility to change, and their time frame also plays an important factor in provoking cognitive dissonance.

Clear and mechanical facts have greater resistance in terms of the possibility of changing them, such as scientific facts, and therefore they create greater dissonance than events. Ambiguous and historical because they are less resistant and therefore easier to neutralize, which means less cognitive dissonance.

Strategies to reduce cognitive dissonance:

1- Adding a new perception, that is, forming cognitive connections that support the repulsive behavior, or a new interface that is more receptive to this behavior, so that it is consistent and harmonious with the repulsive behavior or the repulsive idea.

2- Resisting intrusive contextual knowledge that may cause dissonance, i.e. teaching awareness of the problem through selective exposure to information so that the individual effectively avoids intrusive information.

3- Reducing the degree of importance of the new objectionable perception by interpreting it as illogical (Martin, ; Marsh & Debus, 2003).

4- Increasing the degree of importance of static, fixed perception by adding beliefs that are consistent with it and increase its weight.

5- Putting aside the repulsive perception: that is, abandoning the belief or abandoning the action, and the individual will not return to such an action again (Çalışkan, & Gokalp, 2020); Hutuleac, 2014).

From the above, the researcher believes that some of these strategies may require mental effort in terms of changing the way the individual evaluates actions and ideas, and this is also due to the degree of strength of these convictions in the individual's cognitive system, as Festinger says: A man with conviction is difficult to change, and creating a change in An interpersonal element is not an easy matter, as the individual does not always have the ability to control his environment. In addition, emotional responses sometimes do not fall within the range of behavior that the individual is capable of, so individual success in applying these strategies depends on cognitive and personal characteristics, and specific cultural contexts.

Methodological procedures for research:

Study Approach:

The study relied on the descriptive approach due to its suitability to the nature of the study and the information to be obtained, and to the questions that the study seeks to answer in order to reach answers that contribute to describing and analyzing the results, with the aim of identifying (cognitive dissonance and its relationship to social adaptation among gifted and ordinary middle school students).

The descriptive approach can be defined as a way to describe the phenomenon to be studied through a correct scientific methodology, and to depict the results reached in expressive digital forms that can be interpreted (Al-Mahmoudi, 2019: 46).

Study population and sample:

The study was applied to middle school students, and (176) students were selected, including (120) ordinary students and (56) gifted students. The following table shows the characteristics of the study sample.

Table (1) shows the characteristics of the study sample by type and grade

Category	Frequency	Percentage %	
Type	Male	82	%46.6
	Feminine	94	%43.4
The line	The First	42	%23.9
	The Second	70	%39.8
	The Third	64	%36.4

Tools:

The research tools were:

- 1- Cognitive dissonance scale: prepared by the researcher.
- 2- Social adaptation scale: prepared by the researcher. Below is a description of the study tools and methods for codifying them.

First: Cognitive dissonance scale:

The scale was prepared based on the following steps:

- Reviewing the theoretical frameworks that addressed cognitive dissonance, as well as previous studies and measures prepared for this purpose.

-Through what was seen and through the characteristics of individuals, a set of statements were formulated divided into three areas as follows:

A. Learning area: It contains 10 phrases.

B. The social field contains 11 phrases.

C. The personal field contains (12)phrases.

The scale was presented in its initial form to a number of (9) arbitrators who are specialists in psychology and special education.

Through the arbitrators' comments, some wordings were modified and an agreement rate of 80% was taken.

This did not result in deleting any phrases.

- The exploratory experience of the scale.

-The scale was applied to a survey sample of(35)students to calculate internal consistency and reliability, and the results were as follows:

- Internal consistency.

The correlation between the individual score and the total score of the dimension was calculated using the Pearson correlation coefficient, as well as the correlation coefficient between the total score of the dimension and the total score of the scale.

The results were as follows in Table (2):

Table (1) Pearson correlation coefficients between the scores of each item and the total score of the dimension to which it belongs

The Learning Sphere		The Social Sphere		The Personal Sphere	
M	Correlation Coefficient	M	Correlation Coefficient	M	Correlation Coefficient
1	**0.78	1	**0.69	1	**0.81
2	**0.77	2	**0.85	2	**0.75
3	**0.82	3	**0.76	3	**0.69
4	**0.69	4	**0.68	4	**0.67
5	**0.75	5	**0.72	5	**0.75
6	**0.59	6	**0.77	6	**0.68
7	**0.62	7	**0.68	7	**0.66
8	**0.56	8	**0.59	8	**0.85
9	**0.64	9	**0.76	9	**0.64
10	**0.73	10	**0.88	10	**0.66
-	-	11	**0.75	11	**0.72
-	-	-	-	12	**0.78

** There is significance at the level (0.01) It is clear from Table (2) that the correlation coefficients for each item of the study tool and the total score for the dimension to which it belongs were all statistically significant at the significance level (0.01), which indicates a high degree of internal consistency validity for the study tool.

Table (2) Values of correlation coefficients between the dimension score and the total score of the cognitive dissonance scale

M	dimension	correlation coefficient	Significance level
1	Learning	0.85	0.01
2	field Social sphere	0.79	0.01
3	Personal sphere	0.81	0.01

It is clear from Table (2) that the correlation coefficients of each dimension with the total score of the scale were all statistically significant at the significance level (0.01), which indicates a high degree of internal consistency validity for the study tool.

Stability of the study tool: To verify reliability, the researcher used Cronbach's alpha equation for a survey sample of (35) students. The following table shows the reliability coefficients resulting from this equation:

Table (3) Reliability coefficients of the cognitive dissonance scale

M	The dimension	Cronbach coefficient
1	Learning field	0.70
2	Social sphere	0.82
3	Personal sphere	0.71
4	Cognitive dissonance scale	0.84

It is clear from the previous table that the values of the reliability coefficients were high, and the overall reliability coefficient reached (0.84), which indicates a high degree of reliability, which indicates the possibility of relying on its results.

Second: Social adaptation measure :

The scale was prepared based on the following steps.

- Reviewing the theoretical frameworks that dealt with social adaptation, as well as previous studies and standards prepared for this purpose.

- Through what was seen and through the characteristics of individuals, a group of statements was formulated divided into three dimensions as follows :

a. Adapting to classmates: It contains 10 phrases.

B. Adapting to others has 8 phrases.

C. Adapt to the study and contains (6)phrases. Dr. Emotional adaptation contains (7)phrases.

- The scale was presented in its initial form to a number of (9) arbitrators who are specialists in psychology and special education.

-Through the arbitrators' comments, some wordings were modified and an agreement rate of 80% was taken.

This did not result in deleting any phrases.

- The exploratory experience of the scale.

The scale was applied to a survey sample of (35) students to calculate internal consistency and reliability, and the results were as follows :

Internal consistency:

The correlation between the individual score and the total score of the dimension was calculated using the Pearson correlation coefficient, as well as the correlation coefficient between the total score of the dimension and the total score of the scale.

The results were as follows in Table (4):

Table (4) Pearson correlation coefficients between the scores of each item and the total score of the dimension to which it belongs of the social adaptation scale

Adapting to classmates		Adapting to others		Adapting to studying		Emotional adaptation	
M	Correlation coefficient	M	Correlation coefficient	M	Correlation coefficient	M	Correlation coefficient
1	**0.69	1	**0.79	1	**0.80	1	**0.75
2	**0.71	2	**0.80	2	**0.71	2	**0.76
3	**0.72	3	**0.66	3	**0.79	3	**0.69
4	**0.69	4	**0.62	4	**0.68	4	**0.65
5	**0.76	5	**0.82	5	**0.74	5	**0.65
6	**0.69	6	**0.71	6	**0.78	6	**0.66
7	**0.63	7	**0.68	-	-	7	**0.74
8	**0.56	8	**0.58	-	-	-	-
9	**0.66	-	-	-	-	-	-
10	**0.78	-	-	-	-	-	-

** Significance exists at the level of (0.01) It is clear from Table (4) that the correlation coefficients for each item of the study tool and the total score for the dimension to which it belongs were all statistically significant at the significance level (0.01), which indicates a high degree of internal consistency validity for the study tool.

Table (5): Values of correlation coefficients between the dimension score and the total score of the social adaptation scale

M	The dimension	Correlation coefficient	Significance level
1	Adapting to classmates	0.80	0.01
2	Adapting to others	0.77	0.01
3	Adapting to study	0.80	0.01
4	Emotional adaptation	0.76	0.01

It is clear from Table (5) that the correlation coefficients of each dimension with the total score of the scale were all

statistically significant at the significance level (0.01), which indicates a high degree of internal consistency validity for the study tool.

Stability of the study tool:

To verify reliability, the researcher used Cronbach's alpha equation for a survey sample of (35) students. The following table shows the reliability coefficients obtained using this equation:

Table (6) Reliability coefficients of the social adaptation scale

M	The dimension	Cronbach coefficient
1	Adapting to classmates	0.70
2	Adapting to others	0.80
3	Adapting to study	0.76
4	Emotional adaptation	0.88
Cognitive dissonance scale		0.88

It is clear from the previous table that the values of the reliability coefficients were high, and the overall reliability coefficient reached (0.88), which indicates a high degree of reliability, which indicates the possibility of relying on its results.

Results:

The first question states the following: What is the level of cognitive dissonance among gifted and normal middle school students? To answer this question, the average score of the students in each statement, the standard deviation, and the weighted average of the total dimension statements and the entire scale were calculated, and the results were as follows in the following table:

Table (7) Mean values and standard deviations for demand scores on the cognitive dissonance scale

Dimension	Ordinary			Talented People		
	Mean	Standard Deviation	Level	Mean	Standard Deviation	Level
Learning Field	1.14	0.54	Low	1.22	0.44	Low
Social Sphere	1.36	0.41	Low	1.38	0.42	Low
Personal Sphere	1.81	0.68	Middle	1.82	0.62	Middle
Cognitive Dissonance	1.44	0.34	Low	1.47	0.31	Low
As a Whole						

It is clear from Table (7) that the level of cognitive dissonance among the ordinary and the gifted is similar, with the level ranging between low and medium in both groups.

This result can be explained in the nature of the age stage, where the middle school student lives in a state of somewhat consistency between what he believes and what he does due to his lack of responsibility.

The lack of burdens that he bears and what is expected of him to do in light of his age stage, and everything that he may feel may be the result of adolescence and the contradictions within it that the teenager may feel but do not cause him an acute state of cognitive dissonance (Melhem, 2022).

This result is consistent with the findings of Shawkat's study (2016) regarding a decrease in the level of cognitive dissonance among university students as a result of the consistency of the beliefs held by the students with what society dictates.

This study is consistent with the study of Al-Mawajdah (2020) to identify the relationship between cognitive dissonance and psychological adjustment and concluded that: The level of cognitive dissonance was low, while it differs with the study of Al-Azamat and Al-Atoom (2017), which concluded that the level of cognitive dissonance in the sample was moderate.

second question : It states the following: What is the level of social adaptation among gifted and normal middle school students?

To answer this question, the average score of the students in each statement, the standard deviation, and the weighted average of the total dimension statements and the entire scale were calculated, and the results were as follows in the following table:

Table (8) Mean values and standard deviations for demand scores on the social adaptation scale

Dimension	Ordinary			Talented People		
	Mean	Standard Deviation	Level	Mean	Standard Deviation	Level
Adapting to classmates	2.29	0.68	Middle	2.29	0.68	Middle
Adapting to others	1.97	0.44	Middle	1.96	0.42	Middle
Adapting to study	2.40	0.15	Large	2.37	0.22	Large
Emotional adaptation	1.68	0.53	Middle	1.65	0.62	Low
Social adaptation as a whole	2.09	0.33	Middle	2.07	0.33	Middle

It is clear from Table (8) that the level of social adaptation among the ordinary and the gifted was similar in most dimensions and the total score, where the level ranged between low and medium for the two groups, except for the emotional adaptation dimension, which was moderate among the ordinary and great among the gifted.

This result can be explained by the fact that the middle school student lives in a state of Moderate or moderate adjustment to colleagues, others, and study, and he experiences a moderate state of emotional adjustment.

This can be explained in light of the nature of the age stage that constitutes the beginning of adolescence, during which a teenager appears to be somewhat rebellious against society, and

the field of study was one of the most common fields among ordinary people. Adaptation due to the formal nature of relationships within the school.

As for the gifted, due to the school not meeting their desires and not satisfying their aspirations, they do not feel a great degree of adaptation.

This result differs from the study of Ghobari (2018), which aimed to determine the level of academic social behavior among university students and concluded that the level of academic social behavior was low.

The third question: It states the following:

What is the significance of the relationship between students' scores on the cognitive dissonance scale and their scores on the consensus adjustment scale?

To answer this question, the correlation was calculated between the students' scores on the cognitive dissonance scale and their scores on the social adaptation scale for ordinary and gifted students, and the results were as follows in Table (9):

Table (9): Values of correlation coefficients between cognitive dissonance and social adaptation

Dimensio n	Ordinary				Talented People			
	Lear ning	Socia l	Pers onal	Total Scor e	Learn ing	Soc ial	Pers onal	Total Score
Adapting to classmat es	0.08	*0.27 *	*0.34 *	*0.28 *	0.25	0.0 1	0.11-	0.06
Adapting to others	*0.25 *	*0.41 *	0.16	*0.35 *	0.14-	- 0.1 3	- 0.27 *	0.22-
Adapting to study	- *0.19	0.10	*0.31 *	0.09	- *0.27	- 0.0 1	0.06	0.10-
Emotion al adaptati on	*0.51 *	*0.52 *	*0.64 *	*0.66 *	0.21	0.3 *3	0.34 *	**0.38
Social adaptati on as a whole	*0.27 *	*0.48 *	*0.53 *	*0.52 *	0.09	0.0 8	0.03-	0.06

It is clear from Table (9) that there is a positive relationship between cognitive dissonance and social adaptation among ordinary people in most dimensions, while the relationship was weak and not significant in most dimensions among ordinary people, with the exception of the emotional adaptation dimension, which was significant with the social and personal cognitive dissonance domain and the total score, and this result is despite its lack.

It makes sense for ordinary people, but it can be explained in light of the fact that social adaptation requires the individual to perform behaviors that may not be consistent with what he believes, so how can he keep up with others and coexist with them. As for the gifted, since they are not looking for social support, their cognitive dissonance does not greatly affect adaptation, and it may have an effect.

Negatively, as it appeared in some dimensions, this result partly differs with the study of Al-Otaibi (2015), which resulted

in an inverse relationship between dissonance and self-esteem among female students at Umm Al-Qura University, which explains the negative effects of cognitive dissonance on the student's psychological health and his relationship with others, Al-Lahyani's study. and Al-Otaibi (2020), which resulted in a predictive ability for cognitive dissonance with psychological conflict and anxiety among female students at Umm Al-Qura University.

This result differs from the study of Ghobari (2018), which found a negative relationship between cognitive dissonance and academic social behavior, and that the level of academic social behavior It was low.

The fourth question : It states the following:

What is the significance of the differences between middle school students in cognitive dissonance according to the student's status (gifted, normal), gender (males, females), and grade (first, second, third)?

This question was answered according to each variable as follows First: Differences according to the type of student (gifted, normal):

A t-test was used for differences between two independent groups, and the results were as follows in Table (10):

Table (10) T-value and its significance for the differences between ordinary and gifted people in cognitive dissonance

Domain	Category	Nu mber	Mean	Standa rd Deviasi on	T- Val ue	Significance Level
Learning	Ordinary	120	11.41	5.74	3.0 8	0.01
	Talented People	56	14.13	4.78		
Social	Ordinary	120	14.91	7.45	1.3 5	Not significant
	Talented People	56	16.45	6.04		
Personal	Ordinary	120	21.68	5.35	0.4 5	Not significant
	Talented People	56	22.05	4.53		
Cognitive dissonance	Ordinary	120	48.00	15.39	1.9 8	0.05
	Talented People	56	52.63	12.12		

It is clear from Table (10) that there are differences between ordinary and gifted people in the field of learning and the total degree of cognitive dissonance in the direction of the gifted, and there are no differences in the other dimensions.

This result indicates that the gifted differ in some aspects of cognitive dissonance and in the overall degree due to the nature of the giftedness and the nature of the study that drives The gifted person is dissatisfied and dissatisfied with what he is studying and feels that his ambitions are not satisfied.

Therefore, he lives in a state of cognitive dissonance to a greater degree, especially in the field of learning. Second: Differences according to grade (first, second, third): The (one-way analysis of variance) test was used for differences between more than two independent groups, and the results were as follows in Table (11):

Table (11): F value and its significance for differences between students in cognitive dissonance according to grade

Domain	Source of variance	Sum of squares	Degrees of freedom	Mean of quartiles	F-Value	Significance Level
Learning	Between groups	73.052	2	36.526	1.17	Not significant
	Inside groups	5383.857	173	31.121		
	Total	5456.909	175			
Social	Between groups	7.990	2	3.995	0.08	Not significant
	Inside groups	8702.169	173	50.302		
	Total	8710.159	175			
Personal	Between groups	147.486	2	73.743	2.90	0.05
	Inside groups	4396.553	173	25.414		
	Total	4544.040	175			
Cognitive dissonance	Between groups	500.341	2	250.171	1.18	Not significant
	Inside groups	36571.517	173	211.396		
	Total	37071.858	175			

It is clear from Table (11) that the F value for the differences between students in cognitive dissonance according to grade is not significant in most dimensions except for the personal domain. Differences were found, and to determine the direction of these differences, Tukey's test was used for post-hoc comparisons of means, and the results were as follows in Table (12):

Table (12) Direction of differences between means in personal dissonance according to grade

Class	Average	The Second	The third
The first	20.48	1.15	*2.38
The second	21.63	-	1.23
The third	22.86	-	-

It is clear from Table (12) that there are differences between the first and third grade students only in the direction of the third grade students, and there are no differences between the rest of the grades.

- This result indicates that the students of the different grades in the middle stage are similar in the state of cognitive dissonance they experience, and this can be explained in light of the closeness in age.

- The educational stage and the similarity in their beliefs and behavior, whether they are normal or gifted. This study is partially consistent with Al-Mawajda's study (2020) to identify the relationship between cognitive dissonance and psychological adjustment and found that there are no differences in cognitive dissonance according to academic level.

Third: Differences according to gender (males, females):

A t-test was used for differences between two independent groups, and the results were as follows in Table (13):

Table (13) T-value and its significance for differences between students in cognitive dissonance according to gender

Domain	Category	Number	Mean	Standard Deviation	T-Value	Significance Level
Learning	Males	82	13.22	6.07	2.12	0.05
	Females	94	11.45	5.01		
Social	Males	82	16.45	6.91	1.86	Not significant
	Females	94	14.48	7.09		
Personal	Males	82	21.74	6.04	0.14	Not significant
	Females	94	21.85	4.13		
Cognitive dissonance	Males	82	51.41	16.46	1.66	Not significant
	Females	94	47.78	12.51		

It is clear from Table (13) that there are differences between males and females in the field of learning only in the male direction and there are no differences between them in the rest of the dimensions.

This result indicates that males and females are similar in their level of cognitive dissonance and therefore they form a highly homogeneous group in their average feeling of cognitive dissonance.

Males differed in the field of learning compared to females, who were able to coexist with inconsistent situations and had a high ability to be flexible with situations. This result is consistent with the findings of Salama and Ghobari (2016) that there are no significant differences between males and females in cognitive dissonance.

The fifth question states: What is the significance of the differences between middle school students in social adaptation according to the student's status (gifted, normal), gender (males, females), and grade (first, second, third)?

This question was answered according to each variable as follows: First:

Differences according to the type of student (gifted, normal):

A t-test was used for differences between two independent groups, and the results were as follows in Table (14):

Table (14) T value and its significance for the differences between ordinary and gifted people in social adaptation

Adapt With	Category	Number	Mean	Standard Deviation	T-Value	Significance Level
Fellows	Ordinary	120	22.90	3.96	6.78	0.01
	Talented People	56	17.80	5.87		
The Others	Ordinary	120	15.75	3.89	3.61	0.01
	Talented People	56	13.57	3.34		
Study	Ordinary	120	14.38	3.16	2.78	0.01
	Talented People	56	12.91	3.44		
Emotional	Ordinary	120	11.78	4.54	1.99	0.05
	Talented People	56	10.43	3.29		
Social adaptation	Ordinary	120	64.80	11.02	5.99	0.01
	Talented People	56	54.71	8.94		

It is clear from Table (14) that there are significant differences between the gifted and the ordinary in social adaptation (dimensions and total score) in the direction of the ordinary. This result indicates that the ordinary are more adaptable than the gifted.

This result is logical given that the gifted turns against the existing systems and rebels against them because he sees inconsistency.

While others think that it is consistency, he finds it difficult to keep up and follow the prevailing traditions, and therefore he is less adaptable. Second:

-Differences according to grade (first, second, third).

- The (one-way analysis of variance) test was used for differences between more than two independent groups, and the results were as follows in Table (15).

Table (15) F value and its significance for differences between students in social adaptation according to grade

Adapt With	Source of variance	Sum of squares	Degrees of freedom	Mean of quartiles	F-Value	Significance Level
Fellows	Between groups	3.182	2	1.591	0.06	Not significant
	Inside groups	4748.176	173	27.446		
	Total	4751.358	175			
The Others	Between groups	27.457	2	13.728	0.93	Not significant
	Inside groups	2567.975	173	14.844		
	Total	2595.432	175			
Study	Between groups	53.519	2	26.760	2.47	Not significant
	Inside groups	1871.026	173	10.815		
	Total	1924.545	175			
Emotional	Between groups	13.245	2	6.623	0.37	Not significant
	Inside groups	3106.613	173	17.957		
	Total	3119.858	175			
Social adaptation	Between groups	171.617	2	85.809	0.66	Not significant
	Inside groups	22560.928	173	130.410		
	Total	22732.545	175			

It is clear from Table (15) that there are no differences between students in social adaptation according to grade in the dimensions of social adaptation and the total grade.

- This result indicates that middle school students from the first to third grades are similar in their ability to social adaptation due to the close age stage and the fact that they did not enter into conflict.

-Social and low expectations of their behavior.

-This study is consistent with the study of Al-Mawajda (2020) to identify the relationship between cognitive dissonance and psychological adjustment, and found that there are no differences in psychological adjustment according to academic level.

-**Third:** Differences according to gender (males, females) A t-test was used for differences between two independent groups, and the results were as shown in the following table (16).

Table (16) T value and its significance for differences between students in social adaptation according to gender

Adapt With	Category	Number	Mean	Standard Deviation	T-Value	Significance Level
Fellows	Males	82	20.63	5.99	1.54	Not significant
	Females	94	21.84	4.37		
The Others	Males	82	15.23	4.04	0.56	Not significant
	Females	94	14.90	3.69		
Study	Males	82	14.37	3.18	1.72	Not significant
	Females	94	13.51	3.40		
Emotional	Males	82	10.41	4.15	2.79	0.01
	Females	94	12.16	4.14		
Social adaptation	Males	82	60.65	12.78	1.03	Not significant
	Females	94	62.41	10.04		

It is clear from Table (16) that there are significant differences in the emotional adaptation dimension only towards females, while there are no differences in the rest of the dimensions and the total score.

- This result indicates that males and females are similar in their level of social adaptation due to their young age, and that females are more capable of emotional adaptation than males. .

-This result is consistent with the study of Ghobari (2018), which aimed to identify the relationship between cognitive dissonance and academic social behavior and concluded that there are no differences in social behavior according to gender.

The sixth question asked: Can social adaptation be predicted by the score on the cognitive dissonance scale among middle school students?

First: Predicting social adaptation through the dimensions of cognitive dissonance Multiple regression analysis was used in a stepwise manner.

-This resulted in all dimensions being included in the prediction equation, and the value of R square was equal to 0.18, which means that it predicts equal to 18% of the variance of social adaptation scores.

-The value of F for the significance of the regression coefficient was as follows:

Table (17): F value for the significance of the regression coefficient for predicting social adaptation through the dimensions of cognitive dissonance

Source of	Sum of Squares	Degree s of freedom	Mean squares	T-Valu e	Significan ce Level
Variance	4026.629	3	1342.210	12.34	0.01
Regression	18705.917	172	108.755		
The Rest Total	22732.545	175			

It is clear from Table (17) that the value of the P test for the significance of the regression coefficient was significant, which means the accuracy of predicting social adaptation through the dimensions of cognitive dissonance.

The following equation describes the forecasting process Social Adjustment = 44.64 + 0.67 Personal + 0.51 Social - 0.44 Learning .

Second: Predicting social adaptation through the total degree of cognitive dissonance Simple regression analysis was used, and the value of R square was equal to 0.18, which means that it predicts equal to 10% of the variance of social adaptation scores.

The value of F to indicate the significance of the regression coefficient was as follows: **Table (18): F value for the significance of the regression coefficient for predicting social adaptation through the dimensions of cognitive dissonance**

Source of	Sum of Squares	Degree s of freedom	Mean squares	T-Valu e	Significan ce Level
Variance	2215.131	1	2215.131	18.79	0.01
Regression	20517.414	174	117.916		
The Rest Total	22732.545	175			

It is clear from Table (18) that the value of the P test for the significance of the regression coefficient was significant, which means the accuracy of predicting social adaptation through cognitive dissonance, and the following equation describes the prediction process: Social adjustment = 49.50 + 0.24 cognitive dissonance.

The previous result indicates that cognitive dissonance is a good predictor of social adaptation. The more an individual's beliefs

are consistent with his actions, the more he experiences a state of harmony with himself and thus with others.

Al-Bahnasawy's study (2019) indicated that a state of cognitive dissonance would affect the comprehension and receipt of knowledge, and it might even lead to To stop the student's latent motivation for education, which is the guiding force for him to integrate into the learning process and relationship with others, and thus may hinder their social compatibility and their orientation towards their goals in the future.

Qatami (2012) pointed out that losing a sense of harmony may occur in a subtle or deep way.

The individual's subconscious causes him a clear state of helplessness and weakness, thus affecting his effectiveness in life and his productivity. In order for the individual to be able to get rid of this state, he must have awareness of the problem and understand its causes and impact.

This result is consistent with the study of Ghobari (2018), which aimed to identify the relationship between cognitive dissonance and academic social behavior among university students and concluded that cognitive dissonance explains 13.9% of social behavior.

Suggested Research:

- 1- The causal model of the relationship between academic achievement, learned helplessness, and academic self-handicapping among gifted students.
- 2- The causal model of the relationship between creative cognitive processes, mental wandering, and cognitive dissonance among mentally gifted students.
- 3- The causal model of the relationship of academic achievement to cognitive dissonance, mental wandering, and academic self-handicapping among mentally superior and academically struggling university students.

Recommendations:

1. Conduct further studies on the relationship of cognitive dissonance with other variables.
2. A proposed strategy to activate the educational role in reducing the level of cognitive dissonance among middle school students.
3. Holding training programs for middle school teachers to develop their skills in alleviating cognitive dissonance.

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