



The impact of learning in the fixed way and returning it to the variable in acquiring and saving the effort of learning some offensive skills in handball for students

Dr. Maha Wadood Kamal Saeed ¹

Department of Physical Education and Sports Sciences, University of Jarmo

Dr. Marwa Khaled Jihad ²

maha.wadood@uodiyala.edu.iq¹

marwa.khaled@uodiyala.edu.iq²

Abstract

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Corresponding Author :

maha.wadood@uodiyala.edu.iq1

The importance of research came in benefiting from modern teaching methods represented in the fixed and changing method and the re-learning method in order to improve the level of skill performance and gain performance, as well as to save the learning effort in order to achieve the goal of learning these skills at this age with the formation of a basic base of players for the development of the handball game in our schools, and despite the cognitive openness and scientific development witnessed in the educational process, and the emergence of many modern learning methods, it is noted that the continuation of adopting old traditional methods that do not keep pace with this development in the educational process, or the method used in learning skills may not be in line with the need and ability of motor students that do not contribute to upgrading the skill level as required, and it takes a long time and effort when learning them with the traditional methods used. On the basis of this, the objectives of the study came as they prepare exercises in the fixed method and return them with the variable to acquire some offensive skills with the handball of the students of the second medium, and know the impact of the fixed method and return it with the variable in acquiring some offensive skills with the handball of the intermediate students. The effect of re-learning is also known as the changing method of saving the effort of learning some offensive handball skills for the students of the second medium. The experimental approach was used to suit the nature of the research and to adopt the experimental design for the one group with the first and second pre and post-test. As for the sample, it was represented by the second grade students in the Intermediate School of Forgiveness for Girls in Diyala, which numbered (30) students. The two researchers conducted the pre-test and then the exercises were carried out in the fixed method, then the first post-test was carried out, and after a break in learning, the exercises were carried out in the variable method, and then the second post-test was carried out.

1- Definition of research

1-1 Introduction and Importance of the Research

The world has witnessed an amazing development in the educational process, and it has not reached this level of progress except through perseverance, continuous work and detailed studies of everything related to this process and research in its finest details of curricula and learning methods. It can be said that the modern methods used in motor learning have achieved great and wide successes in the learner's acquisition of basic skills based on sound scientific foundations appropriate to the age, physical and mental level of learners. Through modern and appropriate learning methods, learners are able to acquire information that benefits them in facing new situations, changing ideas , and making judgments. And generate new ideas, and in this way they are able to achieve different goals of learning , as they direct their energies towards those goals , which they have already drawn,which will help them to master and familiarize themselves with the content of the subject, whether theoretical or practical ,and handball is one of the team games characterized by the diversity of motor behavior and linear and skill performance, whether individual or collective, there are plans implemented by players in a collective manner and there are plans that require the individual performance of the player himself, which requires the player to have a physical ability and skill that qualifies him to solve the requirements of the situation required by his opponent, and competitive activity Handball often requires the player to overcome the competitor by using different skill methods within the law of the game , and as a result of the diversity of the requirements of this game and the increasing competition of athletes who practice the game , it made teachers, trainers and specialists looking for the best and most appropriate methods and educational methods to improve the game and reach advanced levels. One of these methods is the sequential and random method, the fixed and variable method, the intensive and distributed method, the total and partial method, and the physical and mental

method. (Magill, 2007, p. 230) "The diversity of the exercise and the change of its methods is aimed at organizing the exercise and its impact on education." The two researchers decided to use the fixed and variable method, where the fixed method is summarized as "a repetition that has a fixed time and path" (Maher Al-Amri, 2014, p. 216). This means that the single educational unit is focused on only one variable to which the learner is subject to from the set of variables during one practice, and this method is suitable for closed skills because it requires a fixed motor program and a high level of artistic performance. As for the changing style, it is "a successive series of exercise practices in which the learner is subject to a number of variables at the same time during one practice"(Wajih Mahjoub, 2001,p. 201) This means that the learner is subject to several variables at the same time during one practice where there is a change in direction, distance, time, etc., while retaining the form of performance and the motor program is more stable and stable because of the diversity of stimuli that provide different information about performance.(Khalil, 2022,p. 129), so the changing style is more appropriate with open skills. The purpose of relearning the basic skills of any game is to get the learner to acquire the mechanism in performance as well as to economize on the effort in terms of the number of attempts or time spent, and this is done by benefiting from learning that the individual has already learned by asking him to relearn what he previously learned after a period of time. The importance of research lies in the use of motor learning methods for motor skills, represented by the fixed method and returning it in the changing method. Relearning has an impact in providing the effort of learning some basic handball skills for students in the second grade, so the current research is an attempt to use modern learning methods in order to improve the level of skill performance and master performance to achieve the goal of learning these skills at this age stage while forming a basic base of players for the development of the handball game in our schools.

One of the goals of the educational process is to take note of the skills of games and know the laws governing performance in them for all sports, especially the game of handball, as this game consists of a set of offensive skills, which is an important base for progress in the level of performance and overcoming the needs of changing play situations, so the choice of modern educational methods leads to the achievement of goals, despite the cognitive openness and scientific development witnessed in the educational process, and the emergence of many modern learning methods. However, it is noted that some physical education teachers continue to rely on old traditional methods that do not keep pace with this development in the educational process. By informing the researchers about the progress of the practical lessons of middle schools and watching some of the physical education lessons, he noted that there is a clear weakness in the level of performance of offensive skills in handball and that the students do not reach a stage of learning in the performance of these skills, and that this weakness is due to several reasons, including the failure to use appropriate educational methods, or that the method used in learning skills may not be in line with the need and ability of motor students that do not contribute to upgrading the skill level in the form It also takes a long time and effort when learning the traditional methods used, and the game of handball is one of the sports in which success depends on the mastery of its members of offensive skills to overcome changing performance conditions, so it is necessary to follow educational methods that contribute to upgrading offensive skills as well as saving effort in learning.

Therefore, the two researchers decided to address this problem by using the two fixed methods and returning it to the variable to learn some offensive handball skills.

Research goals?

Preparing exercises in the fixed method and returning them in the variable to acquire some offensive handball skills for the students of the second intermediate.

Identify the impact of the fixed method and return it to the variable in the acquisition of some offensive handball skills for the students of the second medium.

Identify the impact of re-learning in the changing style in saving the effort of learning some offensive handball skills for the students of the second medium.

1.5 Research Hypotheses :

Learning in the fixed method and returning it in the variable has a positive impact on the acquisition of some offensive skills in the handball of the students of the second medium.

Learning in a fixed style and replaying it with the variable has a positive impact on saving the effort of learning some offensive skills with handball.

RESEARCHED AREAS

1.5.1 Human Sphere: Second Grade Female Students Intermediate , Forgiveness Intermediate for Girls

1-5-2- **Time Range:** Duration from 1/10/2023 to 20/2/2024

1-5-3- **Spatial scope:** The courtyard of the Forgiveness Intermediate School for Girls / Diyala.

Identifying terms

Re-learning: It is one of the methods of measuring learning and is intended to ask the individual or athlete to learn a certain skill or memorize something new so that he can get it and after a long or short rest period he is asked to re-learn any of what has already been learned"(Nabil, 2007, p. 164).

Saved effort: It means the difference between the number of attempts or time for the first learning and the second learning when re-learning "(Nabil, 2004, p. 117).

1. Methodology

The two researchers used the experimental approach appropriate to the nature of the research problem and the experimental design of the one group with the first and second pre and post-test was approved as shown in Table(1):

Groups	Steps								
	First	2	3	4	5	6	7	Eighth	Ninth
SPG Experimental group	Testing Pre- Application	Learning Style Constant	Testing Dimension The First	Difference Between Test Tribal and posterior first	Learning interruption for a period of time 14 Days	Do- over, do- over. Learning by style Variable	Testing Dimension Second	Difference between tests Dimension	elicitation reserve saving Effort

3-2 The research community and sample

The research community was identified, namely the second-grade students at the Forgiveness Intermediate School for Girls in Diyala ,and the research sample was selected from the second-grade students, who numbered (38) students , and (4) students were excluded for the following reasons: –

- 1-Two students for health reasons.
- 2- Failed student.
- 3- One student practicing the game.

While (4) female students were subjected to the exploratory experiment, so the main research sample reached (30) female students, representing a percentage of(88.23%) of the total research community.

2- 3Homogeneity of the sample

For the purpose of knowing the nature of the spread of the sample around its arithmetic medium and homogeneity among its members , the two researchers carried out homogeneity to individualize the research sample in light of the variables (length , mass, age) , to ensure that the research sample is distributed normally , and the researcher used the law of torsion coefficients because it shows the condition of the sample free from the defects of non-moderate distributions and as shown in Table (2)

Table (2) shows the homogeneity of the sample members in the variables (age, height, mass)

Variables	Unit Measurement	Average arithmetic	Standard Deviation	Mediator	Laboratories Twisting!
Length	cm	152-3).	6.69	153	.313

cluster	kg	51.13	8.77	50	0.388
Age	Month	164.4	8.56	162	0.84

Table (2) shows that all data fall under the moderate curve, which confirms the normal distribution of the research sample.

2-4 Means of collecting information, tools and devices used in the research

2-4-1 Means of collecting information .

- Arabic Resources
- Questionnaire to identify the skill tests in question .
- Tests and Measurement.

2-4-2 Hardware and tools:

- A computer (HP-Pavilion) of Chinese origin.
- A digital camera (sony) of Chinese origin.
- A scale to measure mass.
- Metallic tape measure to measure length.
- Two (2) electronic stopwatches of Chinese origin.
- Legal handball goals in terms of length and height (2).
- (15) handballs.
- Medical balls (4)
- Collars of different sizes (6).
- (2) wooden horse.
- Hand calculator
- (12) poles.
- (Fox) type whistle (2).
- chalk

2-5 Identification of research variables

2-5-1 Identification of the studied offensive skills:

The offensive skills were determined according to the curriculum of the Iraqi Ministry of Education for physical education lessons for the intermediate stage, and the two researchers relied on the curriculum of the second intermediate grade and through the vocabulary of the curriculum for the academic year (2023-2024), which includes offensive skills (handling(handling from above shoulder level) , chopping, aiming (aiming from above shoulder level).

2-5-2-Determining the appropriate skill tests:

The two researchers prepared a questionnaire form to determine the most appropriate test for each of the offensive skills of the handball in question and by (3) tests for each skill. The form was presented to (11) experts and specialists in the field of handball, motor learning, training, testing and measurement. In light of the opinions of experts collected, the percentage of expert agreement on the skill tests in question was extracted. The researchers adopted a percentage of 80% and above for the agreement of experts and as in Table (3)

Table (3) shows the percentage of tests agreed upon by experts and specialists

Foundational Skills	Sr	Purpose of the test	Percentage
Communion	1	Measure the compatibility and handling speed on the wall for a distance of 3m.	100%
	2	Measure compatibility, speed and accuracy of handling.	0%
	3	Measure compatibility, speed and accuracy of handling on both walls.	0%
Tabtabah	1	Measuring the skill of continuous chopping.	11.11%
	2	Measure the level of chuck skill in a zigzag direction from a distance of 15 m back and forth.	88%
	3	Measure the level of chuck skill in multiple directions.	0%
Shooting	1	Measure the accuracy of the aim from stability.	88.88%
	2	Shooting Accuracy	11.11%
	3	Measure accuracy and strength of aiming.	0%

2-5-3 Tests used in the research: -

I. Handling and Receiving Test (Sumaidai et al., 2010, p. 418)

Test name: (Handling speed and receiving the ball 30 seconds)

Test Objective: Measure compatibility and handling speed on a wall .

Tools used : handball , electronic clock (2) . Plane Wall Sticker

Method of performance : The student stands at a distance of (3) meters from the wall and at the signal passes the ball to the wall and continues to pass as many as possible in a specified time of (30) seconds.

Registration: – Counts the number of passes in the specified time (counts the number of times the ball is received) .

Second – Tabtaba test (Ahmed, 2011, p.269)

Test name: (chuck in zigzag direction 15 m back and forth).

Objective of the test: – Measuring the level of chuck skill.

Tools used: – (5) flags, (2) electronic stopwatch, handball .

Method of performance: –Installing five flags on the ground vertically and in a straight line, the first is 3 m away from the starting line and the distance between one flag and another is 3 m .The student stands behind the starting line and at the start of the badge, the student strokes the ball while running in a zigzag shape between the flags back and forth until crossing the finish line.

Registration: – The time recorded back and forth is calculated from the moment of commencement until the student crosses the finish line.

III. Aiming test (Al-Sumaidai et al., 2010, p. 436)

Test Name: (Aiming accuracy at a distance of 6 m)

Objective of the test: – Measuring the accuracy of the aiming .

Tools used: – A handball, a handball goal drawn on a wall (3x2) m. The goal is then divided into nine rectangles to measure the accuracy of the goal and a line is drawn on the ground (6) m away from the goal.

Method of performance : The student shoots from behind the line with the pivot step, taking into account the following: –

Injury to the rectangles (9,7,3,1), which represent the corners of the goal, which have dimensions of (100 x60) cm, gets four degrees .

Injury to the rectangles (8,2), which represents the area above the head of the goalkeeper and between her feet, whose dimensions are (100x60) cm, receives three degrees .

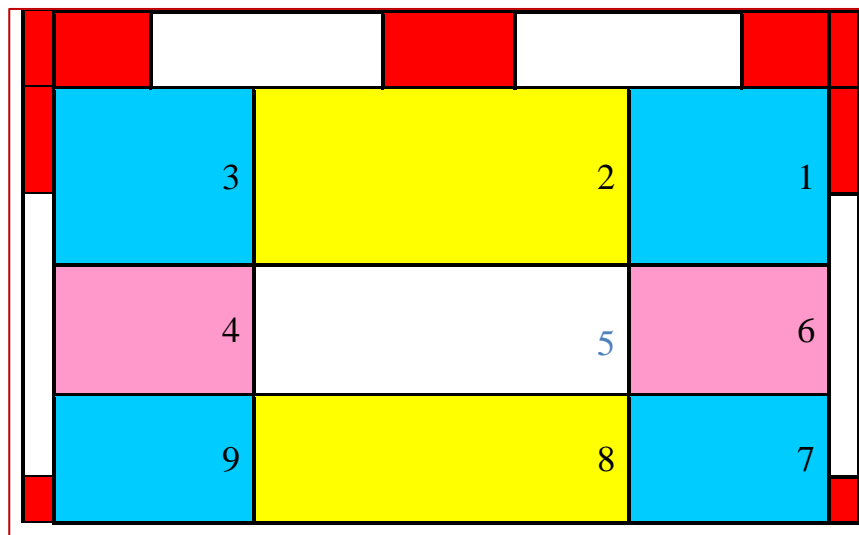
Injury to the rectangles (6,4), which represents the area of the range of the arms of the goalkeeper, which is (100 x 80) cm, reaches two degrees .

Rectangle injury (5) represents the area of the chest and trunk of the goalkeeper, whose dimensions are (80x100) cm, which obtains one degree.

If the ball comes out of that it gets a zero .

Each student performs ten shots and each student has only one attempt. Figure (1).

The highest score of the test (maximum score) (40) .



Figure(1) shows the measurement test of the accuracy of the aiming

2-6 Scoping Experiment for Skill Tests:

In order to properly identify the implementation of the vocabulary of tests that lead to obtaining correct and accurate results in accordance with the scientific methods followed. The two researchers, together with the assistant team, conducted a exploratory experiment from the second intermediate grade students, numbering (4) students who did not participate in the main experiment in the average forgiveness for girls on (Sunday)corresponding to (15/10/2023) at (9 am) to carry out the tests for the basic skills under research, and the two researchers aim from the exploratory experiment to the following:

Finding the scientific basis for the skill tests.

- 1-Identify the validity and suitability of the tests for the sample level.
- 2-Identify the time taken to perform each test and for the tests as a whole.
- 3-Identifying the safety and efficiency of the tools used in the tests.
- 4-Identifying all the obstacles and problems that the two researchers may face when implementing the basic experiment
- 5- Determining the efficiency of the assistant work team and determining its duties.

2-7 Scientific Basis for Tests

The two researchers found the scientific coefficients of (honesty, consistency, objectivity), which is one of the most important features of a good test.

2-7-1 Validity of the test

Honesty means that an honest test is a test that measures the function it purports to measure and does not measure anything else instead or in addition to it(Sami, 2000, p.287)

The two researchers extracted honesty in the manner of apparent honesty, as the tests were presented to a group of experts and specialists, and the validity of the tests was proven after the experts agreed that they achieve the purpose for which they were developed and their suitability for this age group .

2-7-2 Test stability

The stability of the test means "the test that gives similar results or the same results if it is repeated more than once and in the same circumstances"(Khair al-Din, 1999, p.55)

To calculate the stability coefficient, the test-re-test method was selected on a sample of (4) players from outside the main research sample. The first test was conducted on (15/10/2023) and the test was reapplied after(7) days and on (22/10/2023) under the same conditions as the first test. The correlation coefficient was extracted between the first application of the test and the second. After obtaining the results of the two tests and processing them statistically using

Pearson's simple correlation coefficient, and then researching the strength of the correlation coefficient to know the significance and stability of the tests, it was found that the calculated value of the correlation is greater than the tabular value of (0.87) and with a degree of freedom (4). This confirms that the tests have a high degree of stability.As in Table (4)

Table (4) shows the stability coefficient of the research skills tests

Tests	Stability coefficient
Wall Handling Accuracy Test	0.90
Stroking Time Test	0.89
High Jump Aim Test	0.85

2-7-3 Objectivity of the test

Since the candidate tests that were used in the research have specific, clear, understandable and non-translatable instructions and are far from self-assessment, as the tests depend on units of measurement such as (repetitions/s for handling), (time/s for the chuck), (time /degree according to the place of the ball to aim). Therefore, these tests are objective because they are not subject to the judge's estimates in obtaining the test result and are far from biased and self-evaluating.

2-8 Research Procedures

2-8-1 Pre-test

In order for the pre-tests to be feasible and in accordance with the correct scientific foundations, on Monday, 23/10/2023, the two researchers gave the research sample an introductory unit on the skills in question, and after all the test requirements were prepared, then the selected skill tests in question (handling, chopping and correction) were conducted, after being identified by the experts , in the yard of the Intermediate School for Forgiveness for Girls on Tuesday, 24/10/2023.

2.8.2 Key Experience

The main experiment was started by applying skill exercises in a consistent manner to the research sample at nine o'clock in the morning on Tuesday,

31/10/2023 ,as the educational curriculum included (12) educational units for a period of (6) weeks ,with (2) educational units per week on Sunday and Tuesday , and a time of (45) minutes for the educational unit. The curriculum consisted of (36) exercises divided into the selected offensive skills, (12) exercises for the handling skill, (12) exercises for the chopper skill, and(12) exercises for the correction skill, that is, (12) exercises for each skill.In each learning unit, three exercises were given.The exercises were applied in the applied section of the main part,where the time of the main section is (27) minutes divided into (6) minutes for the educational activity to explain, present and perform the exercises ,and the time of the applied activity is (21) minutes , to apply the exercises ,by (7) minutes for one exercise, while the duration of the final section is (5) minutes for one educational unit and includes a small game and calming and dismissal exercises. The application of the last educational unit was completed on Sunday, 10/12/2023.

2-8-3 First Post-Test

After the completion of the application of skill exercises in the fixed method and after (6) weeks of the application of the experiment , the two researchers conducted the first post-test on Tuesday, 12/12/2023 at 9 am , and the two researchers were keen to install the same conditions that were used in the pre-test in terms of time, place, tools used and the method of implementation .

4-8-2 Relearning in a Changing Style

The learning of the skills was stopped for a period of (14) days, and then the skills were relearned in a changing manner as the exercises were applied in the applied section and its duration was (21) minutes divided into three exercises for each exercise (7) minutes , and the exercises were applied in each of the educational units as follows: -

- In the first exercise, my skills (chopping and handling)
- In the second exercise, my skills (chopping and aiming)
- In the third exercise, my skills (handling and aiming)

At the rate of one exercise for every two skills, the same exercise is reapplied in the next learning unit. Thus, the number of exercises prepared by the two researchers in the variable method reached (24) exercises, each exercise was applied in two educational units. The exercises continued for a period of (6) weeks and at a rate of two units per week, thus the number of educational units reached (12) educational units.

The two researchers began re-learning offensive skills in a changing style on Tuesday , 26/12/2023. The two researchers completed the application of the last educational unit on Sunday, 4/2/2024. The two researchers were keen to implement the re-learning of skills in the same way as in the main experiment in terms of the time and number of educational units, except for the method of implementing the exercises, where the exercises were applied in the variable method, which is the introduction of a large number of variables that affect skill performance.

2-8-5 Second Post-Test

After completing the relearning of skills in the variable method of the research sample, the two researchers conducted the second post-test on Tuesday, 6/2/2024 at 9 am , and the two researchers were keen to install the same conditions that were used in the first pre-test and post-test in terms of time, place, tools used and method of implementation.

2-8-6 Extraction of Saved Voltage

One method of measuring learning was relied upon to measure the saved effort in order to know the impact of re-learning skills in the variable method of the research sample, by extracting the time or point difference (number of attempts) between the first and second dimensional tests. The percentage of saved effort for each of the offensive skills in question was also extracted as in the following equations (Nabil, 2007, p. 165):

Effort saved = the number of attempts (time) required for the first learning – the number of attempts (time) required for the second learning.

The percentage of saved effort can be measured through the following equation:

$$\frac{\text{Number of attempts(time) for the first learning} - \text{Number of attempts (time) for the second learning}}{\text{Number of attempts (time) required for the first learning}} \times 100$$

Number of attempts (time) required for the first learning

3–Presenting, analyzing and discussing the results

3–1 Presentation and analysis of the results of the first pre and post tests of offensive skills tests in the fixed method

Table (5) shows the results of the arithmetic media, the standard deviations of the first pre and post–test, the difference of the arithmetic media, the difference of the standard deviations, the calculated value, the percentage of error and the moral significance of the offensive skills

Skills	Unit of measure	Pre–test		Post–test		SV	BRB.	Calculated value	Error ratio	Significance
		You will	W	You will	W					
– Communion!	Nos Occurrences	6.333	838,0	8.067	1/387	1.733	1.723	2.134	.041	Legal
Tabtabah	Second	.811	366	918	10629	893	.032	0.056*	.049	Legal
Shooting	Degree	19.47	.008	23.00	509	.533**	2, 288	499.	.018	Legal

* The tabular value (t) is (1.699) under the degree of freedom (29) and the probability of error (0.05) .

It is clear from Table (5) that (C) calculated for the handling skill has reached (2.134) with an error rate of (.041), which indicates the existence of significant differences between the first pre and post tests of the handling skill and in favor of the first post test.

While the value of (T) calculated in the skill of the chopper was (2.056) with an error rate of (.049), which indicates that there are significant differences

between the first pre and post tests of the chopper skill and in favor of the first post test.

While the value of (T) calculated in the skill of aiming was (2.499) with an error rate of (.018), which indicates that there are significant differences between the first pre and post tests of the skill of aiming and in favor of the first post test.

3-2 Discussing the results of the first pre and post tests of offensive skills tests in the fixed method

It is clear from Table (5) that the fixed method used in learning the selected offensive skills (handling, chopping and correction) had a positive impact on learning the offensive skills, and the educational units that were implemented by the two researchers contributed to this, in addition to the exercises used in the fixed method, where emphasis was placed on what is appropriate to the degree of skill difficulty and the age level of the students and correcting errors through the use of feedback and the optimal use of tools and supplies necessary for learning.

The researchers attribute the moral differences of the selected basic skills (handling, chopping, and correction) in the first dimensional test to the quality of the skill exercises that were used in a consistent manner in the educational curriculum and that were developed on a precise scientific basis that focused on developing the level of performance of the selected skills, where the student is subject to one variable during the skill performance. This variable is in a relatively stable external environment in which the exercise is carried out. Using one method in which the skill is repeated in the education process in terms of distance or The direction or speed of skill performance as the two researchers attribute the differences in the first post-test is due to the use of the fixed method, as it helped to acquire the information that formed the sound basis for learning and developing motor tasks as a result of repetition on a regular basis, and this confirms (Hassan Al-Awran, 2019, p. 22) "that the educational programs used the fixed method of learning have a positive impact on learning motor skills

in different sports",as (Ismail, 2003,p. 46) confirms that the basic role of learning methods is to improve, develop and stabilize skill performance, so the exercise must be repeated until reaching the correct form of performance and then diversity to improve performance. "This is why this method is the most effect in the early learning stage to learn a skill by the beginner learner because it facilitates the performance process.

3-3 Presentation and analysis of the results of the first and second dimensions of the selected offensive skills tests (in a variable style)

Table (6)shows the results of the arithmetic media, the standard deviations of the first pre and post-test, the difference of the arithmetic media, the difference of the standard deviations, the calculated value, the percentage of error and the moral significance of the offensive skills

Skills	Unit of measure	Post-test		Post-test		SV	BRB.	Calculated value	Error ratio	Significance
		You will	W	You will	W					
- Communion!	Nos Ocur renc es	8.067	1/387	367	1.876	3.300	0.933	841	.000	Legal
Tabtab ah	Seco nd	918	10 629	239	.024	7.680	384	3.695	.001	Legal
Shooti ng	Degr ee	23.00	509	29.60	4/861	6.600	231	Four eighty -six.	.000	Legal

The tabular * value (t) is (1.699) under the degree of freedom (29) and the probability of error (0.05) .

Table (6) shows that the handling skill has reached (4.841) with an error rate of (.000), which indicates that there are significant differences between the first and second dimensional tests of the handling skill and in favor of the second dimensional test.As for the clamping skill, it was calculated at (3.695) with an

error rate of (.001), which indicates that there are significant differences between the first and second dimensional tests of the clamping skill and in favor of the second dimensional test. While the calculated rate in the shooting skill was (5.486) **with** an error rate of (**.000**), which indicates that there are significant differences between the first and second dimensional tests of the shooting skill and in favor of the second dimensional test.

3-4 Discussing the results of the first and second dimension tests of the selected offensive skills tests (in the variable method)

It is clear from the presentation and analysis of the results presented in Table (6) of the first and second dimensional tests that there are significant differences between the first and second dimensional tests and in favor of the second dimensional test in all the selected basic skills. The two researchers attribute these differences to the use of exercises in a changing manner in which the learner is subjected to a changing environment, whether from the places of performance of the exercise or from the number of repetitions or from the distance from which the exercise is performed or the style of the exercise itself. Therefore, by applying the exercises in this manner, the student learns to perform the skill from different directions or from different angles, and thus there becomes a return and the ability of the drummer to perform the skill in any circumstance in which it is placed, whether the skill is performed from different distances or through different angles or at different speeds. This is confirmed by (Amer, 1998, p. 70) "that the changing method is highly effective in education and is the best and best for what this method achieves by creating programs and kinetic laws that benefit the athlete and help him to perform the skill under the conditions of the game if it requires performance from different places, angles and directions", as confirmed by (Rasha, 2019, p. 15) in her study is "that the educational programs used the changing method of learning have a positive impact on learning motor skills in different sports." Therefore, the two researchers believe that the changing method increases flexibility in movement

performance and adaptability to produce movements. As confirmed by the two researchers, as confirmed by most of the research and studies conducted in this field, it is that the fixed method is preferable to be used in the early stages of learning for what this method achieves from the acquisition and rapid learning of the skill and its basic principles, but the changing method is preferable to be used in the advanced or later stages of learning for what this method achieves in creating programs and kinetic laws that benefit the athlete and help him to perform those skills under the conditions of the game or requires to be performed in different places and directions.

The researchers attribute the acquisition and learning of skills and saving effort to relearning the chosen offensive skills in a changing manner, which contributed to the improvement and development of the chosen offensive skills, by giving the student more time to practice and repeat, as with increasing practice, performance becomes better when exposed to new future situations. Good skill performance is always directly attributed to the amount of individual practice of the skill, and this is consistent with what he indicated (Schmidt, 2000, p. 206) "Teachers or trainers are supposed to encourage learners to perform as many exercise attempts as possible.

3-5 Presentation of the results of measuring the effort saved in learning the selected offensive skills

Table(7) shows the computational media for the first and second dimensional tests and the effort saved in performing the selected offensive skills

Tests	First post-test	Second post-test	Saved voltage The difference between the two tests
	You will	You will	
-Communion!	8.067	368	3.301 times
Tabtabah	918	239	7.679s
Shooting	23.00	29.60	6.6 degrees

Table (8) shows the percentage of effort saved in performing the chosen offensive skills by handball

Skill tests	Saved Voltage
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	Ratio
-Communion!	91%
Tabtabah	24 May
Shooting	28.69%

3-6 Discuss the results of measuring the effort saved in learning the chosen offensive skills

The results of the effort saved in the chosen offensive skills are due to the re-learning method, as re-learning in the changing method has a positive impact on learning, as it helped students to perform the selected basic skills with less physical and mental effort and more economically in terms of reduced effort and reducing the time period for performing the skills, and this is confirmed by (Nabil Mahmoud D, 2004, p. 119) quoting Wajih Mahjoub as "Continuing in learning attempts leads to the occurrence of added learning represented in the decrease of effort."

It can be said that re-learning in the variable method has achieved a saving effort in learning the chosen offensive skills, and despite the varying rates of saving effort between the chosen offensive skills, according to the type of skill and its difficulty, but the impact of re-learning in the variable method was evident in the improvement of skill performance in the second dimensional test, and this was confirmed by (Wajih Mahjoub, 1987, p. 161) "The movement develops with regular and continuous repetition of the exercise, as a result of the development of the mental and intellectual level and the development of physical qualities."

Conclusion and recommendations

4.1 Conclusion

1. The use of the fixed method effectively contributed to the acquisition of the chosen offensive skills in handball.
- 2- Re-learning in a changing style has achieved varying percentages in saving the effort of learning some offensive skills in handball, as the best percentages were for the skill of handling, followed by the skill of aiming and then chopping.

3-The process of re-learning in the changing style saved a lot of time and effort, which led to a decrease in the feeling of fatigue.

4.2 Recommendations

1-Using the fixed method when teaching new skills in handball because of its clear impact on the acquisition of skills.

2- To learn better and with less time and effort, it is preferable to re-learn in a changing way to learn skills and save effort to learn them

3-Conducting similar research on different samples in terms of gender, educational stage and game type.

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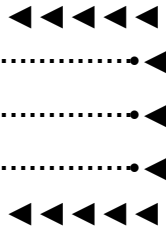

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Appendix

Appendix (1) shows a model of a fixed-style educational unit

Educational unit	Educational Objectives	Educational Objectives
School: Forgiveness High School for Girls	Learning the skill of handling from above grade: The second is the average of accustoming students to discipline and order	Accustoming students to teamwork
Time:	Shoulder level	

Activity Type	Time	Physical Activity	3. Organizational form	Remarks
Preparatory Department	13/D			
Introduction	2D	Prepare the tools, stand the students, register the absence, perform the start greeting.	▼▼▼▼▼ ☐	System Emphasis Emphasis on dressing for an athlete.
Warm-up	5 min	A ←jogging ← jogging walk with the arms rotated forward and backward(the mill) ← jogging with touching the ground in succession A regular ← jogging is a normal ← walk.	◀◀◀◀◀◀◀◀ ◀◀◀◀◀◀◀◀ ☐	Maintain the distance between each student to perform the exercises properly. Emphasis on orderly functioning.
Physical exercise	6d.0	Arm Exercise: (Standing, open) Bending the arms, then extending them aside, then bending them, then lowering them down ... 1 - 4 Torso exercise: (standing, opening, waist) Twisting the torso to two sides while raising the arms in succession... (1/4)	■ ☐	Ensure that the exercises are applied correctly to all members of the sample.

		Exercise for the two legs: (long sitting) Bending and extending the legs forward in succession 1 - 4		
Parent category	27 (d).			
Educational Activity	6d.0	Demonstrate and demonstrate the skill .		Taking into account that the students stand in the viewing position opposite the direction of the sun. Confirm that the form is displayed correctly.
Applied Activity	21/D	Handling Exercise No. (1) Handling Exercise No. (2) Handling Exercise No. (3)		Emphasis on catching the ball correctly . Emphasis on pushing the ball with the wrist and fingers . Emphasize the appropriate height of the ball. Correcting mistakes , and promoting correct performance.
Closing Section	5 min			
	3.Ⓓ	Recreational?		Adhering to game restrictions and everyone's participation
	2D	Calming exercises with ending the lesson with a sporting shout and then leaving.		Emphasize order and leave quietly

EXERCISE 1

The students are divided into four groups, with four balls. The first student from each group, at a distance of (2)meters from a flat wall, handles the ball and receives it to the wall from stability , and then returns behind her group, and so on for the rest of the students.

EXERCISE 2

The students are divided into four groups with two balls. The first student in the group in possession of the ball passes the ball to the first student in the opposite group and returns to the back of her group and so on for the rest of the students.

EXERCISE 3

The students are divided into four groups with two balls. The first student in the group in possession of the ball passes the ball to the first student in the opposite group and moves behind the ball to the opposite group.