

The Effect of Using Flexible Grouping Strategy in Accordance with the Kinesthetic Training in Learning Some Football Skills

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Abstract: The research includes the definition, introduction and importance of research which is that a teacher who is fluent in the use of different strategies and methods during teaching is the one who makes the lesson characterized by flexibility and vitality, produced by his own style and reflected on the learners making them interact with the lesson through good performance of the exercise and the output of learning unit in line with the learners level and abilities which in turn gives an advantage in learning those sport skills. Football, which is one of the team games characterized by high attention to the teammate, opponent and ball, needs, to some extent, high degrees of kinetic, skill and physical abilities, and the contact with the opponent team, thus it requires composite exercises, especially in terms of sense and perception of distance and time. Thus, the importance of research is evident in that the teacher uses the strategy of flexible grouping in teaching and the introduction of kinesthetic exercises that develop the learner's abilities of football and affect skills stimulation and learning.

The problem of the research lies in the fact that the researchers, through their work as teachers and their field trips to schools during the periods of application, have found that physical education teachers lack the change and the identification of the new teaching methods strategies and means, as well as the weakness in students towards motor perception and sense and the way of learning them, which motivated the researchers to stand on this real problem, study and provide a solution to it, which is through the use of flexible grouping strategy in accordance with the kinesthetic exercises in learning some skills in football.

The objectives of the research included:

- Developing learning modules using the flexible grouping strategy according to kinesthetic training to learn some skills in football.
- Identifying the impact of using the flexible grouping strategy in accordance with the kinesthetic exercises in learning some football skills.

The research used an experimental method, and its sample consisted of 60 high school students of the fifth literary class. It also included the tests used in the research, pilot study, pre-tests, the application of learning modules on the research sample and the post-tests. As well as the presentation, analysis and discussion of the pre- and post-results between the experimental and control groups and skills post-tests between the two groups.

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The findings reached by the researchers:

- The results showed the superiority of the experimental group that used flexible grouping strategy in teaching in accordance with the kinesthetic training in learning some skills of football on the control group.
 - The proposed learning modules, including teaching in flexible grouping strategy and kinesthetic training affected positively as being aid exercises in acquiring motor harmony perception in football.
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I. INTRODUCTION AND IMPORTANCE OF RESEARCH

The progress made in the various sciences and specializations witnessed by the world is unprecedented, and the organization and educational outputs have become unable to keep pace with this tremendous progress, hence, the change in planning, implementation and evaluation in educational outputs have become a must.

Despite the research, confirmations, psychological and modern education literatures and their necessary reflections on the activation of teaching methods in a way that stimulates and develops the learner's role and makes him supportive and effective in the educational process, they still experience some useless accumulations that harm the learner and are limited to the fact that the learner receives knowledge from listening and indoctrination in various sciences, including physical education and sport sciences.

A teacher who is fluent in using different strategies and methods during the teaching process makes the lesson flexible and vital as he produces it by his own style that is reflected on the learners and makes them interact with the lesson through the good performance of exercises, and thus the output of the learning module will commensurate with the level and abilities of learners, which in turn gives an advantage in learning those sport skills.

Therefore, the teacher must work on organizing the process of teaching and takes into account the individual differences between learners and prepare them the right way in the physical, skill, psychological and mental aspects in order to reach the best responses by learners. Therefore, the kinesthetic perception in various sports events emerges, including football where it appears in most the moves of harmony through sensing the moves and being ware of the sections of the movement and the development of these exercises that helps to stimulate them.

Football, which is one of the team games characterized by high attention to the teammate, opponent, and ball, needs, to some extent, high degrees of kinetic, skill and physical abilities, and the contact with the opponent team, thus it requires composite exercises, especially in terms of sense and perception of distance and time.

Thus, the importance of research is evident in that the teacher uses the strategy of flexible grouping in teaching and the introduction of kinesthetic exercises that develop the learner's abilities of football and affect skills stimulation and learning.

II. SEARCH PROBLEM

Football is one of the sports that require a set of motor and physical abilities in order to bring out the skill side remarkably and distinctly, it requires mastering the skills and motor capability that derive from cognitive and sensory abilities, including kinetic compatibility which is one of the most important pillars of the moves recognized by the teacher to output the lesson correctly. Despite the multiplicity of strategies, means and teaching methods in the educational process, the teaching is still limited to the use of conventional strategies and methods of teaching, especially in physical education materials that are characterized by practicality. Strategies are featured with the obvious control of the teacher without intervention or giving relative freedom to the student, this reflects negatively and largely on the students, as well as the lack of competence atmosphere among students which was noticed by the researchers through their work as teachers and field trips to schools during the periods of application, that the teachers

who teach physical education lack the change and being informed of the modern teaching means, strategies and methods. In addition to the poor perception and sense of movement aspect in students which prompted researchers to identify this real problem, study it and provide a solution through the use of flexible grouping strategy according to the kinesthetic cognition in learning some of football skills.

III. RESEARCH OBJECTIVES

- Developing and implementing special learning modules using the flexible grouping strategy in accordance with kinesthetic perception exercises to learn some football skills.
- Identifying the impact of using the flexible grouping strategy in accordance with kinesthetic perception exercises to learn some football skills.

IV. RESEARCH HYPOTHESES

- There are statistically significant differences between the results of the pre-test and the results of the post-test of the experimental group and the control group in learning some football skills.
- There are statistically significant differences between the results of the post-tests of the experimental group and the control group in learning some football skills and in favor of the experimental group.

V. RESEARCH SCOPES

1.5.1 The human scope: Fifth grade literature students, Al-Khadhraa' High School in Baghdad, Karkh 1, for the academic year 2018-2019.

1.5.2 Temporal scope: From 12 November 2018 to 30 December 2019.

1.5.3 Spatial scope: Indoor hall in Al-Khadraa' High School in Baghdad.

Topic Two

2. Research Methodology and Field Procedures

2.1 Research Methodology

The researchers used the empirical method.

2.2 Society and Sample of Research

The research community is represented by the fifth grade literature students, Al-Khadhraa' High School in Baghdad, Karkh 1, for the academic year 2018-2019. The sample was chosen deliberately, and the total number was 110 students distributed on 4 halls (a, b, c and d). Drawing lots method was adopted to select the halls, where the students who were admitted to the pilot study, the absent students and the rooms that did not interfere with the main experiment were excluded, the number was 50 excluded students, and thus the sample reached 60 students, which constituted 54.54%. Hall A was selected to be the experimental group which is 30 students and Hall C to be the control group which is 30 students.

2.3 Sample Homogeneity

The researchers carried out homogeneity in height, age, and weight for all sample individuals as shown in table 1 below.

Table 1

Sample homogeneity with the variables: age, height, and weight:

Variables	Arithmetic mean	Standard deviation	Median	Coefficient of skewness
Age	17,69	0,67	17,28	1,00
Height	171,95	2,12	173	0,538
Weight	65,70	2,30	66,00	0,350

It can be seen from the above table that the coefficient of skewness in the variables is confined between the real boundaries (-3), and thus the sample is distributed naturally and is homogeneous.

2.4 Tests Used in Research

- Test Name: Passing in football.
- Test Objective: 30 - seconds wall bounce pass (Ass'ad, 2009, p.55).
- Test Name: shooting.
- Test Objective: shooting on a target drawn on a goal, the number of correct attempts in 30 seconds (Khraibit, 1989, p.38).

2.5 Pilot Study

The researchers conducted a pilot study on the 8 sample of students who were excluded from the main study on 12 November 2018. The study was repeated seven days later on 19 November 2018. The researchers have obtained the following:

- Knowing the time of skills explanation, overcoming some of the difficulties faced by the researchers, taking into account the safety of the students sample of research and the introducing of the tests and application method to the assistant team.

The selected tests in the research are based on scientific foundations and applied to the Iraqi environment, but the researchers deliberately conducted the scientific bases on a sample of 10 students as shown in table 2 below.

Table 2

Validity, Constancy and Objectivity:

Variables	Validity	Constancy	Objectivity
Passing skills	0,90	0,81	0,94
Shooting skills	0,92	0,85	0,95

The T calculated value was greater than T table value (0.52) at degree of freedom 8 and below significance level 0.05. The tests have high degrees of honesty, consistency, and objectivity.

2.6 Pre-Tests

The researchers conducted pre-tests that include pass and shooting skills on the sample at the indoor sports hall in the school on 26 November 2018. It was carried out by professors specialized in physical education lesson and supervised by the researchers. The researchers then conducted sample equivalence for the skills studied in football as shown in table 3 below.

Table 3

The Sample Equivalence from Skill Aspect:

Skills	Experimental group		Control group		T calculated value	T table value	Significance
	M	SD	M	SD			
Passing skill	3,70	1,70	3,96	1,50	0,97	1,68	Insignificant
Shooting skill	9,44	2,9	9,38	2,10	0,90	1,68	Insignificant

Table 3 shows that the T calculated value is less than the T table value which indicates that the sample is equivalent from skill aspect.

2-7 Use of Flexible Grouping Strategy Based on Kinesthetic Training:

The researchers implemented the special learning modules developed by them, which included the strategy of flexible grouping according to the kinesthetic perceptions training that was inserted within the curriculum adopted by Karkh 1 Directorate of Education.

The modules included the use of flexible grouping strategy, which is dividing the students into small groups, not more than 6 students in each group that will be equal or unequal in number and according to the required composition and the purpose of the objective. The student is free to shift in return for a replacement of another colleague to the group, then carrying out the exercises of kinesthetic perception which is the sense of distance, time of the ball and without it, and learning the skills under discussion. The learning modules reached 8, 2 learning modules per week, 4 learning modules for each skill. The application of the modules began on 2 December 2018 until 27 December 2018.

2.8. Post-tests

The researchers conducted the post-tests on the research sample on both the experimental and control groups. They were conducted on the same indoor sports hall and by the professors who implemented the pre-tests, on 30 December 2018.

2.9 Statistical Means

Statistical data were processed using the statistical package software (SPSS).

Topic Three

3. Presentation, Analysis, and Discussion of Results

3.1 Presentation and Analysis of Results

3.1.1 Presenting, analyzing, and discussing the results of the pre- and post-tests of the experimental and control groups for passing and shooting skills in football.

Table 4

The Arithmetic Means, Standard Deviations, and Calculated and T Table Values of the Pre- and Post-Tests of the Skills under Discussion in Football for the Two Groups

Skills	Group	Pre-test		Post-test		T Calculated value	T Table value	Significance
		+M	SD	+M	SD			
Passing skill	Experimental	3,70	1,70	8,44	1,20	13,96	1,69	Significant
	Control	3,96	1,50	6,19	0,89	6,28		Significant
Shooting skill	Experimental	9,44	2,90	17,65	2,10	10,79		Significant
	Control	9,38	2,10	13,96	1,30	7,24		Significant

The T table value is 1, 69 under significance level 0, 05 and 29 degree of freedom.

Table 4 shows that the T calculated value of the passing skill of the experimental group amounted to 13.96, which is greater than the T table value and this indicates the existence of significant differences in favor of the post-test.

The T calculated value of the passing skill of the control group was 6, 28, which is greater than the t table value and this indicates the existence of significant differences between the results of the two tests and in favor of the post-test

It is evident from the table above that the T calculated value of shooting skill for the experimental group was 10.79, which is greater than the T table value and this indicates the existence of significant differences between the results of the two tests and in favor of the post-test.

Through table 4 above, we see that the T calculated value of the control group shooting skill is 7.24, which is greater than the T table value and this indicates the existence of significant differences between the results of the two tests and in favor of the post-test.

It is evident from table 4 that the experimental group progressed in the tests of skills (passing and shooting skills) and in favor of the post-test. The researchers attribute this to the use of flexible grouping strategy according to the kinesthetic perception exercises and involving it into the curriculum in the form of learning modules for the skills in question, which were consistently and scientifically used, as the groups were divided into small groups that gave a strong incentive for the learner to rush for the effective participation, which gives him flexibility of movement between groups, makes him the focus of the educational process, develops his collective responsibility, and helps to involve in the teamwork, and the teacher is the instructor of the process. Flexible grouping strategy is based on the fact that each student in the group plays an active role that emphasizes his activity; therefore, the effort in the educational situation can lead to the retention, function, and transition of learning (Barakat, 2005, p.4).

The kinesthetic perception exercises also played a role in the progress of the experimental group where they were developed in a way that suits the learners' ages, as well as in the coordination with the strategy used. It also took a prominent role through the sense and perception of the skills as the sensory knowledge is significant in the sports kinetic activities coordinated with the cognitive ability of all the phenomena outlined distinctly in the learning process

"The sensory receptors exist in the muscles send sensory nerve signals carrying information about the muscles shortening or lengthening extent, tension and relaxation, contraction speed and strength, and the status of the different parts of the body in general. They also send signals about the changes in these parts, the accuracy of movement in the surrounding space and their performance time, thus these information help on the accuracy of the player's assessment of motor performance through the nervous system control of the performance of moves acquired and mastering them during the processes of kinetic learning) (Geilani, 2005, p. 70).

Through this, we see that the progress of the experimental group was mixed with the use of the flexible grouping strategy with the exercises that stimulated learning, namely kinesthetic training. The control group's progress is also evident in the post-test.

3.1.2 Presentation, Analysis, and Discussion of Post-Tests Results of the Experimental and Control Groups Skills (Passing and Shooting) in Football:

Table 5

The Arithmetic Means and Standard Deviations of the Two Post-Tests of the Experimental and Control Groups Skills in Football:

Skills	Experimental group		Control group		T calculated value	T table value	Significance
	M	SD	M	SD			
Passing skill	8,44	1,20	6,19	0,89	4,61	1,68	Significant
Shooting skill	17,65	2,10	13,96	1,30	4,29		Significant

*The T table value was 1,68 under significance level 0,05 and 58 degree of freedom.

Through table 5 above, it is evident that there are significant differences between the experimental and control groups in the post-test results of football skills, as they show that the T calculated value which is 4,61 is greater than T

table value in passing skill test, which indicates the existence of significant differences between the two groups and in favor of the experimental group. It is also shown in the shooting skill test, we find that the T calculated value was 4.29, which is greater than the T table value and this confirms the existence of significant differences between the two groups in this test and in favor of the experimental group.

Through table 5, we note that the experimental group that introduced the flexible grouping strategy in the curriculum was more influential in football skills and this confirms the effectiveness of teaching the strategy of flexible grouping according to the exercises of kinesthetic perception, which was implicitly coordinated through groups varied in number and places of existence in learning the skills. It has also played an active role in the progress of the experimental group, and since the flexible grouping strategy is an educational module that includes a specific subject and contains different elements with basic objective that is increasing the student's interaction and effective participation in the various activities that the flexible groups seek in the one learning situation in order to achieve the specific educational goal of the module with high proficiency, through which the learner can move from one group to another, and he is given the freedom to choose the right group with the assessment of groups levels by the supervising teacher and instructor.

"The strategy of flexible grouping is one of the most important strategies through which the teacher achieves the diversification of teaching and learning activities to suit the needs and abilities of students, as well as achieving societal goals or equal comprehensive development for all students despite their differences" (Ibraheem, 2010, pp.58-59).

The flexible grouping strategy grants the students the freedom of movement amongst groups provided that this be under teacher's knowledge, as he follow-up all learners through the transition and roaming between groups to facilitate the learning process, the instruments and appropriate places are prepared for that. Each group is provided with learning resources separately and so on for the rest of groups. Learners are assessed individually by the instructor, the activities were designed in accordance with the specified subject and objective, taking into consideration the sequence in the presentation of skills content and the individual differences among learners. A set of exercises were developed that allow learners to practice and perform the duty in learning situations. "Flexible group teaching offers the flexibility in selecting the activities and learning according to the individual's own abilities, and it provides conditions that give the learner a positive role in every learning situation" (Rober, 1999, p.90).

The progress that has been made in the group that taught flexible grouping strategy teaching has a significant effect on the participation of learners. The most important teaching characteristic is that learners participate and share beyond the fact that they are recipients of information, they participate in the study activities superbly, continuously, and vitally throughout the learning modules.

The kinesthetic perception training has an effect in improving motor harmony and advancing the skills of football, as mental abilities were taking into account by choosing exercises because the kinesthetic perception is linked to the central nervous system, which is one of the most important results of brain processes related to knowledge and the higher mental processes of cognition, sensation, remembering, and vision. Thus these processes are the main axes of the cognitive organization of learners as it is difficult for the learner to imagine a kinetic behavior in the absence of one of these key axes, (the overall performance and its development depends on the development of cognitive processes as a result of the learners subject to exercises by aid training means to help the development of these capabilities, which

leads to the improvement of learner's sense of the ball because of the neural processes strength that result in his increased awareness of the surrounding) (Allawi, et al, 2003 p.48).

The perceptual ability has a direct impact on learning and improving skill performance and accuracy and the acquisition of new skills, as well as learning and play situations, especially when sending and passing it needs the sense of touch and sight, and some internal sensations such as sense of direction, distance, and time more than any other senses, which attributes broad prospects to the learners in perceiving the largest range of variables surrounding performance (kinesthetic perceptions can be developed through advanced exercises specified for these perceptions), (Shawqy, 1998, p. 83).

These exercises develop a kinesthetic perception of skills, which helps learners to gain more understanding of the nature of the required skill performance, which makes them succeed in the performance of motor skills, in addition the continuous training leads to increasing the ability of the learner to focus on the skill performance and this led, in turn, to the development of the perception process, as "the more exercise period for the player, the more he gains experience and skills in different positions of play" (Hamad, 1998, p. 34).

The exercises have been selected in an orderly, gradual in difficulty, and consistent between the parts of the body, and have a functional effect on the development of compatibility between the nervous and muscular systems in which physical abilities participate (compatibility development is one of the main objectives of physical education) (Ahmed, 1997, p. 205).

The flexible grouping strategy has also worked in accordance with the kinesthetic perception training, which has a clear impact on the progress of the experimental group in all skills, where they were prepared appropriately for the sample in terms of estimating the situation, orientation ability for time and space, control of the body movement in space and time, and perceive the status and changes of the body for the playground, movement, and the ability to Kinetic linkage and coordination and this gives the quality of exercises developed by researchers, in which they focused on improving the kinetic compatibility between the body parts and skills in football that have evolved the movement of learners. Through this we note the advancement in the experimental group that used the flexible grouping strategy teaching and kinesthetic perception exercises in all skills, and we note that the control group has progressed in learning skills as well.

Topic Four

VI. FINDINGS AND RECOMMENDATIONS

4.1 Findings:

- 1- The results showed the superiority of the experimental group that used flexible grouping strategy in teaching in accordance with the kinesthetic training in learning some skills of football on the control group.
- 2- The proposed learning modules, including teaching with flexible grouping strategy and kinesthetic perception training affected positively as being aid exercises in acquiring motor harmony perception in football.
- 3- The results showed the improvement in the control group that used the teaching followed by the instructor in learning football skills.

Recommendations

- 1 - Taking advantage of the current study findings to learn and develop the kinesthetic perception and some skills in football in the field of physical education at high schools in the Ministry of Education.

2 - Conducting similar studies on a different sample and other games.

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