



Modern educational technology (educational videos) and its impact on learning some basic handball skills for students in the final stages of secondary education.

التكنولوجيا التعليمية الحديثة (الفيديوهات التعليمية) وتأثيرها على تعلم بعض المهارات الأساسية في كرة اليد لتلاميذ الأقسام النهائية من التعليم الثانوي .

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Abstract:

This study aimed to identify the impact of using modern educational technology on learning some basic handball skills (dribbling, passing, and shooting from a stationary position) among students in the final years of secondary education. We used an experimental approach in our research, designing two groups: an experimental group and a control group. The study was conducted on a sample of 20 students who were selected intentionally, representing 19% of the students in the final grades at Abdul Rahman Al-Disi Secondary School in Busaada.

The statistical results showed statistically significant differences between the pre- and post-tests in favor of the post-tests in all the skill tests under study for both groups (control and experimental). Although both methods have a positive effect on motor learning, learning through modern technology proved to be more effective than the traditional method.

Keywords: modern educational technology; basic motor skills; handball; secondary school.

المخلص :

هدفت هذه الدراسة إلى التعرف على أثر استخدام التكنولوجيا التعليمية الحديثة في تعلم بعض المهارات الأساسية في كرة اليد (تنطيط الكرة، التمرير، والتصويب من الارتكاز) لدى تلاميذ الأقسام النهائية من التعليم الثانوي. وقد اعتمدنا في بحثنا على المنهج التجريبي بتصميم مجموعتين: تجريبية وضابطة، وأُجريت الدراسة على عينة مكونة من 20 تلميذاً تم اختيارهم بطريقة قصدية، بما يمثل 19% من تلاميذ الأقسام النهائية بثانوية عبد الرحمن الديسي ببوسعادة.

ولقد توصلت النتائج الإحصائية إلى وجود فروق ذات دلالة إحصائية بين القياسات القبليّة والبعدية لصالح القياس البعدي في جميع الاختبارات المهارية قيد الدراسة لكلا المجموعتين (الضابطة والتجريبية) وعلى الرغم من أن الطريقتين لهما تأثير إيجابي على التعلم الحركي إلا أن طريقة تعلم بواسطة التكنولوجيا الحديثة أظهرت فعالية أكبر من الطريقة التقليدية.

الكلمات المفتاحية : التكنولوجيا التعليمية الحديثة ؛ المهارات الحركية الأساسية ؛ كرة اليد ؛ المرحلة الثانوية

Introduction:

Modern technology has become one of the basic necessities for the development and advancement of various educational systems and the improvement of various aspects of the educational process. Given this significant change in modern teaching methods compared to what they were in the past, which is due to the rapid technological development characteristic of this stage, The computer is one of these modern methods of education due to its capabilities to facilitate and improve the accuracy of the educational process. We can also say that the term technology means the application of modern scientific theories to various aspects of life to achieve progress and prosperity for peoples. It can also be said that the word technology means the art of science in improving performance and achieving the desired results with precision, calculated speed, and at the lowest cost (Abd Al Halim Sharaf, 2000, p. 17).

In other words, if a person wants to achieve a certain goal, they use a set of knowledge, skills, and techniques, with the help of various tools and devices, in order to reach their desired objectives. They use modern technology. From this, we can say that technology is the scientific application of the products of thought and scientific research, of what humans produce or invent in the field of material culture or related knowledge, experience, and material capabilities, in order to serve humans and improve their use, understanding, and development of human, material, and informational resources (Darwish, 2009, p 19).

Hussein Kamel Bahaa El Din summarizes that technology is a way of thinking, performing, and solving various problems, and is not merely the possession of equipment (Nour El Din Zamam, Sabah Slimani, 2013, p 165).

In addition, the use of technology requires, first and foremost, the knowledge that its users acquire through scientific and technical training, as well as the infrastructure of advanced facilities and equipment (Sahaint Al-Miloud, 2017, p. 46).

The term technology is a comprehensive term for all fields, including education, which McKinsey defined as the systematic study of the means used to achieve educational goals (Laila Al Sayed Farhat, 2001, p. 76).

There is no doubt that the development of educational systems was the result of the application of technology using computers, the Internet, and various media, which helps to bring together and speed up the understanding of different types of knowledge, motivate learners, and draw their attention to different types of knowledge and motor skills. Considering that physical education and sports classes are one of the subjects in the Algerian educational system, they have educational and teaching objectives from various aspects, whether sensory, motor, cognitive, emotional, or psychological. Enayat Muhammad believes that the main

objective of physical education and sports classes and lessons is to contribute effectively to the development of a well-rounded personality that forms the backbone of a developed society (Enayat, 1998, p 11).

Therefore, we must follow the latest scientific methods and modern and contemporary studies in order to achieve maximum benefit, as the use of modern technology in the educational process is the best and most reliable way to achieve the various objectives of physical education and sports classes. Handball is a team sport that uses a ball and is very popular worldwide. Many consider it to be a derivative of soccer, as it is a fast-paced and exciting game that combines many techniques and skills such as catching, jumping, shooting, and running in the shortest time possible. Competitions are held in various halls or in open-air stadiums (Subhi Ahmad Qublan, 2012, p. 63).

Handball is unique in that it is played with the hands at high speed while performing various skills. The importance of using educational technology lies in developing the educational process to activate its fundamental role by investing in the technical capabilities of computer-based educational technology, which is considered the foundation and cornerstone of the coming information revolution (Asma Aziz Fateh, 2018, p. 2).

1. Research problem:

By reviewing previous studies and their findings in our field of study, and based on the recommendations of those studies to overcome the difficulties faced by students during traditional teaching methods, the researcher seeks to take advantage of modern technological methods of learning. We therefore pose the following question: Does the use of modern educational technology have an impact on some basic skills (dribbling, passing, and shooting from a stationary position) in handball for students in the final stages of secondary education?

1.1 Specific Questions:

1.1.1 Are there statistically significant differences between the pre- and post-tests of the experimental group in the level of basic skills performance (dribbling, passing, shooting from a stationary position) in handball in favor of the post-test?

1.1.2 Are there statistically significant differences between the pre- and post-tests of the control group in the level of performance of basic skills (dribbling, passing, shooting from a standstill) in handball in favor of the post-test?

1.2 Hypotheses

1.2.1 General Hypothesis:

Does the use of modern educational technology have an impact on certain basic skills (dribbling, passing, shooting from a stationary position) in handball for students in the final years of secondary education?

1.3 Specific Hypotheses:

1.3.1 There are statistically significant differences between the pre- and post-tests of the experimental group in the level of performance of basic skills (dribbling, passing, shooting from a standstill) in handball in favor of the post-test.

1.3.2 There are statistically significant differences between the pre- and post-tests of the control group in the level of performance of basic skills (dribbling, passing, shooting from a stationary position) in handball in favor of the post-test.

1.4 Importance of the study:

The importance of the current research is evident in the following points:

1.4.1 Drawing the attention of those responsible for the educational process to the importance of using modern technological means in the field of education and teaching.

1.4.2 Helping physical education and sports teachers reduce the effort and time required during the teaching process, overcome the problem of increasing numbers of learners, and create a new atmosphere characterized by excitement and enthusiasm on the part of students.

1.5 Study objectives:

To identify the impact of using modern educational technology on learning some basic skills (dribbling, passing, shooting from a stationary position) in handball for students in the final years of secondary education.

1.6 Definition of concepts and terms:

1.6.1 Modern educational technology: The concept of educational technologies (educational technology refers to the organization of the teaching and learning process and the conditions related to it, as distinct from the concept of educational techniques, which refers to the organization and comprehensive development of the educational system, the effects of which extend to curriculum development, textbook authoring, the availability of educational resources, training of educational staff, school buildings, and the search for and application of the best teaching and learning strategies in the educational process. (Al-Hila, 2001, p. 6).

These are all the modern processes, techniques, and methods used in football training to improve players' skills and achieve better results.

Modern technological means include all modern methods, tools, and devices used in the training process to achieve the best quality of sports training, such as electronic vests, technical analysis devices, training load monitoring devices, and means of measurement and physical, technical, and physiological testing. (ben harkat.rafik kaia2025.p2).

1.6.2 Basic motor skills: These are movements that individuals perform in their normal daily lives, which are necessary for living and include walking, jumping, hopping, hanging, climbing, crawling, running, and throwing. All these movements are called basic, natural, innate motor skills. Sports motor skills, on the other hand, require a specific method of performance (technique) that is governed by rules and regulations, such as organized games in soccer, basketball, and volleyball. Individual games (Bastwisi, 1996, p. 42) .

are also considered one of the main pillars, as they are the basis of the game, and without mastering them, players cannot perform the duties of their positions in the various lines of play (Muzari, Fateh, et al., 2017, pp. 11-12).

1.6.3 Secondary education: The middle stage of general education, preceded by basic education and followed by higher education in most developed and developing countries alike. It corresponds to the 16-18 age group and is mentioned in the draft secondary education structure developed by the Ministry of Education in March 1992. It consists of seven branches with scientific, literary, and technological orientations appropriate to the nature of the scientific education provided. This type of education is called "general and technological secondary education" (Abdul Razzaq Fayed et al., 2021, p. 07).

1.6.4 Handball: Handball is a team sport played with a medium-sized ball using only the hands on a rectangular court with right angles. Each handball team consists of 12 players, of whom only 7 are on the court at any given time. A handball match lasts 60 minutes, divided into two halves of 30 minutes each, with a 10-minute break between halves (Jalti Tayeb, 2017, p. 113).

Mohamed Sobhi Hassanein and Mahdi Abdel Moneim emphasize that basic skills are the movements that players must perform in all circumstances and situations required by the game to achieve the best results while conserving energy (Mohamed Sobhi Hassanein and Hamdi Abdel Moneim, 1988, p. 153).

Therefore, skills are one of the basic components and an important factor in implementing plans and deciding the outcome of a match. Without a high level of skill mastery, it becomes difficult to implement

plans, making it difficult for players to perform as required. Skills, in turn, affect the physical and tactical abilities of players (Zaki Muhammad Muhammad Hassan, 1989, p. 15).

It is the latest team sport characterized by speed and excitement. Competition in this sport requires considerable physical abilities and specific morphological characteristics, as it combines running, jumping, passing, receiving, and shooting in the shortest time possible. The game is played in indoor halls or outdoor courts. (Abdel Rahim Marazqa, Nour al-Din Ghanam. 2024p151).

1.7 Previous studies:

1.7.1 Mustafa Nawasser's study (2021) entitled "The Impact of a Proposed Educational Program Using Modern Technology (Kenovia Programming as a Model) to Improve Certain Basic Skills (Passing, Receiving, and Shooting) Among School Handball Players During the Coronavirus Pandemic." This study aimed to investigate the impact of a proposed educational program using modern technology during the coronavirus pandemic, using Kinovia programming as a model for school handball players for the 2020/2021 academic year. The researcher used an experimental approach to verify the study's hypotheses. The study sample consisted of 14 handball players for school sports, who were selected deliberately. The data collection tools consisted of field tests, and the researcher found statistically significant differences between the pre- and post-measurements of the passing and receiving skills of school handball players, as well as statistically significant differences between the pre- and post-measurements of the shooting skills of school handball players .

1.7.2 A study by Abdullah Marzi Owaid Al-Anzi (2022) entitled "The Impact of Educational Platforms on Learning Some Basic Skills in Handball," which aimed to design an educational program using Edmodo educational platforms to teach basic handball skills. The researcher used an experimental approach with two groups, one experimental and the other control, using pre- and post-testing, which was appropriate for the nature of this research. The research sample was selected using a random sampling method for the academic year (2020-2021). The research sample consisted of 50 students, who were divided into two groups, one experimental group of 25 students and one control group of 25 students. Twenty students were also used as a preliminary sample. The most important results were the effective impact of teaching handball skills using educational platforms. The educational platforms helped provide students with their test results, which increased their understanding and comprehension. Students tended to prefer free learning using educational platforms.

1.7.3 A study by Abdul Razzaq Fayed et al. (2021) entitled “The Impact of Using Modern Technology in Learning Basic Motor Skills in Volleyball,” which aimed to determine the impact of using modern technology in learning basic motor skills in volleyball among secondary school students. The experimental method was adopted by designing a control group and an experimental group. The study was applied to a sample of 37 students (23%) studying in secondary school, who were selected at random. It was found that the use of modern technology has a significant positive effect on the learning of motor skills among students.

1.7.4 A study by Jalti Al-Tayeb entitled “The Impact of Semi-Sports Games on Learning Basic Handball Skills Among Male Youth,” which aimed to determine the impact of semi-sports games on learning basic skills (passing, receiving, dribbling, and shooting) in handball among adolescents. The hypothesis of the study was that semi-athletic games have a positive effect on learning some basic skills in handball among male adolescents. After presenting, analyzing, and discussing the results of the study, and in light of the research results and within the limits of the estimated research sample of 32 players, the researcher concluded that the proposed training program using semi-athletic games achieved positive development in the post-test results between the control and experimental groups, in favor of the experimental group. The researcher concluded that the proposed training program using semi-athletic games had an effect on the development of some basic skills (passing, receiving, dribbling, and shooting) in the research sample.

Applied aspect:

2. Methodological and field procedures

2.1 Methodological methods used: Methodology is the approach taken by researchers to achieve their objectives, and research methodology varies according to research objectives. For this reason, there are several types of scientific methodologies. In this study, I relied on an experimental design (pre-post) for two independent groups: an experimental group and a control group, in line with the nature of the research.

2.2 Research sample: The study was conducted on a sample of 20 students selected intentionally, representing 19% of the final year students at Abdel Rahman Al-Disi High School in Bou Saada in the second semester of the academic year (2024-2025). The primary research sample consisted of 42 students out of 220 (research population), representing 19% of the total. Eight sick students were excluded, and 14 students were used in the exploratory study, bringing the number of the main research sample to 20 students, divided into two equal groups, one experimental and the other control, each consisting of 10 students.

2.3 Fields of study:

2.3.1 Human field: Students in the final year of Abdel Rahman Al-Disi High School – Bou Saada –

2.3.2 Spatial field: 2.3.2 Spatial setting: The high school playground, where both groups (experimental and control) were subjected to the same conditions, i.e., the same playground and the same teacher.

2.3.3 Temporal field: 2.3.3 Time frame: From February 23, 2025, to April 20, 2025 (09 sessions) for each group. For the control group, the session was conducted in the traditional manner, while for the experimental group, the group first watched a series of educational videos with explanations, and then learned the skills.

2.3.4 Research sample and how to select it:

In order to ensure the homogeneity of the samples, I took a series of measurements (height, age, weight) for all members of the sample before dividing them into two groups, an experimental group and a control group, in order to determine whether there were any differences that might affect the study.

The following table shows the characteristics of the study sample:

Variables	Unit of measurement	Arithmetic mean	Coefficient of variation
Height	Centimeters	171.60	0.82
Weight	Kilograms	58.32	0.79
Age	Years	17.27	1.14

Prepared by the researcher using the results of the SPSS program

The results of the previous table show that all torsion coefficient values in the variables (height, weight, and age) were between (0.79 and 1.14) they were within the range of (-2 to +2) This indicates the homogeneity of the research sample in the variables (height, weight, and age).

2.3.5 Tools for collecting information and data: I used the following tools:

- Tests and measurements
- Handballs
- Handball court
- Official whistles
- Measuring tape - Adhesive tape to mark the start and end points of the tests
- Laptop computer
- Device for measuring height and weight - Digital stopwatches

- 25 cm measuring squares for accuracy tests.
- CDs

2.3.6 The tests used in the research are:

2.3.6.1 The first test (continuous bouncing of the ball in a zigzag pattern for a distance of 30 meters).

The aim of the test: to measure the level of bouncing.

❖ Test implementation procedures:

Tools: handball – 10 cones – chronometer – recording form.

Test procedure: Seven cones are placed on the ground in a straight line, with a distance of two meters between each cone, and a start and finish line is drawn at a distance of 3 meters from the first cone. The student stands behind the starting line and, when the signal is given, bounces the ball while running in a zigzag pattern between the cones back and forth until reaching the finish line.

Registration method:

The time recorded is calculated from the moment the player starts until they cross the finish line.

2.3.6.2 Second test (passing speed from a distance of 05 meters).

The aim of the test is to measure coordination and handling speed on the wall.

Tools used: Handball - Stopwatch - Recording form - Wall

❖ Test implementation procedures:

Test procedure: The test taker stands 5 meters away from the wall and passes the ball to the wall as many times as possible within a specified time of 30 seconds.

Recording method: The number of passes within the specified time is counted, counting the number of times the ball is received without falling to the ground.

2.3.6.3 Test 3 (shooting test from a fixed position).

The aim of the test is to measure shooting accuracy.

Equipment used: Handballs, handball goals, four iron goals measuring 25 x 25 cm suspended at the four corners of the handball court, whistle.

How to perform the test: The student stands behind the 6 m line holding the ball in his hand. When the signal is given, the student shoots at the square targets hanging at the corners of the legal goal in parallel, starting from the upper right corner, then the upper left corner, then the left corner, then the lower right corner, then the lower left corner, and repeats the performance twice.

Scoring method: One point is awarded for each shot inside the designated square, zero points if the ball is outside the square, if the student moves the foot on which he is standing, and zero points if the shot is not taken within the legal time.

2-3-7 Scientific basis of the test:

Validity of the test: After selecting the videos and assessing their success in my study, they were shown to a group of three professors who are experts in the field of handball. They confirmed the validity of the tool for the purpose for which it was designed, and therefore this is considered valid content. After recording the data for the research sample through conducting a ball bounce test, a passing speed test, and a shooting test from a stationary position, and entering it into forms, the research sample was divided into two experimental groups, one of which was taught using modern technology, and a control group that was taught using traditional methods to explain the various motor skills under study. These classes began with an achievement assessment using the aforementioned tests, followed by a total of six classes for each group, and then ended with a final assessment using the same tests.

3. Presentation, interpretation, and discussion of results:

3.1 Display the results of the first hypothesis:

Presentation and analysis of the results of the first hypothesis: Are there statistically significant differences between the pre-test and post-test scores of the experimental group in terms of basic skills performance (ball bouncing, passing, and shooting from a stationary position) in handball in favor of the post-test?

Table 2: Significance of differences between the pre-test and post-test scores of the experimental group in basic skills tests (dribbling, passing, shooting from a stationary position).

Variable s	Tests	Unit of measureme nt		Pre-test measureme nt	Post-test measureme nt		(T) calculate d	(T) schedule d
			Arithmet ic mean	Standard deviation	Arithmetic mean	Standar d		

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						deviatio n		
Ball bounce	Zigzag bounce for a distance of 30 meters	Second	18.91	1.12	14.11	0.73	6.13	2.264
Passing	Passing and receiving the ball off the wall for 30seconds	Number of times and success rate of passing and receiving	22.80	2.80	28.97	2.89	6.23	2.264
Shooting from a stationary position	Shooting at the goal	Number of times	4	0.83	6.80	1.01	5.04	2.264

Prepared by the researcher using the results of the SPSS program

At a significance level of 0.05 and a degree of freedom of 9

3.1.1 Interpretation of results:

Discussion of the results of the first hypothesis, which states that "there are statistically significant differences between the mean pre-test and post-test scores of the experimental group in favor of the post-test in learning some basic skills (bouncing the ball – passing – shooting from a set position) in handball in favor of the post-test." The results in Table (02) show the following:

For the test of bouncing the ball in a zigzag pattern for a distance of 30 meters, the calculated t-value was (6.13) in the pre- and post-tests, which is greater than the tabulated t-value at the 0.05 level (2.264), indicating statistically significant differences between the pre-test and post-test averages in favor of the post-test.

As for the second test, which is the test of passing and receiving the ball from the wall inside the rings for 30 seconds, the calculated value (t) reached (6.23) in the measurement (pre- and post-test), which is greater than the scheduled value of " t " at a significance level of 0.05 (2.264), indicating statistically significant differences between the pre- and post-measurement averages in favor of the post-measurement.

As for the third test, which is the accuracy test of shooting from the base within the targets set in the goal, the calculated t -value (5.04) in the pre- and post-tests is greater than the tabulated t -value at a significance level of 0.05 (2.264), indicating statistically significant differences between the pre- and post-measurement means in favor of the post-measurement.

By reading the results obtained from Table 2, which shows the differences between the pre- and post-tests of the experimental group in basic skills tests (ball bouncing, passing, and shooting from a stationary position), showed that there were statistically significant differences between the pre- and post-tests of the experimental group in learning basic handball motor skills in favor of the post-test, which is attributed to the effectiveness of the computer-based educational program content and the clarity of the students' vision of the model performance by the photographed model of one handball players, in addition to the set of exercises designed to develop basic handball skills (under investigation), which led to an improvement in the motor performance of the motor skills studied, in addition to the element of excitement inherent in this method of teaching, especially since we used a projector to introduce new stimuli in the learning process and engage all their senses during learning, stimulating their motivation during learning and making it as close to reality as possible, which makes the educational learning process easier and more enjoyable for students. This is in line with the findings of a study by Mustafa Nawasser (2021) Under the title "The Impact of a Proposed Educational Program Using Modern Technology (Kenovia Programming as a Model) to Improve Certain Basic Skills (Passing, Receiving, and Shooting) among school handball players during the coronavirus pandemic, the researcher found statistically significant differences between the pre- and post-measurements of passing and receiving skills among school handball players and statistically significant differences between the pre- and post-measurements of shooting skills among school handball players. Another study by Abdul Razzaq Fayed et al. (2021) examined the impact of using modern technology in learning basic motor skills in volleyball. This study aimed to determine the effect of using modern technology in learning basic motor skills in volleyball among secondary school students. They concluded that the use of modern technology has a significant positive effect on students' learning of motor skills.

This confirms the first hypothesis, which states that "there are statistically significant differences between the pre- and post-test average scores of the experimental group in favor of the post-test in learning some basic skills (dribbling, passing, and shooting) in handball for students in the final years of secondary education ."

3.2 Display the results of the second hypothesis:

Presentation and analysis of the results of the second hypothesis: Are there statistically significant differences between the pre- and post-tests of the control group in the level of performance of basic skills (dribbling, passing, and shooting from a stationary position) in handball in favor of the post-test

Table 3: Significance of differences between the pre- and post-tests for the control group in basic skills tests (dribbling, passing, shooting from a stationary position).

Variables	Tests	Unit of measurement		Pre-test measurement	Post-test measurement		(T) calculated	(T) scheduled
			Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation		
Ball bounce	Zigzag bounce for a distance of 30 meters	Second	17.19	1.12	15.33	0.68	3.17	2.264
Passing	Passing and receiving the ball off the wall for 30seconds	Number of times and success rate of passing and receiving	23.03	2.57	25.60	2.43	3.67	2.264
Shooting from a stationary position	Shooting at the goal	Number of times	4.30	0.70	6.10	1.53	2.49	2.264

Prepared by the researcher using the results of the SPSS program

At a significance level of 0.05 and a degree of freedom of

3.2.1 Interpretation of results:

Discussion of the results of the second hypothesis, which states that "there are statistically significant differences between the mean pre-test and post-test scores of the control group in favor of the post-test in learning some basic skills (dribbling the ball, passing – shooting from a stationary position) in handball in favor of the post-test." The results of Table (03) showed the following:

For the zigzag dribbling test over a distance of 30 meters, the calculated t-value was 3.17 in both the pre-test and post-test, which is greater than the tabulated t-value at the 0.05 level (2.264), indicating statistically significant differences between the pre-test and post-test averages in favor of the post-test.

As for the second test, which is the test of passing and receiving the ball from the wall inside the rings for 30 seconds, the calculated value (t) reached (3.67) in the measurement (pre- and post-test), which is greater than the scheduled value of "t" at a significance level of 0.05 (2.264), indicating statistically significant differences between the pre- and post-measurement averages in favor of the post-measurement.

As for the third test, which is the accuracy test of shooting from the base within the targets set in the goal, the calculated t-value (3.49) in the pre- and post-tests is greater than the tabulated t-value at a significance level of 0.05 (2.264), indicating statistically significant differences between the pre- and post-measurement means in favor of the post-measurement.

By reading the results obtained from Table 3, which represents the significance of the differences between the pre- and post-tests of the control group in the basic skills tests (ball bouncing, passing, and shooting from a stationary position), it appears that there are statistically significant differences between the pre- and post-tests of the experimental group in the level of learning basic handball motor skills in favor of the post-test. The researcher attributes these significant differences between the pre- and post-test averages in the level of performance of some basic skills and cognitive achievement in handball under study to the control group to the fact that the traditional teaching method is based mainly on verbal explanation of knowledge, information, and related skills, demonstration of skills, trial and repetition by students, and then correction of mistakes by the teacher. This provides and helps students to form the correct image of those skills and continuously helps them to have a good opportunity to learn, which in turn has a positive effect on motor and skill learning for various motor skills. . Physical

education and sports teachers in educational institutions have sufficient experience in the learning process, which is reflected in their teaching of new skills in the selection of physical exercises specific to the skill.

alsaiid alsaiid Ibrahim et al. (2024) point out that one of the best ways to teach skills is for the teacher to demonstrate the skill and explain it, showing a picture of it. The degree to which players perform the skill depends on the teacher's ability to explain the art of performing the skill accurately and correctly in terms of the correct positions of all parts of the body during the teaching process. (Al-Sayed Al-Sayed Ibrahim et al., 2024, p. 110).

This is consistent with the results of a study by Abdul Rahman Muhammad (2020), who pointed out that the traditional method used with the control group, which relies on verbal explanation and practical demonstration, led to the learners' positive understanding and learning of motor skills.

This confirms the second hypothesis, which states that "there are statistically significant differences between the mean pre- and post-test scores of the control group in favor of the post-test in learning some basic skills (dribbling, passing, and shooting) in handball for students in the final grades of secondary education."

It can be seen from Tables 2 and 3 that there are statistically significant differences between the experimental and control groups in the pre- and post-tests of basic skills (dribbling, passing, and shooting) in favor of the experimental group. This is due to the impact of using modern educational technology in the educational process, which includes the ease of presentation and accuracy of information, knowledge, and motor skills related to the basic skills studied. This helped achieve the lesson objectives by stimulating the students' interest and motivating them to make an effort in learning and interacting in situations and various training workshops and not feeling bored.

This confirms the general hypothesis that "the use of modern technology has an impact on the learning of some basic skills (dribbling, passing, and shooting) in handball for students in the final stages of secondary education."

3. 3 General conclusions:

In light of the research objectives and hypotheses, and within the limits of the research sample and its characteristics, and in accordance with the results of the statistical analysis, I was able to reach the following conclusions:

- ❖ The results show that modern learning technology had a significant and effective impact on the development of motor performance of basic handball skills among secondary school students. By comparing the pre- and post-measurements of the experimental group, it is clear that the differences were statistically significant in favor of the post-measurement, indicating that the technology-based educational program was not merely an aid, but a tool that led to an actual improvement in skill level.

This improvement is attributed to the fact that the use of technology in education -such as video analysis, simulation programs, and immediate feedback -helps students correct mistakes more quickly and understand the details of motor performance with greater accuracy, which was reflected in:

1. Increased speed of performance in dribbling skills

This indicates an improvement in motor-visual coordination and the student's ability to control the ball while moving, which increases their efficiency in real-world performance within the game.

2. Improved passing accuracy

This is evidence of improved control over the power and direction of movement, indicating better cognitive-motor skills acquired through technology-guided repetition.

3. Decreased error rate in shooting skill

This is related to students receiving accurate feedback on error points, which led to performance adjustments and more proficient execution.

Statistically, the calculated value of $t = 6.13$, which is much higher than the tabulated value of 2.264 at a significance level of 0.05, confirms that the improvement achieved is not random but is a direct result of the use of educational technology.

This result indicates a strong impact of the training program, as the high value of t shows that the differences between the two measurements are large and significant, which enhances the reliability of the results.

Based on this, it can be said that modern learning technology has clearly contributed to raising the level of motor performance and improving the quality of skill learning among learners, compared to traditional methods.

- ❖ The results indicate that the traditional program based on verbal explanation and practical

demonstration had a positive effect on the performance level of some basic handball skills among final-year students. A comparison between the pre- and post-tests of the control group showed statistically significant differences in favor of the post-test, which means that the traditional program actually contributed to improving the students' skill performance.

This improvement is due to the fact that traditional methods—especially direct explanation, verbal guidance, and modeling—help students understand the basic steps of the skill and give them a clear picture of the correct way to perform it, in addition to providing repetition and practical practice that enhances skill acquisition.

This was reflected in the results through:

- 1- Improved performance speed in ball bouncing skills , indicating that students acquired better ball control during movement.

Improved passing accuracy

This indicates an increased ability to direct the ball correctly and reduce errors resulting from execution.

- 2- Lower error rate in shooting skills

This reflects better understanding of movement patterns and greater coordination between the eyes, arms, and feet during shooting. Statistically, the calculated t-value in the 30-meter zigzag dribble test was: Calculated $t = 3.17$

Table $t = 2.264$ at a significance level of 0.05

Since $3.17 > 2.264$, this confirms that the differences between the pre- and post-measurements are real and not due to chance, which supports the effectiveness of the traditional program in improving performance.

Although the improvement was clear, the size of the t-difference (3.17) indicates that the effect is of moderate strength compared to programs based on modern technology, which often show larger t-values and therefore a stronger effect.

- ❖ Our study has shown that traditional techniques for learning various motor skills involve providing direct training methods based on practical explanation, repetition, and immediate guidance from the teacher, which helps students acquire the basics clearly and gradually. The

traditional method also contributes to enhancing direct communication between the teacher and the learner and supports motor interaction in the field. In contrast, learning through modern technological techniques (educational videos) has shown a greater positive impact, as it provides advanced educational tools such as analytical videos and training applications, allowing learners to review their performance with high accuracy and quickly correct mistakes. and improve the quality of the educational process by providing immediate and objective feedback. Although both types of technology have a positive impact on learning handball skills, methods based on modern technology are more effective due to their ability to significantly improve learning accuracy and accelerate skill acquisition.

- Summary:

Through our study, which included various skill tests and statistical analysis related to our study hypotheses, and through what was presented in the theoretical background and previous studies, and through the study of modern educational technology and its impact on learning basic motor skills (ball bouncing, passing and shooting from a stationary position) in handball among students in the final years of secondary education, which are considered the objectives of the study, we have reached the following conclusions: . Modern technology (videos, projectors, computers) has a positive effect on motor learning of various motor skills in general and the learning of basic motor skills in handball in particular.

The use of technology (images, videos, motor analysis programs) helps teachers achieve their objectives to a large extent, as it attracts students' attention and engages all their senses during the explanation. These tools play an exciting role in stimulating learners and generating their desire and eagerness to learn.

Future prospects:

- 1- The need to use modern educational technology in physical education and sports lessons at various educational levels..
- 2- The need to use modern educational technology in learning and mastering various motor skills in handball.

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