



## مجلة جامعة ذي قار لعلوم التربية البدنية

مجلة علمية محكمة تصدرها كلية التربية البدنية وعلوم الرياضة



### *Teaching according to active learning and its effect on learning some offensive skills in the game of volleyball*

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#### **ABSTRACT**

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Cognitive dissonance represents a state of anxiety that arises when two or more ideas conflict in an individual, which leads to a state of contradiction between them, and the person may hold two opposing ideas, and this contradiction provokes a feeling of anxiety that prompts the individual to try to reduce this feeling by addressing the dissonance between his thoughts and knowledge, and this is achieved by reducing the stress and anxiety resulting from this conflict. Through the practical vision of female researchers as teachers, this phenomenon has been seen and spread widely among female students, and accordingly, this case has been studied and identified through the conflict resulting from the conflict of traditional values (such as family commitments) with modern requirements (such as socially unacceptable sports activities), which generates a cognitive dissonance that affects the ability of female students to make effective and consistent decisions with their goals. Thus, the researchers identified the research problem with some questions: Is there a state of cognitive dissonance among female students of the College of Physical Education and Sport Sciences, University of Baghdad? Do female students of the College of Physical Education and Sport Sciences have the ability to make decisions rationally? The research aimed to identify the values of cognitive dissonance among female students of the College of Physical Education and Sport Sciences for Girls / University of Baghdad, and to identify the values of decision-making among female students of the College of Physical Education and Sport Sciences for Girls / University of Baghdad, and to identify the relationship between cognitive dissonance and decision-making among female students of the College of Physical Education and Sport Sciences for Girls / University of Baghdad.

The researchers used the descriptive approach in the method of relational relationships appropriate to the nature of the problem. The research population was identified with the female students of the fourth stage at the College of Physical Education and Sport Sciences for Girls - University of Baghdad, and the research sample was selected by random method and by lottery method, which numbered (55 students) out of (60) female students.

**1- Introduction:****1-1- Research Overview:**

This era was known as "the age of speed as a result of the great scientific development in various fields of life, especially in the field of education and the contents of the educational process, and based on its important foundations ((the teacher, the learner, the curriculum)) and the means and mechanisms of input and outputs for lessons, including theoretical or practical" (10).

Cognitive dissonance is one of the main theoretical pillars in social psychology, which explains the internal conflict caused by the conflict of thoughts, behaviors, or feelings with the individual's value system, which pushes him to seek cognitive consistency by restructuring his beliefs or justifying his behavior. This directly affects the quality of decisions and the extent of their rationality" (12). Within the faculties of physical education and sports sciences for girls, this phenomenon deepens as female students face dual pressures between stereotypical femininity and the demands of competitive athletic performance. Cognitive dissonance represents a state of anxiety that arises when two or more ideas conflict in an individual, which leads to a state of contradiction between them, and the person may carry two opposing ideas, and this contradiction provokes a feeling of anxiety that prompts the individual to try to reduce this feeling by addressing the dissonance between his thoughts and knowledge, and this is achieved by reducing the stress and anxiety resulting from this conflict. Cognitive dissonance may affect the decision made by the individual in various areas of his life, as the individual goes through a series of decisions that require logical thinking and analysis of the situation to reach a number of available alternatives to achieve a specific goal or a specific problem, and he must choose the best and most appropriate alternatives based on his experience, thinking, and the information available to him. Therefore, "it is necessary to focus on the integration of sports and its positive activation in a way that works to spread sports culture and awareness through the introduction of sports laws and information about sports"(11).

**1-2- Research justifications and importance:**

Through the practical vision of the female researchers as teachers, this phenomenon was seen and spread widely among female students, and therefore the researchers decided to delve into this case, which she identified through the conflict resulting from the conflict of traditional values (such as family commitments) with modern requirements (such as socially unacceptable sports activities ), which generates a cognitive dissonance that affects the ability of female students to make effective and consistent decisions with their goals.

**1-3- Research Problem:**

The researchers identified the research problem with some questions, is there a state of cognitive dissonance among the students of the Faculty of Physical Education and Sport Sciences for Girls, University of Baghdad? Do female students of the College of Physical Education and Sport Sciences have the ability to make decisions rationally? Does cognitive dissonance affect female students' decision-making?

**1-4- Research Objectives:**

The research aims to:

1. Identifying the Values of Cognitive Dissonance among Female Students of the College of Physical Education and Sport Sciences for Girls / University of Baghdad.
2. Identifying the values of decision-making among female students of the College of Physical Education and Sport Sciences for Girls / University of Baghdad.
3. Identifying the Relationship between Cognitive Dissonance and Decision Making among Female Students of the College of Physical Education and Sport Sciences for Girls / University of Baghdad.

**1-5- Research Areas:**

1.5.1. Human Field: The number of (55) female students in the Faculty of Physical Education and Sport Sciences for Girls for the academic year 2024-2025.

1-5-2- Temporal Domain: From 3/11/2024 to 1/3/2025

1.5.3. Spatial Domain: Classrooms at the College of Physical Education and Sport Sciences for Girls / University of Baghdad.

## 2- Research Methodology and Field Procedures:

### 2-1- Research Methodology:

The researchers used the descriptive method in the method of relational relations appropriate to the nature of the problem, and aims to "describe certain phenomena and events or things, and collect information, facts, and observations about them to suit the objectives of the study" (1).

### 2-2- Research Population and Sample:

The research population was determined by the deliberate method, represented by the female students of the fourth stage at the Faculty of Physical Education and Sport Sciences for Girls - University of Baghdad, who are (60) female students for the academic year (2024-2025), after excluding the sample of the exploratory experiment that was selected by random method and by lottery, which is (5) female students, and the remaining number of female students was selected to represent the sample of the main experiment (55 Female Students), as shown in Table (1).

Table (1)  
Shows the research community and its samples

Survey Sample	Research Sample	Research Community	Samples	Means, and Tools,
5	55 Female Students	60 students	Issue	
8,33	91,66	100 %	Favorable Ratio	

### 3-3. Tools, Devices Used in the Research:

3.3.1. Means of collecting information: Arab and foreign sources, observation, questionnaire, cognitive dissonance scale, decision-making scale, data collection and dumping forms.

3.3.2. Tools and Devices Used: Classrooms, Dell Laptops, Canon 2900 Laser Printers, Office Supplies.

### 3.4. Field Research Procedures:

#### 3.4.1. Metrics Used:

##### First: Cognitive Dissonance Scale:

The researchers used the Cognitive Dissonance Scale and the scale (Saeed Ali-2024) (3) was adopted, and the scale consists of (20 items) and the alternatives to the answer were the Likert Quadruple (always applies to me, applies to me often, applies to me sometimes, does not apply to me) and the scale consists of two areas (10) paragraphs that measure the cognitive field and (10) paragraphs that measure the emotional field. The Cognitive Dissonance Scale was presented to a group of specialized experts and the experts agreed on all paragraphs of the scale and by (100%).

##### Second: Decision Making Scale:

The researchers used the decision making scale, and it was relied on the scale (Laith and Haitham - 2014) (7) and it consists of (20 items) and the alternatives to the answer were the five-point Likert was: (always applies to me, applies to me often, applies to me sometimes, applies to me rarely, does not apply to me at all)

The decision-making scale was presented to a group of specialized experts and all the paragraphs of the scale were agreed upon by (100% ).

### 3.4.2. Exploratory Experiment:

The exploratory experiment was conducted on the sample of (5) female students from the research community and from outside the main experiment sample, which were randomly selected by lottery, as the exploratory experiment was conducted on Thursday, 25/1/2025 in the classrooms of the Faculty of Physical Education and Sport Sciences for Girls - University of Baghdad, and its purpose was:

- Knowing the obstacles and negatives that female researchers may face during their work.
- Knowing the time it takes to perform the two scales used in the research.
- Identifying the safety and validity of the scale and its suitability for the sample .
- Ensuring the ability and efficiency of the assistant team.

### 3.4.3. Scientific Foundations of the Two Scales:

The scientific foundations of the two scales were verified by apparent honesty by presenting the two scales to a number of experts and specialists, and they all agreed on the validity of the two scales by (100%). The stability of the two scales was confirmed by (Vakronbach), as the results showed the stability of the two scales (cognitive dissonance - decision making) (0.89 - 0.87) respectively, and this shows the stability of the two scales, and since the two scales were agreed upon by experts and the two scales have clear paragraphs and the method of correction is not questionable, this confirms the objectivity of the two scales.

### 3.4.4. Main Experience:

After the completion of the exploratory experiment and the scientific foundations of the two scales, the main experiment was conducted by distributing the two scales (cognitive dissonance - decision making) to the members of the main experiment sample, which are (55) female students, on Monday, 10/3/2025, at ten o'clock in the morning and in the classrooms of the College of Physical Education and Sport Sciences for Girls - University of Baghdad, and after applying the two scales to the sample members. Forms collected for statistical processing

### 3.4.5. Statistical Methods:

The statistical package (SPSS) was used, including (arithmetic mean, standard deviation, percentage, simple correlation coefficient (Pearson), hypothetical mean).

### 3- Presentation, analysis and discussion of the results:

#### 3-1- Presenting, analyzing, and discussing the results of the Cognitive Dissonance Scale:

Table (2)

Shows the arithmetic medians, standard deviations, hypothetical mean, and the calculated t-value of the cognitive dissonance scale

Level Significance	Significance Value	Calculated t-value	The hypothetical medium	Standard deviation	Arithmetic mean	Sample	Variable
Moral	0.001	3,48	50	81,12	11,57	55	Cognitive dissonance

The significance value is significant if it is  $< 0.05$

Table (2) shows that there are significant differences between the arithmetic medium and the hypothetical mean of the cognitive dissonance scale and in favor of the arithmetic median, and this indicates that the female students of the fourth stage of the College of Physical Education and Sport Sciences for Girls, University of Baghdad, have a level of cognitive dissonance.

The researchers believe that although female students have reached the stage of mental maturity, they still have cognitive dissonance due to the abundance of information they receive, which may constitute an external force that forces them to engage in behavior that is contrary to their thinking due to social pressure, study pressure, or others. "The more an individual's culture and educational

level, the more he has attitudes of cognitive dissonance"<sup>(9)</sup>. Since the students "come from different social and cultural environments, and each of them carries within them the beliefs and ideas that they were raised on, which creates a cognitive dissonance in them, even to a small extent "<sup>(8)</sup>

The researchers agree with (Olfat Mohammed) that focusing on the present experiences is more than preoccupying with past experiences or future events, accepting and tolerating the experiences, and facing the events completely as they are in reality, and without making evaluative judgments on them, an invisible phenomenon that results in a feeling of threat, turmoil, nervousness, and excessive sensitivity that makes the individual unable to adapt to the environment in which he works and reflects on his behavior with others, which causes A state of unease and instability that accompanies the lack of satisfaction of desires, the failure to achieve goals, or when there is an internal conflict between more than one motive" <sup>(5)</sup>.

### 3-2- Present, analyze, and discuss the results of the Decision Making Scale:

Table (3)

Shows the arithmetic medians, standard deviations, hypothetical mean, and calculated t-value of the decision-making scale

Level Significance	Significance Value	Calculated t-value	The hypothetical medium	Standard deviation	Arithmetic mean	Sample	Variable
Moral	0.021	8,38	60	7,63	55,31	55	Decision Making

The significance value is significant if it is  $< 0.05$

Table (3) shows that there are significant differences between the arithmetic mean and the hypothetical mean of the decision-making scale among the members of the research sample and in favor of the hypothetical medium, which means that the female students of the fourth stage of the Faculty of Physical Education and Sport Sciences for Girls / University of Baghdad do not have the ability to make decisions.

Researchers believe that the reasons for poor decision-making in female students are the negative impact of cognitive dissonance, and this internal conflict generates psychological anxiety that weakens intellectual clarity, which leads to avoiding situations that require bold decisions to reduce the feeling of discomfort, and relying on external guidance (such as parents or professors) instead of independence in decision-making, as well as the social and cultural pressures facing students., which creates a conflict between their personal desires and societal norms, which pushes them to avoid making decisions that may enhance their efficiency.

### 3-3- Viewing, analyzing, and discussing the results of the correlation relationship:

Table (4)

Shows the correlation results of the Cognitive Dissonance and Decision Making Scale

Significance Value	Correlation coefficient	Standard deviation	Arithmetic mean	Variables
Moral	0,85	81,12	11,57	Cognitive dissonance

		7,63	55,31	Decision Making
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Table (4) shows that there is a significant correlation between cognitive dissonance and decision-making, and the researchers believe that the moral value between cognitive dissonance and decision-making among the fourth stage students of the Faculty of Education came to the conclusion that the decision-making process requires mental skills such as analysis, extrapolation, and evaluation, and the need to be fully aware of these mental processes during decision-making, and this corresponds to the feeling of anxiety, distress or tension that negatively affects the decision-making process For female students.

In the context of female students of physical education colleges, this dissonance may appear as a result of the conflict between traditional values such as social expectations associated with femininity and the desire to achieve athletic or academic excellence, this conflict generates anxiety that pushes female students to avoid situations that require bold decisions. Jameel's (2022) study showed that 40% of female students resort to the method of "avoidance in decision-making due to the conflict between traditions and desires, which weakens the quality of decisions" (13), and to confirm the result of the research, we find that in conservative societies, women's sports are a controversial field, which promotes cognitive dissonance, and this is what the study of Karan et al. (2021) indicates that "the weakness of women's sports Students' confidence in their athletic abilities leads them to avoid decisions that enhance their physical efficiency (such as joining sports teams), and to rely on external guidance (such as parents or teachers) rather than independence" (14).

Researchers also attribute the reason for the cognitive dissonance among female students to the lack of use of aids and means that enhance the memorization and storage of information in memory, as "the learning process and the stimulation of one sensory experience is not enough for the learner to reach the perception and understanding of the educational material, so the acquisition of experiences requires the involvement of more than one sense, which is important for mental processes to make learning meaningful" (15), and this "will help to build the mental model." The process of building the mental model inside the brain to move on to building connections between the images presented to them." (4). This, in turn, causes poor concentration, which causes a weakness in receiving information and thus causes cognitive dissonance in the information he obtains, as "focusing on the skill well helps the learner and makes him more motivated towards learning" (6). The researchers also attribute the reason for the cognitive dissonance to the incompatibility of the method of explaining and presenting the educational material with the level of learners, as "the clarity of the educational objectives of each unit and their harmony with the level and capabilities of the learners" (2).

### **The end:**

**The researchers reached a number of conclusions, which are:**

1. Female students of the fourth stage of the Faculty of Physical Education and Sport Sciences for Girls, University of Baghdad, have a certain amount of cognitive dissonance, which indicates that some of their thoughts and beliefs are inconsistent with their behaviors.
2. The fourth grade students of the Faculty of Physical Education and Sport Sciences for Girls, University of Baghdad, do not have the ability to make decisions, and this indicates the immaturity of the personality and the tendency towards relying on others in their current lives.

3. Cognitive dissonance plays an important role in decision-making ability and is evidence that female students who suffer from manifestations of cognitive dissonance are certainly difficult to make the right decisions.

**The researchers recommend the following:**

1. The necessity of holding seminars and educational courses for female students at the university in order to provide guidance in order to employ their self-and social interaction with others to benefit from them in decision-making.
2. The Ministry of Higher Education and Scientific Research should prepare awareness curricula that help students make sound decisions in all areas of their lives based on their social and mental characteristics.
3. Conducting several training courses on communication methods to explain the role of cognitive dissonance and its impact on making the right decisions for the university student.
4. Conducting similar studies on cognitive dissonance and decision-making for other school levels and for both sexes (males and females).

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**Appendices**  
**Appendix (1)**  
**Cognitive Dissonance Scale**

It never applies to me	Applies to sometimes	Applies to most of the	Always apply to me	Paragraphs	t
				I study in the college of Liste Helmi	1
				He had to work while studying even though I knew it was affecting my studies	2
				I like to be nice to my friends and my work requires me to be a tough person	3
				Lie to avoid lectures	4
				I had to study in college and I changed what I aspire to	5
				I claim religion and I don't adhere to it	6
				My colleague's actions bother me and I try to accept her for fear of losing her	7
				I am proud of the friendship of some although I am not convinced of them	8
				I get sick and I don't leave lectures and homework	9

				Get excited about the simplest things even though I know their harms	10
				I disturbed my father and then painfully regretted it	11
				I love my country but I don't want to live in it	12
				I give up my right to please my friends	13
				I had to go with some people and I don't like them	14
				I throw garbage in the street convinced that I am wrong	15
				I hate those who cheat in the exam but I keep silent for fear of problems	16
				I had to isolate from my family to achieve my dreams	17
				I had to live in my area even though it doesn't fit my thoughts and beliefs	18
				I feel hurt because others are taking advantage of my excess kindness.	19
				I get annoyed because I prefer to surf the internet and at the same time I want to read my lessons	20

**Attachment (2)**  
**Decision Scale**

It never applies to me	Applies to Rarely	Applies to sometimes	Applies to most of the	Always apply to me	Paragraphs	t
					Have the ability to choose the most appropriate times to make a decision	1
					I have enough experience and education to make a decision.	2
					I base my decisions based on my knowledge of the facts	3
					When he makes a decision, make sure to implement it	4
					I can identify my problem easily and flexibly	5
					I appreciate the meaning of responsibility for decision-making	6
					Make my decision based on the advice of my colleagues	7
					Study the causes of the problem before making a decision	8

					Postpone the decision until appropriate alternatives are available.	9
					Evaluate the advantages and disadvantages of each alternative adopted.	10
					He adopted the decision even if he achieved some goals.	11
					I back off when I know I made the wrong decision	12
					Be sure to evaluate the alternatives before making a decision	13
					Choose the best alternative after comparing the pros and cons of each alternative	14
					Most of my colleagues are involved in deciding the best decision	15
					Make decisions flexibly and effectively	16
					I seek the opinions of my colleagues to make the decision according to a scientific method drawn	17
					I base my decisions on past information and experience.	18
					Listen to other people's opinions before making a decision.	19
					Base my decisions on new and innovative information	20