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# THE IMPACT OF THE GUIDED APPROACH ON LEARNING COURT DEFENSE FOR FEMALE PHYSICAL EDUCATION AND SPORTS SCIENCE STUDENTS – AHLULBAYT UNIVERSITY

**<sup>1</sup>Haifa Mohammed Faleh Mohammed**

*<sup>1</sup>Ahl Al Bayt University/ Faculty of Physical Education and Sports Sciences/Iraq.*

**Corresponding Author:**

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## ABSTRACT

*Studies and educational experience have proven that a successful teacher is one who chooses the most suitable teaching methods, selecting those that best suit their students to ensure the educational process proceeds as planned. This involves considering the subject matter, the student's learning style, and the overall teaching environment within the lecture. One such method is the guided discovery approach, a modern method that has played a significant role in directing teaching towards innovation and creativity, fostering positive thinking, and teaching basic volleyball skills to female students. This study aims to identify the impact of the guided discovery approach on developing positive thinking and teaching some basic volleyball skills to second-year female students at the College of Physical Education and Sports Sciences, Ahlulbayt University. The researcher hypothesized that both guided discovery and guided discovery approaches have a positive impact on developing positive thinking and teaching basic volleyball skills to female students, and that the guided discovery approach is more effective in this regard. The researcher employed the experimental method with equivalent groups, as it aligns with the nature of the research problem. The study population consisted of 63 second-year female students from the College of Physical Education and Sports Sciences at Ahlulbayt University during the 2025-2026 academic year. The research sample comprised 60 students, all of whom participated in developing the Positive Thinking Scale. The educational curriculum consisted of 16 learning units, each taught using a specific method, with two units per week. Each learning unit lasted 90 minutes. Pre- and post-tests were conducted for the students on the volleyball court and in the classrooms of the College of Physical Education and Sports Sciences at Ahlulbayt University. The most important conclusions are: the guided discovery method has a significant impact on developing positive thinking and teaching some basic volleyball skills to the students. The method also has the same effect on developing positive thinking and teaching some basic volleyball skills to the students. One of the most important recommendations is to utilize the guided discovery method in developing positive thinking and teaching some basic volleyball skills to the students.*

**KEYWORDS:** Learning, defense, physical education, sports science.

## INTRODUCTION

The teaching process is an organized and sequential process containing interconnected elements. This process cannot occur without these elements, which are the student, the teacher, and the curriculum. Conversely, the requirements for the success of the educational process have imposed a vital requirement on the learning process, namely teaching methods and their importance and positive role in educational outcomes. This is achieved through the teacher's selection of the optimal method from among many, each type of which has characteristics that distinguish it from the others. Educational studies and experiences have proven that the successful teacher is the one who chooses the most suitable method, the one he deems appropriate for his students, so that the educational process proceeds as planned. This is done by considering the subject matter, the student, and the teaching environment within the lecture. Furthermore, it is a scientific and educational axiom that the concepts of the learning process are constantly subject to scientific studies and research in order to reach the most impactful, effective, and least difficult methods for students. Among these methods is guided discovery, which is considered one of the modern methods that has played an active role in directing teaching thought towards innovation and creativity, as these methods consider the student. It is a fundamental pillar in the learning and teaching processes, and it cultivates scientific thinking in students by creating scientific environments, developing intellectual skills and mental processes, and emphasizing the continuity of self-directed learning and students' motivation. It also focuses on building students' self-confidence and a sense of accomplishment and progress.<sup>1</sup> Furthermore, it increases students' activity and enthusiasm for learning and education. Its importance lies in how it cultivates positive thinking in students, which enhances the effectiveness of the learning process. The use of positive thinking by students helps develop skill performance and ensures the success of the learning process, as skill and the determination to perform it stem from positive thinking. This positive thinking is the guiding principle for performing the skill correctly, and it is the driving force behind human success at all levels, since a person is the product of their thinking. Whenever they possess positive thinking, they will achieve positive results. The more effectively the teaching process is conducted, the more it will contribute to the success of the teaching process and, consequently, the achievement of educational goals.<sup>2</sup>

A positive mindset is a fundamental aspect of the learning and teaching processes. Volleyball is an exciting and beloved team sport for all age groups, thanks to its popularity and the thrill, speed, and excitement it offers. This is due to the development of players' physical, technical, tactical, and psychological skills. It demands a high level of mastery of basic individual skills, as well as effective coordination among teammates. This has prompted researchers and specialists in the sport to conduct extensive research and studies to improve the teaching of volleyball skills to students, particularly in the faculties of physical education and sports science at Ahlulbayt University. This research contributes to preparing a promising generation capable of teaching fundamental skills using modern methods, thus contributing to the development of the sport.

From the foregoing, the importance of the current research becomes clear by highlighting the use of modern and diverse teaching methods, specifically guided discovery. These methods empower students to play an active role in the learning process by employing a curriculum designed to cultivate positive thinking and teach basic volleyball skills to female students.

## RESEARCH PROBLEM

The researcher identified several difficulties that hindered the development of students' performance levels when learning basic volleyball skills. Through personal interviews with instructors, experts, and specialists in volleyball skills and teaching methods, it was determined that these difficulties may stem from several factors. These include the instructor's use of specific methods where they are largely responsible for most of the lesson details, resulting in limited opportunities for students to participate in improving their skills. This is the core of the research problem.

This study examines the guided discovery approach, which gives students a greater role, and its impact on developing positive thinking and learning basic volleyball skills among second-year students at the College of Physical Education and Sports Sciences, Ahlulbayt University.

## RESEARCH OBJECTIVES

1. Develop a scale for assessing positive thinking among students at the College of Physical Education and Sports Sciences, Ahlulbayt University.
2. Identify the impact of the guided discovery approach on developing positive thinking and learning basic volleyball skills among second-year students at the College of Physical Education and Sports Sciences, Ahlulbayt University.

## RESEARCH HYPOTHESIS

- There is a positive effect of the guided discovery method on developing positive thinking and learning some basic volleyball skills among female students.

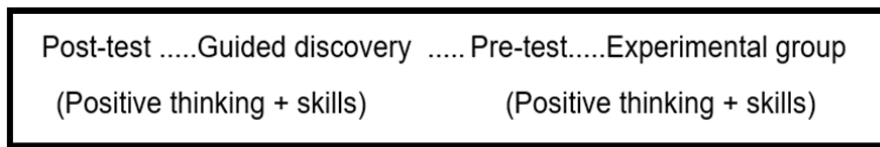
## RESEARCH SCOPE

- Human Scope: Second-year students at the College of Physical Education and Sports Sciences, Ahlulbayt University, academic year 2025-2026.
- Time Scope: From December 20, 2025, to February 25, 2026.

- Spatial Scope: The volleyball court and classrooms at the College of Physical Education and Sports Sciences, Ahlulbayt University.

**RESEARCH METHODOLOGY**

The researcher used the experimental method with an equivalent group design using pre- and post-tests, as it is suitable for the nature of the research problem. Figure (1) illustrates the experimental design of the research:



**Figure 1.** Illustrates the experimental design of the research

**RESEARCH POPULATION AND SAMPLE**

The research population consisted of second-year female students at the College of Physical Education and Sports Sciences, Ahlulbayt University, for the academic year 2025-2026, totaling (63) students. The research sample was selected from (60) students, representing 95.23% of the population, after excluding three students: one due to illness and the other two due to frequent absences. The sample was divided into several groups according to the research procedures, as shown in Table (1), as follows:

1. Pilot Study Sample: (10) students.
2. Positive Thinking Scale Development Sample: (60) students, including the pilot study sample.
3. Main Experiment Sample: Selected randomly, comprising (30) students.

**Table 1.** shows the number of individuals in the two research groups

Classes	Total number	Excluded students	Exploratory experiment sample	Members of the research sample	Sample scale preparation	Percentage
B	28	1	5	15	27	96.42%
C	35	2	5	15	33	94.28%
Total	63	3	10	30	60	95.23%

**RESEARCH METHODS, TOOLS, AND EQUIPMENT**

**1. Data Collection Methods**

- Arabic and foreign sources and the internet.
- Observation.
- Personal interviews.
- Questionnaires.
- Research skills test results form.
- Objective tests.
- Supporting team.

**2. Research Equipment**

- GVC video camera (Japanese made) with camera tripod.
- Casio handheld calculator (Japanese made).
- Lenovo laptop (1).
- DVDs.
- Metal measuring tape.
- Height and weight measuring device.
- 15 regulation footballs.
- 1 ball bearing for marking the field.
- 30 goalposts.
- Colored ropes for dividing the field.
- Whistle number (4).

**FIELD RESEARCH PROCEDURES**

**1. PROCEDURES FOR PREPARING THE POSITIVE THINKING SCALE<sup>3</sup>**

The researcher adopted the Raad Abdul-Amir Finjan (2012) scale for positive thinking, which he designed on a sample of heads of sub-sports federations. The scale consists of (28) items and was scored according to two answer choices, (A, B). Since the scale was designed for a sample different from the current research sample, and to make it suitable for the current research sample, the researcher undertook the following procedures:

1- Most of the scale items were modified to align with the nature and effectiveness of volleyball and the level of the research sample.

2- To ensure the validity and suitability of the items on the Positive Thinking Scale for female students at the College of Physical Education and Sports Sciences, Ahlulbayt University, the scale was presented to a group of (11) experts and specialists in general psychology, sports psychology, educational psychology, volleyball, and sports testing and measurement. The purpose of this review was to evaluate the scale's effectiveness in measuring positive thinking, the validity of its items, and the suitability of its answer choices.

After reviewing the scale items, the experts and specialists accepted all items after some modifications were made. The researcher used the chi-square ( $\chi^2$ ) test, and the significance level for all items was less than (0.05), as shown in Table (2).

**Table 2.** shows the opinions of the experts and specialists on the scale items and their chi-square ( $\chi^2$ ) values for their responses to the items

Paragraphs	Number of paragraphs	Agrees	Disagrees	Percentage	Calculated ( $\chi^2$ ) value	Level of significance	Significance
1 ,2 ,3 , 6 ,7 ,8 , 9 ,10 ,11 , 12 ,13 , 14 ,16 , 17 ,18 , 20 ,21 , 22 ,23 , 24 ,25 , 26 ,28	23	11	0	100%	11	0.00	Sig.
4 , 5 , 27	3	10	1	90.9%	7.36	0.007	Sig.
18 , 15	2	9	2	81.8%	4.45	0.035	Sig.

Based on the experts' responses and after completing the necessary steps, the items on the Positive Thinking Scale for female students at the College of Physical Education and Sports Sciences, Ahlulbayt University, remained at (28) items. These items were distributed across the scale as both positive and negative statements.

3- Linguistic Validity of the Items: After confirming the validity of the scale items, the researcher presented all items to an Arabic language specialist to ensure their accuracy and freedom from linguistic errors. Thus, the scale is free of linguistic errors.

4- Distribution of Items in the Scale: The researcher deliberately distributed the items in the scale to conceal its true purpose.

**2. PREPARING THE SCALE INSTRUCTIONS**

To ensure the scale is complete and suitable for application to female students at the College of Physical Education and Sports Sciences at Ahlulbayt University, the following scale instructions have been prepared:

- Do not include your name on the scale questionnaire. Mark the responses of the research sample students to distinguish them from the responses of the rest of the class.
- Answers must be honest and accurate.
- Do not leave any item unanswered.
- There is no right or wrong answer.
- Do not ask another student for help with the answers.
- There is a specific time limit for answering.
- Mark (✓) next to the option that best matches your choice and next to each item.
- The results are confidential and used for scientific research purposes.

**3. PILOT TEST OF THE SCALE**

After finalizing the scale instructions, the researcher conducted a pilot test on December 22, 2025, with a sample of (10) female students from the research population. These students were randomly selected and excluded from the main research

sample to investigate the following:<sup>4</sup>

1. To ensure the clarity of the instructions and scale items for the students.
2. To determine the time required to complete the scale items.
3. To identify the conditions under which the scale was administered and any associated difficulties.
4. To provide the researcher with practical training to personally observe the strengths and weaknesses encountered during the main test.

2-4-1-3 Administering the Scale to the Sample  
 The Positive Thinking Scale, consisting of (28) items, was administered to a sample of (60) female students from the second year of the College of Physical Education and Sports Sciences at Ahlulbayt University on December 25, 2025, in the college's classrooms. The primary purpose of the experiment was to statistically analyze the scale items to select valid ones and eliminate invalid ones.

**METHOD OF SCORING THE SCALE**

The answer choices (A and B) were assigned scores of (1) for positive items and (0) for negative items. The scores for the Positive Thinking Scale items for the female students of the College of Physical Education and Sports Sciences at Ahlulbayt University were determined by calculating the scores each student received for each of the (28) items. The total score was then calculated using the scoring key shown in Table (3), where the highest score achieved by the examinee was (28) and the lowest score was (0).

**Table 3.** shows the scores of the choices in the Positive Thinking Scale

Positive paragraphs	1
Negative paragraphs	0

The total score for the sample of students on each form of the scale was then calculated. The highest score was 25, and the lowest was 5, with a mean of 17.4, a standard deviation of 4.93, and a skewness coefficient of -0.463. Table 4 shows the frequency distribution of these scores, and Figure 13 illustrates the graphical representation of the frequency distributions for the sample of students who took the Positive Thinking Scale.

**Table 4.** Frequency Distribution of Students' Scores on the Positive Thinking Scale

Category	Repeating it
7-5	2
10-8	5
13-11	14
16-14	17
19-17	11
22-20	8
25-23	3
المجموع	60
Mean	17.14
Std	4.93
Std diff.	- 0.463

**4. STATISTICAL ANALYSIS OF SCALE ITEMS**

Statistical analysis aims to calculate the discriminatory power and internal consistency of the scale items. Discriminatory power refers to the ability to differentiate between individuals who score high and those who score low on the same scale, while internal consistency refers to the degree of homogeneity of the items in measuring the trait. In other words, item analysis means retaining the good items in the test.

To ensure the validity of the scale items and their ability to discriminate, the researcher used two methods:

**FIRST: THE TWO-GROUP APPROACH**

The researcher used the two-group approach to reveal the discriminatory power of the items on the Positive Thinking Scale. This method is considered suitable for differentiating items. The total scores obtained by the students after scoring the scale were ranked in descending order, and then (30%) of the highest and lowest scores were selected. Each of the two-group groups consisted of (18) students. To calculate the discrimination index for each of the 28 items in the scale, the independent samples t-test was used using the Statistical Package for the Social Sciences (SPSS). A statistically significant t-value was considered an indicator of item discrimination. Twenty-six items were accepted due to their discriminatory significance at a significance level of less than 0.05, while items 4 and 5 were rejected due to their weak

discriminatory power. The researcher used the Ebel criterion, as shown in Table 6, for this rejection. Table 5 shows the discrimination index for the items.

**Table 5.** Discrimination Index for Each Item in the Scale

Paragraph number	discrimination factor	Paragraph number	discrimination factor	Paragraph number	discrimination factor	Paragraph number	discrimination factor
1	0.388*	8	0.333*	15	0.333*	22	0.333*
2	0.611*	9	0.444*	16	0.444*	23	0.611*
3	0.444*	10	0.5*	17	0.777*	24	0.444*
4	0.166	11	0.555*	18	0.888*	25	0.333*
5	0.166	12	0.333*	19	0.333*	26	0.388*
6	0.333*	13	0.333*	20	0.388*	27	0.333*
7	0.333*	14	0.333*	21	0.333*	28	0.611*

\* Paragraph Feature

**Table 6.** shows the Abel criterion for comparing discriminatory power

Distinction guide	Evaluation of discrimination
0.40 and above	Very good paragraphs
0.30 – 0.39	Paragraphs that are acceptable but could be improved
0.20 – 0.29	Borderline paragraphs that need improvement
Less than 0.19	Weak paragraphs, to be deleted or improved

**SECOND: INTERNAL CONSISTENCY COEFFICIENT**

The researcher used Pearson's correlation coefficient to calculate the internal consistency coefficient between each item score and the total scale score using the Statistical Package for the Social Sciences (SPSS). The results showed that (23) items were accepted as having correlation coefficients with a significance level less than (0.05), while (3) items (7, 8, and 15) were excluded because their significance level was greater than (0.05). Table (7) illustrates this.

**Table 7.** shows the coefficients between the item score and the total scale score

Paragraph number	Correlation coefficient	Level of significance	Significance	Paragraph number	Correlation coefficient	Level of significance	Indication
1	0.366	0.004	Sig.	15	0.192	0.142	Non sig.
2	0.579	0.000	Sig.	16	0.430	0.001	Sig.
3	0.471	0.000	Sig.	17	0.648	0.000	Sig.
4	into discrimination			18	0.660	0.000	Sig.
5	into discrimination			19	0.284	0.028	Sig.
6	0.375	0.003	Sig.	20	0.269	0.037	Sig.
7	0.205	0.116	Non sig.	21	0.325	0.011	Sig.
8	0.205	0.116	Non sig.	22	0.356	0.005	Sig.
9	0.384	0.002	Sig.	23	0.548	0.000	Sig.
10	0.392	0.002	Sig.	24	0.490	0.000	Sig.
11	0.461	0.000	Sig.	25	0.569	0.000	Sig.
12	0.286	0.026	Sig.	26	0.527	0.000	Sig.
13	0.299	0.021	Sig.	27	3.92	0.002	Sig.
14	0.298	0.021	Sig.	28	0.414	0.001	Sig.

**5. THE SCIENTIFIC FOUNDATIONS OF THE POSITIVE THINKING SCALE<sup>5</sup>**

Measurement literature indicates that there are several scientific foundations that can be used as indicators of the accuracy of psychological scales. Psychometricians and specialists almost unanimously agree that validity and reliability are among the most important scientific foundations of psychological scales.

**FIRST: SCALE VALIDITY**

Validity is a crucial characteristic that must be considered when constructing psychological scales. A valid scale is one that fulfills its intended function. This scale demonstrates two types of validity:

## 1. CONTENT VALIDITY

This type of validity aims to determine the extent to which the test or scale represents aspects of the trait or characteristic being measured, and whether the test or scale measures a specific aspect of the phenomenon or the whole of it. In other words, it assesses the degree to which its content corresponds to what it seeks to measure. The opinions of experts in the field the test attempts to measure are used in determining this content.

This type of validity was confirmed when the scale was presented to a group of experts and specialists in the field of sports psychology, measurement, and evaluation to validate the suitability of its items in measuring positive thinking among students. The experts unanimously agreed on the validity of all the items.

## 2. CONSTRUCT VALIDITY

This was verified first using the two control groups and secondly using the internal consistency coefficient. Items with high discriminatory power and high consistency were retained.

## SECOND: SCALE RELIABILITY

Reliability is a fundamental concept in measurement and must be present in a scale for it to be valid for use. To verify the reliability of the positive thinking scale, the researcher used two methods:

### 1. SPLIT-HALF METHOD

This method relies on dividing the test whose reliability is to be determined into two equivalent parts after administering it to one group. There are several methods for splitting the test; the first half may be used against the second half, or questions with odd numbers may be used against questions with even numbers.

In this scale, the researcher used data from the primary sample of (60) female students. The (23) items of the scale were divided into two sections: odd-numbered items and even-numbered items. After excluding the median score because the number of items was odd, the homogeneity of the scores of the two halves was verified by calculating their F-values. The calculated F-value was (1.36). When compared to the tabulated F-value at two degrees of freedom (59, 59) and a significance level of (0.05) of (1.53), it was found to be non-statistically significant as it was less than the tabulated value. Thus, the homogeneity of the scores of the two halves of the scale was verified. The correlation coefficient between the sum of the scores of the two halves was then calculated using Pearson's method with the Statistical Package for the Social Sciences (SPSS).

The correlation coefficient was (0.80). Since this correlation coefficient represents the reliability of only half the test, the Spearman-Brown formula was applied to obtain the overall reliability of the test. This resulted in a reliability coefficient of (0.88), indicating high reliability.

### 2. INTERNAL CONSISTENCY METHOD (KUDER AND RICHARDSON)

To determine reliability using this method, the researcher used data from a sample of (60) students. The Statistical Package for the Social Sciences (SPSS) was used, yielding a reliability coefficient of (0.86) for the Positive Thinking Scale. This value provides a high indicator of the scale's reliability, demonstrating its trustworthiness.

## PILOT STUDY

The pilot study was conducted on December 22, 2025, with a sample of (10) female students. The researcher and her team supervised the administration of the three skills tests. The objectives of the pilot study were:

1. To identify the difficulties and obstacles encountered in administering the tests and to develop solutions.
2. To determine the time required to administer the tests.
3. To assess the capabilities of the support team in terms of competence and number.
4. To evaluate the efficiency and suitability of the equipment and tools used in the tests.
5. To assess the students' responsiveness and interaction with the tests and their suitability for them.

The tests were found to be suitable for the sample, and no difficulties or obstacles were encountered during their administration. It should be noted that on the same day, a pilot study of the Positive Thinking Scale was also conducted with a sample of (10) female students.

## SCIENTIFIC FOUNDATIONS OF THE TESTS

To ensure accurate measurement, the researcher verified the scientific foundations of the tests before commencing the main experiment. Therefore, the researcher established the scientific foundations (validity, reliability, and objectivity) of the tests to ensure their validity and application to the research sample.

### 1. VALIDITY

The validity of the tests was verified using content validity by presenting them to a group of experts and specialists, and by employing the chi-square ( $\chi^2$ ) test. All tests were found to be valid.

### 2. TEST RELIABILITY

The researcher used the test-retest method to determine the reliability coefficient of the tests. This involved administering the test and then re-administering it to the same pilot study sample on two days with similar conditions as much as possible,

and to the same individuals. The tests were administered by taking the results of expert evaluations of (8) female students in the pilot study on December 22, 2025, and then re-evaluating the same students four days later on December 26, 2025. By calculating the simple correlation coefficient (Pearson's correlation coefficient) between the results, it was found that the three tests were reliable.

### 3. OBJECTIVITY OF THE TESTS

Objectivity means "freedom from bias and prejudice, and not introducing personal factors into the researcher's judgments." Therefore, the researcher relied on the evaluation results of two specialists and calculated the simple correlation coefficient between their evaluations, which showed that the tests possessed a high degree of objectivity.

### THE EDUCATIONAL PROGRAM

Based on the researcher's review of scientific sources and her experience in volleyball, the educational program was designed. This program incorporated the guided discovery approach.

These educational programs were presented to a group of experts and specialists in volleyball and teaching methodologies to obtain their feedback on the suitability of the program's components and to suggest modifications as needed. After incorporating all the experts' feedback, the programs were implemented with the research sample on December 26, 2025, at the volleyball court in the College of Physical Education and Sports Sciences at Ahlulbayt University.

### THE TIMELINE FOR THE GUIDED DISCOVERY APPROACH

The educational program consists of (16) learning units over (8) weeks, with two learning units per week. Each learning unit is (90) minutes long, distributed across three sections (preparatory, main, and final) as follows:

- Preparatory Section: (20) minutes
- Main Section: (65) minutes (25) minutes for the educational activity and (40) minutes for the practical activity.
- Concluding Section (5 minutes)

### POST-TESTS

Post-tests for the three skills and for positive thinking were conducted after the completion of the curriculum on Sunday, February 20, 2026. The researcher ensured that the conditions were similar to the pre-tests in terms of location, time, support team, and the same instructor who administered the pre-tests, with the researcher present. The results were then statistically analyzed to determine whether the research objectives were met.

The researcher recorded the post-tests with a video camera, transferred them to CDs, and presented them to volleyball experts. These experts reviewed the tests and evaluated the students' skills and the results of their questionnaires using designated forms.

### STATISTICAL METHODS

The researcher used the Statistical Package for the Social Sciences (SPSS).

### RESULTS AND DISCUSSIONS

#### PRESENTING, ANALYZING, AND DISCUSSING THE RESULTS OF THE DIFFERENCES BETWEEN THE PRE-TEST AND POST-TEST OF POSITIVE THINKING FOR THE FIRST AND SECOND EXPERIMENTAL GROUPS.

To determine the significance of the differences between the pre-test and post-test of positive thinking for the students in the two experimental groups, the researcher used a t-test for matched samples. The results are shown in Table (8).

**Table 8.** Shows the means, standard deviations, calculated t-value, and significance of the difference between the pre-test and post-test of positive thinking for the two experimental groups

S	skill	Pre-test		Post-test		Calculate d value of (t)	Level of significance	Indication
		Mean	Std	Mean	Std			
1	Group 1: Guided Discovery	18.06	3.08	20.40	1.99	3.74	0.002	Sig.

Table (8) shows that there are statistically significant differences between the pre-test and post-test scores of the two experimental groups in positive thinking. The calculated t-value (3.74) for the first group was at a significance level of (0.002), which is less than the significance level of (0.05), thus confirming the significance of the differences in favor of the post-test. This indicates the effectiveness of using the educational method in developing positive thinking and how the students use it in their learning and performance in their academic and professional lives.<sup>6</sup> This suggests that during the program's implementation period for the first experimental group, attention was given to the issue of positive thinking, as the student is exposed to many practices and situations, whether through learning a new skill, practicing it, or participating in competitions. All of this results in different perceptions about themselves.<sup>7</sup> The researcher also observed that the effectiveness of the method applied to the research group, including the behavioral patterns within each lesson, along with the provision of specific instructions and guidelines for each element, led to an improvement in learning time for each group in the main part of the lesson.<sup>8</sup> This section focused on skills learning, encompassing educational activities that

explained and demonstrated the skill, followed by questions related to each skill to prepare students to respond practically in the applied activity. The aim was to increase the frequency of correct performance to achieve mastery, correct errors, and provide self- or teacher-provided feedback. All of this contributed to developing positive thinking among the students.

**PRESENTING, ANALYZING, AND DISCUSSING THE DIFFERENCES IN THE POST-TEST SCORES BETWEEN THE TWO EXPERIMENTAL GROUPS REGARDING POSITIVE THINKING.**

To determine the significance of the differences in the post-test scores between the two experimental groups regarding positive thinking, the researcher used an independent samples t-test. The results are shown in Table (9).

**Table 9.** shows the means, standard deviations, calculated t-value, and significance of the difference for the post-test between the two experimental groups for positive thinking

variable	Guided Discovery Group		Semi-directional detection group		Calculated value of (t)	Level of significance	Indication
	Mean	Std	Mean	Std			
Positive thinking	20.40	1.99	20.73	2.49	0.40	0.68	Non sig.

Table (9) shows no statistically significant differences between the two experimental groups in the post-tests of positive thinking. The calculated t-value was (0.40) at a significance level of (0.68), which is greater than the significance level of (0.05). This confirms the randomness of the differences between the two groups. This result contradicts the second hypothesis, which indicated that the guided discovery method is more effective in developing positive thinking among female students.

**CONCLUSIONS**

Based on the research results, statistical data analysis, and the application of the two educational methods used in the research, the researcher reached the following conclusions:

1. The guided discovery method had an effect on developing positive thinking among volleyball students.
2. The guided discovery method had an effect on the students' learning of volleyball skills.
3. The guided discovery method had the same effect on developing positive thinking among volleyball students.
4. The guided discovery method has the same effect on learning volleyball skills.

**RECOMMENDATIONS**

In light of the conclusions reached through the research, the researcher recommends the following:

1. Focusing on using the guided discovery method to develop students' positive thinking in volleyball lessons.
2. Emphasizing the use of the guided discovery method in teaching basic volleyball skills to female students.
3. The necessity of conducting further studies that utilize different modern teaching methods to teach and develop volleyball skills to female students.
4. Conducting similar studies on other sports to determine the extent of the benefit of using this method in developing basic skills in those sports.

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