

The Effect of the Small Group Method on Developing the Ability of Visual Perception and Teaching the Skill of Typing to Female Students

Hiba Ali Shamkhi

hibaaa346@utq.edu.iq

ABSTRACT

The importance of the research through the researcher's attempt to organize the content of the lesson in a way that makes the students positive participants in the lesson by following the method of small groups in organizing the lesson and knowing their role in organizing the work, as well as the extent of their contribution to the development of visual perception and teaching the skill of drumming in basketball to female students, and **the problem of the research** through the researcher's experience and her knowledge and observation of most of the lessons offered to the student in general follows a general context in teaching offensive skills, most of which tend to follow the method based on The immediate and direct relationship between the motivation given by the teacher and the response made by the student, where the teacher is responsible for the stages of the lesson, which may generate monotony in teaching skills among students, sometimes reaching a state of boredom, so we observe that some students fail to perform some offensive skills, specifically basketball drumming, so the researcher decided to study this real problem and identify solutions that may be appropriate through the use of the small groups method in developing Visual Perception and Teaching the Skill of Drumming among the Students of the Faculty of Physical Education and Sport Sciences The **objectives of the research are** to identify the effect of the small groups method on the development of visual perception and teaching the skill of drumming in basketball to female students, and to identify the significance of the differences between the control and experimental groups in the development of some of the development of visual perception and teaching the skill of drumming in basketball to female students. The researcher used the **experimental** method with equal groups (control – experimental) to suit the nature of the research problem, and the researcher identified the **research community**, represented by the students of the first stage at the Faculty of Physical Education and Sport Sciences, Dhi Qar University for the academic year 2024-2025, which are (28) (20) students representing the main experiment sample and (8) female students representing **the sample of** the exploratory experiment were selected, and the researcher divided the sample into (control and experimental group) with (10) female students for each group, and the researcher followed the random method and the method of lottery in the division procedures, the experimental group takes its educational units according to the method of small groups, and the researcher worked to divide the members of the experimental group into three groups, each group includes (5) female students. As for the control group, they will take their educational units according to the method followed by the subject teacher, and one of the most important **conclusions** is that the exercises prepared by the researcher and the experimental group as well as the exercises prepared by the teacher for the control group had a positive role in developing the level of skill performance for both groups.

1. Introducing the research

1-1 Introduction and Importance of the Research:

The progressive intellectual civilizational renaissance that the world is witnessing was not the result of chance, but came according to a time sequence that extended for many decades, during which all the possibilities, experiences and expertise reached by humanity through scientific gains and knowledge, as the world witnessed a progressive industrial revolution that moved it from primitive eras called darkness to the era of progress and prosperity and in various fields and fields, including the sports field. The results of these great achievements were through the physical education lesson and the extent of its actual contribution to the education and acquisition of motor skills through the preparation, preparation and proper organization of the lesson and the use of effective methods and methods appropriate to the level and capabilities of students.

There are many methods in which the learner is a positive and active participant in the lesson, which facilitated the process of better understanding and understanding the content of the lesson and achieved the principle of saving effort and time spent by the teacher in the lesson, and perhaps one of these modern methods that creates a positive atmosphere and stimulates the motivation of learners towards learning is the small groups method based on The principle of teamwork and a clear educational style works to consolidate the basic personality qualities of the student, consolidates the relationship between the teacher and the student, and develops the spirit of creativity and quick realization by the student.

The physical education lesson for teaching the game of basketball needs the student to have a great role and a positive participant in acquiring the skills of this distinctive game, which enjoys high popularity and a lot of interest in it, as it is a team game in which the capabilities of the skilled player are highlighted through the harmony of the parts of the skill and a performance that reflects a high fluidity and a dazzling aesthetic that attracts the attention of the audience and followers, and because most of its skills, whether defensive or offensive, need a high and great compatibility between the gaze and the movement Paying attention to the abilities of visual vision, and one of these abilities (visual visualization) is a basic requirement in achieving this compatibility to reflect high effectiveness in the performance of these skills, and the learner's enjoyment of sound and high visual vision leads to achieving distinguished performance and thus reaching the achievement of the desired goals that both the teacher and the learner aspire to.

Hence, the importance of the research came through the researcher's attempt to organize the content of the lesson in a way that makes the students positive participants in the lesson by following the method of small groups in organizing the lesson and knowing their role in organizing the work, as well as the extent of their contribution to the development of visual perception and teaching the skill of drumming in basketball to female students.

1-2 Research Problem:

Through the researcher's experience, knowledge and observation of most of the lessons that are presented to the student in general, following a general context in teaching offensive skills, most of them tend to follow the method based on the immediate and direct relationship between the motivation given by the teacher and the response made by the student, where the teacher is responsible for the stages of the lesson, which may generate monotony in teaching skills to students, sometimes reaching a state of boredom, so we observe that some students fail to perform some offensive skills and Specifically basketball tape.

Therefore, the researcher decided to study this real problem and identify the solutions that may be appropriate through the use of the small group method in developing visual perception and teaching the skill of drumming among the students of the Faculty of Physical Education and Sport Sciences.

1-3 Research Objectives :

- 1- Identifying the Effect of the Small Group Method on the Development of Visual Perception and Teaching the Skill of Basketball Drumming to Female Students.
- 2- Identifying the significance of the differences between the control and experimental groups in developing some of the visual perception development and teaching the skill of basketball drumming to female students.

1-4 Research Hypotheses:

- 3- There are statistically significant differences between the pre- and post-selection of the control and experimental groups in the development of visual perception and teaching the skill of basketball to female students and in favor of post-tests.
- 4- There are statistically significant differences between the control and experimental groups in the post-tests in the development of visual perception and teaching the skill of basketball to female students, in favor of the post-tests and in favor of the experimental group.

1-5 Research Areas:

1-5-1 Human Field: First Stage Female Students / Faculty of Physical Education and Sport Sciences / Dhi Qar University for the academic year 2024-2025.

1 5-2 Temporal Domain: 25/9/2024 to 10/3/2025

1.5.3 Spatial Field: The closed sports hall at the Faculty of Physical Education and Sport Sciences, Dhi Qar University.

2. Research methodology and field procedures:

2-1 Research Methodology:

The researcher used the experimental method with equal groups (control-experimental) to suit the nature of the research problem.

2.2 Research Population and Sample:

The researcher identified the research community, represented by the students of the first stage at the Faculty of Physical Education and Sport Sciences, Dhi Qar University, for the academic year 2024-2025, which are (28) female students, and (20) students representing the main experiment sample and (8) female students representing the sample of the exploratory experiment were selected, and the researcher divided the sample into (control and experimental group) and The researcher followed the random method and the method of lottery in the division procedures, the experimental group took its educational units according to the method of small groups, and the researcher worked to divide the members of the experimental group into three groups, each group includes (5) female students, while the control group will take its educational units according to the method followed by the subject teacher.

2.2.1 Sample homogeneity:

In order to prevent the effects that can hinder the progress of the research, there must be homogeneity between the members of the sample, i.e. there are no individual differences between the two individuals, as the researcher used the coefficient of difference to find the homogeneity in the variables represented by (height, age, weight), as shown in Table (2).

Table (2)

Shows the homogeneity of the research sample in the research variables

Sample size	Divergence coefficient	Standard deviation	Arithmetic mean Going to	Unit of Measurement	Statistical Treatments Variables	t
10	3.42	0.73	21.34	year	Chronological age	1
	1.32	2.14	161.96	poison	Length	2
	11.24	6.77	60.23	kg	Weight	3

*All values of the coefficient of difference are less than (30), which indicates the homogeneity of the sample members.

2.2.2 Equivalence of the research sample:

In order to achieve a single starting line and ensure that there is no difference between the two research groups, the researcher performed the equivalence using the law of (t) for independent samples in the research variables represented by (visual perception and drumming skill) and Table (3) shows this.

Table (3)
Shows the parity of the sample members in the research variables

Significance	T Value*		Control Group		Experimental Group		Unit of Measurement	Processors Statistics Variables	t
	sig	Calculated	on	Going to	on	Going to			
Insignificant	0.65	0.4	1.187	4.13	1.42	4.17	degree	Visual Visualization	1
Insignificant	0.64	1.7	1.68	12.89	1.44	12.03	Tha	Patting skill	2

* D at a significance level of ≤ 0.05 and a degree of freedom of 28.

2.4 Means and tools used

2.4.1 Means of Information Collection:

1. Arab and foreign sources.
2. Expert opinion poll form to determine the skills as well as the appropriate tests for the research sample.

2.4.2 Tools and devices used in research

"Research tools are what help the researcher in collecting his data and solving his problem in order to achieve the research goals, regardless of the tools such as data, samples, and devices." (Wajih Mahjoub, 1993, p. 179)

Therefore, the researcher used a set of tools and devices, which are as follows:

1. 6 homemade wooden signs.
2. Basket balls (15) of the type (Mekasa) of Chinese origin.
3. Personal interviews.
4. Leather tape for measuring length.
5. ACS-23 type medical scale of Chinese origin.
6. 2 Casio electronic stopwatches of Japanese origin.
7. Basketball court legal.
8. Crayons
9. Non-stretch rope.
10. Whistle number (2) of Chinese origin.
11. Screws.
12. Notification.
13. Tests and measurement.
14. Legal basketball goals.
15. Adhesive tape with a length of (1.50) m.

2.5 Tests used in the research:

First: Visual Perception Test (Ali Hussein Hashem, 2012 , p. 57)

Purpose of the test: Measurement of visual perception.

Testing Tools: Four cards of 15×20 cm with four shapes drawn on them that are placed at the level of the student's gaze on the wall.

Method of Performance: The student looks at the four figures and asks him to answer the following questions:

If you were looking at the figure from behind, what would it look like to you?

If you flipped the shape down, what would it look like?

If you were looking at this figure from behind and it was flipped down, what would it look like?

Calculation of Scores: A card with (4) possible answers is given to the lab and the three questions are asked for each of the four shapes and the number of correct times is calculated out of a total of 12 questions

Second: The high start time of the high fast tapestry for a distance of (20 m) for the dominant arm.(Faris Sami Yousef, 2001, p. 101)

- **Purpose of the test:** Measure high tapping speed.
- **Tools used.** A basketball court, an electronic stopwatch, a legal basketball (2), a measuring tape, chalk, and a whistle to give the start signal.
- **Performance Description:**
 - ✓ The student takes the standby position from the high start behind the starting line (A) drawn on the ground with the ball.
 - ✓ Give the start signal to the student who runs with the high thump with the dominant arm as fast as possible until he crosses the finish line (B).
- **Test Instructions:**
 - ✓ The student took the correct position (high start standby position) and with it the ball.
 - ✓ The exam ends when the student crosses the finish line (B) as quickly as possible.
 - ✓ Each student has only one attempt.
 - ✓ The number that the student scores is announced to the next player to ensure the competition factor.
- **Test Management:**

- ✓ Registrar: He calls out the names and gives the start signal first and records the results second.
- ✓ Timer: It times as well as stands at the finish line (B).

- **Calculating Grades:**

A score for each player is the time it takes to perform the test from the moment they give the start signal and at line (A) until they cross the finish line (B).

- **Time:**

The duration of the test explanation was (3) minutes and within the limits of the sample of the exploratory experiment.

2.6 Exploratory experiment

The researcher conducted an exploratory experiment on Sunday 6/10/2024 at ten o'clock in the morning on (8) female students from outside the sample in the closed games hall at Dhi Qar University, Faculty of Physical Education and Sport Sciences, where the exploratory experiment is used to avoid the shortcomings while determining the place, time and duration of the experiment (Wajih Mahjoub, 1993, p. 34) and the aim of conducting the exploratory experiment was:

- 1- Prepare and guide the assistant team according to the research objectives.
- 2- Configure the necessary devices and tools.
- 3- Finding the scientific basis for the test.
- 4- Recognize the time needed for the test.

2-7 Scientific Foundations of the Test:

1- Test Validity:

The researcher presented the tests to the experts and specialists in the field of basketball, testing and measurement through personal interviews and their agreement about the validity of the tests as shown in Table (2).

Table (2) shows the percentage of the validity of the research tests

Percentage	Number of Consensus Opinions	Number of Experts	Exam Name	t
100%	13	13	Visualization Test	1
100%	13	13	Drum Test	2

2- Test Stability:

The researcher used the test and retest method to calculate the stability coefficient with a time interval between the first and second test (7) days. By extracting the stability coefficient by means of the correlation coefficient (Pearson) between the results of the first test and the results of the second test, and extracting the significance of the correlation, the researcher concluded that the tests of theEnjoy high morale because the value of $(sig) \geq (0.05)$

3- Objectivity:

The researcher found the objectivity coefficient of the tests under research by finding the simple correlation coefficient (Pearson) between the results of the two referees in the first application conducted during the exploratory experiment, and the correlation coefficients were high, which indicates the objectivity of the tests used in the research, and Table (3) shows this.

Table (3) Builds the stability coefficient for the research tests

sig	Objectivity Factor	Sig	Stability Coefficient	audition	t
0.000	0.90	0.000	0.84	Visualization Test	1
0.000	0.93	0.000	0.88	Drum Test	2

The correlation coefficient is significant at the significance level of > (0.05)

2-8 Field Research Procedures:

2.8.1 Pre-tests for the research sample:

The researcher conducted tests and pre-measurement before starting the implementation of the exercises in the small groups method on Wednesday 16/10/2024 at ten in the morning, and all the members of the research sample (20) students attended and the results were extracted.

2.8.2 Educational Modules in the Small Group Method :

The educational units were applied to the main experiment sample by the subject teacher for both groups, and the work of the control and experimental groups was as follows:

Control group: The control group applied the educational modules for learning the skill of drumming prepared by the subject teacher for a period of (4) weeks starting from Sunday 20/10/2024 until Sunday 17/11/2024, as the educational curriculum included (4 educational units) with one educational unit per week, and the members of this group received their educational units according to the lecture schedule in On Sunday, the time of the educational unit reached 90 minutes, divided into three sections, namely (the preparatory section, the main section, and the final section).

Experimental group: The experimental group applied the educational modules prepared by the researcher according to the method of small groups to develop visual perception and teach the skill of drumming, as the members of this group were divided into three small groups of (5) female students for each group who work together in order to acquire the skill of drumming. The duration of the educational unit reached 90 minutes divided into three sections (Preparatory Section, Main Section, and Final Section).

If the time allocated to each of the three sections and for both the control and experimental groups is as follows:

- 1- Preparatory section 20 minutes.
- 2- Main section 60 minutes.

3- The final section is 10 minutes.
The total time of the educational curriculum was 540 minutes.

2.8.3 Post-tests for the research sample:

The post-test of the research sample was conducted on Tuesday 19/11/2024 after the completion of the educational curriculum application period. The researcher was keen to provide the conditions of the pre-test and its procedures for the research tests.

2.9 Statistical Methods:

- Arithmetic mean.
- Standard deviation.
- Divergence coefficient.
- Pearson correlation coefficient .
- T)) test for threaded samples.
- T)) test for independent samples.
- Favorable Percentage.

3. Present, analyze and discuss the results:

3-1 Presentation and analysis of the results of the pre- and post-tests of the control group:

Table (4) shows the values of the arithmetic medians, standard deviations, and the value of (T) calculated for the tests

Conclu sion	Sig	T calcul ated	(Next)		(Qibla)		Unit of Meas urem ent	Indicators and accuracy
			on	Going to	on	Going to		
Moral	0.012	3.871	1.06	4.90	1.187	4.13	degre e	Visualization Test
Moral	0.004	6.23	1.39	11.46	1.68	12.89	Tha	Drum Test

* Significant at the significance level of $\geq (0.05)$

Table (4) shows the arithmetic media, standard deviations and the value of (t) calculated between the results of the pre- and post-tests, as the results presented in the table showed that the value of the significance level in all values was (0.000), which is less than the value of the significance level (0.05), which indicates that there are significant differences between the pre- and post-tests of the sample.

3-2 Presentation and analysis of the results of the pre- and post-tests of the experimental group:

Table (5) shows the values of arithmetic medians, standard deviations, and the value of (T) calculated for the tests.

	Sig		(Next)	(Qibla)		Indicators and accuracy
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Conclu sion		T calcul ated	on	Going to	on	Going to	Unit of Meas urem ent	
Moral	0.000	17.98	1.62	7.01	1.42	4.17	degre e	Visualization Test
Moral	0.000	11.34	1.91	10.51	1.44	12.03	Tha	Drum Test

* Significant at the significance level of $\geq (0.05)$

Table (5) shows the arithmetic media, standard deviations and the value of (t) calculated between the results of the pre- and post-tests, as the results presented in the table showed that the value of the significance level in all values was (0.000), which is less than the value of the significance level (0.05), which indicates that there are significant differences between the pre- and post-tests of the sample.

3-3 Presentation and analysis of the results of the post-tests for the control and experimental groups:

Table (6) shows the values of arithmetic medians, standard deviations, and the value of (T) calculated for the tests.

Conclu sion	Sig	T calcul ated	(Experimental)		(Control)		Unit of Meas urem ent	Indicators and accuracy
			on	Going to	on	Going to		
Moral	0.000	7.18	1.62	7.01	1.06	4.90	degre e	Visualization Test
Moral	0.000	5.01	1.91	10.51	1.39	11.46	Tha	Drum Test

* Significant at the significance level of $\geq (0.05)$

Table (6) shows the arithmetic medians, standard deviations and the value of (t) calculated between the results of the post-tests of the control and experimental groups, as the results presented in the table showed that the value of the significance level in all values was (0.000), which is less than the value of the significance level (0.05), which indicates that there are significant differences between the pre- and post-tests of the sample.

3-4 Discussion of the Results:

The researcher's findings are logical results due to the fact that the educational variable that was introduced to the development of the experimental group's education in the method of small groups in basketball, which includes several exercises, which led to a moral effect between the pre- and post-tests, which means the improvement and development of the skill of drumming in basketball.

Through the results presented in Tables (5 and 6) of the results of the pre- and post-tests for the control and experimental groups and for the test of visual visualization and typing skill, it was found that there are significant differences between the pre- and post-tests and in favor of the post-tests according to what was stated in the first hypothesis of the research, and the researcher attributes this difference to several reasons, the most important of which are:

- The integrity of the educational curriculum of both groups (experimental and control), specifically the main section, and their inclusion of scientifically selected exercises with correct and consistent repetitions and consistent with the level and ability of the sample members and based on the correct practice. Therefore, practice is the most important variable in the learning process for complex and even simple skills. (Qasim Lazam Sabr, 2005, p. 56)

- In addition to the above, the two approaches included selected exercises that are in line with the age and capabilities of the students, as the experimental group applied the curriculum prepared by the researcher according to the method of small groups, while the control group applied the curriculum prepared by the subject teacher, and that both groups achieved a remarkable development in the formal perception of the skill performance of the drumming skill. The reason for this is that all the decisions of the lesson are issued by the teacher and the students must obey these decisions without discussion, which may lead to the teacher's lack of knowledge of the students' abilities and where to start working with them, and not taking into account the individual differences between them, and thus the lack of cooperation and enthusiasm among the students when performing motor skills, on the contrary, the experimental group. In addition, the method applied by the students of this group, which is represented by the method of small groups, which expresses an educational plan in which work is done in small groups of homogeneous achievement, in which the principle of teamwork is carried out in a clear manner, which leads to the consolidation of the basic personality traits of the female students. It consolidates the correct relationship between the teacher on the one hand and the students on the other hand, in addition to this, this method develops their spirit of creativity and the quick perception by the students of the information presented to the lesson, and the researcher believes that the method of small groups works to form small groups of female students that work within the group in the spirit of cooperation between its members to perform the motor duty, as all the available possibilities that can be used contribute greatly to the development of the performance of the students. Motor skills, mastery and stabilization. (Fadilat Hussain Yusuf, 1984, p. 148)

- Also, feedback played a great role in strengthening motor responses and was a helpful and powerful factor in learning the skill of drumming, through which the students were told about their performance, whether it was true or false, and through feedback, the students were helped to correct the wrong performances and repeat the correct performances only, as the information received by the performer related to the actual performance (the technique used) helped in evaluating the performance. This feedback on performance is largely related to the external feedback that the coach or

teacher makes in providing the performer with the mistakes made in the technique (Talha Hossam Al-Din et al. 1998, p. 88).

4- Conclusions and recommendations

4.1 Conclusions

- 1- The exercises prepared by the researcher and the experimental group as well as the exercises prepared by the teacher for the control group had a positive role in developing the level of skill performance for both groups.
- 2- The organization of work through the application of the small group method effectively contributed to the improvement of the skill level of basketball drumming skills of the members of the experimental group.
- 3- The smoothness and ease of application of the exercises set by the researcher, in addition to the programmed repetitions within the limits of their implementation, contributed to the development of the level of skill performance clearly and significantly for the members of the experimental group.

4-2 Recommendations:

- 1- Adopting the exercises developed by the researcher using the small groups method because of its large and effective role in developing the level of skill performance of the basketball drumming skill.
- 2- The trainer or teacher in the field of physical education must work on developing the level of skill performance of the drumming skill by organizing the work according to the method of small groups because of its great role in highlighting the talents of students.
- 3- The need to ensure the use of appropriate means, especially visual aids, because of their positive role in organizing work and identifying areas of defects when performing the skill of drumming.
- 4- Conducting similar studies and research on different age groups and for both genders in the game of basketball.

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