The effectiveness of using a guideline supported by a quick response code to learn some skills Offensive Handball for Students of the Faculty of Physical Education

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Introduction and problem of research:

Physical education has multiple objectives, the most prominent of which is to train students to raise the level of various skills and provide them with information, knowledge and positive trends related to handball skills, and since handball is a team sport that needs to apply modern scientific methods to achieve its goals, whether in the selection of beginners or in the method of learning skills, so attention must be paid to teaching the correct performance methods of basic skills, as it is the first thing that an individual needs to learn in sports that will specialize In it, since not mastering these skills and recognizing their principles will not reach a high level, hence the importance of skills and the accuracy of their performance (16:67) (12:17).

The courses and their teaching at the undergraduate level in recent years have witnessed a clear and tangible development that included changing the angles of view to the courses and making them electronic and teaching through e-learning systems in addition to direct teaching within the corridors of the university in order to make the courses available to students at all times and places and take advantage of the available technological potential.

The interest has increased recently on the part of specialists in the field of education in e-learning as a system of education that helps solve some of the problems facing ordinary education that has not been characterized by special features that have made it a reliable system in solving the problems of regular education, so universities have tended to develop the educational process through the establishment of an e-learning system that goes aside with regular learning, and has also sought to develop courses in the light of the quality standards of online courses To achieve the quality of student preparation (3: 162).

Mobile learning has spread rapidly and superiorly, and in the recent period there have been many institutions of its design, development and use, and the demand for it has increased after the development of web services and increasing their speed and sizes and expanding the circle of availability, as well as Internet packages through the harmony of different telecommunications companies in order to provide a fast service and at the lowest cost, in addition to the rapid successive developments of smartphones with their different tools and applications, which prompted educational and training institutions to more using Mobile learning and training services(2).

Kapsalis 2017 indicates that the QR Code belongs to the category of web applications and has come after the linear code "Bar Code" and is considered more advanced and sophisticated than it and the QR Code is characterized by the easy of reading the encrypted data through its reader or through a program on mobile phones where all kinds of many and complex data are downloaded and called with easy, and then QR codes can be produced for both Internet addresses, e-mail sites, texts, SMS, photos and videos (21) .

QR Codes can be placed in the context of mobile learning.These square-form codes can contain information, such as written text, address to websites or any other data. To decipher the QR Code, users must have a mobile device equipped with a camera and code reading software in order to perform the QR code scanning process(23).

Both Gray and Deborah (2002) point out that the QR Code offers great potential by integrating it into the curricula and so the trend has been to reform education in America by integrating technology into the educational process since the beginning of the twentieth century, where the development focused on learner-centered education by relying on collaborative learning and open source learning environments focused on students, enabling them to choose their learning content and providing multiple ways to clarify concepts. As for contextual learning, it enables students to better understand what they are learning, so when students participate in context it becomes easier for them to hope for content (20:1-14).

Mohammed Al-Walili" (2001) considers that the handball field is one of the sports fields that has been greatly positively affected by the development and modernization of the methods and methods of education, training and preparation of young people (13 :25).

Since handball is a team sport that needs to apply modern scientific methods to achieve its goals, whether in the selection of beginners or in the method of learning skills, so attention must be paid to teaching the correct performance methods of basic skills as they are the first thing that the individual needs to learn in the sports in which he will specialize as the lack of mastery of those skills and the recognition of their principles will not reach a high level and hence the importance of skills and the accuracy of their performance.16 67)(12: 17).

The handball curriculum is one of the basic and important curricula that are taught to the students of the faculties of physical education, where the skills of offensive handball are taught and applied using any of the teaching methods or learning methods that lead to the achievement of the desired cognitive, skill and emotional goals, and currently there is a strong desire from most researchers to experiment with modern teaching methods and methods, which have spread significantly as a result of scientific and technological development in all fields, including the educational field and those methods that have emerged Newly it is learning using a QR Code which is based on the learner's positivity.

Through the work of the researcherWen and his participation in the teaching of handball he noticed some of the shortcomings of the students' performance of some of the offensive skills in handball and their lack of understanding of the motor infiltration of the learned skills and their lack of awareness of the working parts of the body during the performance of those skills and this may be due to the fact that most of those who teach handball use the usual method of teaching (the method of explanation and performance of the model) where the teacher explains verbally and performs a model For the learned skill, the students imitate the model and performance, in addition to that most of the university books and courses used by the students of the college are in the form of printed texts and supported by some pictures and drawings only, especially that the handball course contains many practical skills that need clarification and performance of a practical model of the skill so the researcher saw Overcoming this problem may be by exploiting the students' passion and love for technology in general and the possibility of employing it in particular during mobile learning using mobile devices and using QR Codes in order to raise the skill level of students in some of the offensive skills in handball, especially after many studies have proven the importance of using the rapid response code in the educational process through his work as a technological medium linking paper book and media. Multiple-prepared so that the student can use it inside the lecture by watching the method of performance of the skill and educational steps more than once as well as using it outside the lecture at the time of exercise and study.

Research Objective:

This research aims to find out the effect of the QR code on learning some offensive skills in handball (passing and receiving - shooting) and the cognitive achievement of the students of the first band at the Faculty of Physical Education - Minya University.

Research Assignments:

1- There are statistically significant differences between the average scores of the pre- and post-measurements of the experimental group in learning some offensive skills in the handball under research and in favor of telemetry.
2- There are statistically significant differences between the average scores of the pre- and post-measurements of the control group in learning some offensive skills in handball under consideration and in favor of telemetry.
3- There are statistically significant differences between the mean scores of the two dimensional measurements of the experimental and control groups in learning some offensive skills in handball under research and in favor of the experimental group.

Search terms:

QR Code" (Procedural Definition)

"It is a code or code consisting of digitally arranged dots or lines stored in a square form where it can be read by a device and software specially designed to read those types of symbols, and this code carries the information inside it in the form of (files, text, image, video or link)."

Search Procedures:

Research Methodology:

Researcher Wen used the experimental approach to suit the nature of the research using the experimental design of two groups that they found experimental and the other controlled, following the pre- and posterior Q of each.

Community and Research Sample:

The research community included the students of the first group at the Faculty of Physical Education, Minya University, in the second semester of the academic year 2020/2021, numbering (307) students, and the researchers selected a random sample of (60) sixty students from the total research community who were divided into two equal groups of (30) thirty students each, an experimental group using the educational program prepared using the QR Code A control group will use the tutorial using the traditional method (verbal explanation and modeling).

Moderation of sample distribution:

The researchers ascertained the extent to which the frequency distribution of the two research groups was moderate in growth rates (age, height, weight), physical tests, skill tests and tables (1 and 2) illustrate this.

Table (1)

Arithmetic and median average, standard deviation, torsion coefficient of growth rates and physical tests The skills under consideration for the basic and exploratory research sample (n = 100)

Variables		Unit of Measurement	Average	Medain	Standard deviation	Torsion coefficient
Growth rates	Age	year	18.51	18.55	0.35	-0.34
	Length	poison	163.46	164.00	4.85	-0.33
	Weight	kg	62.28	62.00	5.76	0.15
Physical tests	“ 50” yards sprint	second	14.20	14.37	1.97	-0.26
	Running in Form 8	second	22.06	22.01	2.35	0.06
	Sitting from lying down at "30 s"	number	14.52	14.00	3.24	0.48
	Hand aiming at overlapping circles	degree	7.35	7.00	2.56	0.41
	Fleischman's zigzag running	second	24.62	24.60	2.97	0.02
Skill tests	Scrolling and receiving at "30 s"	number	9.70	9.00	2.84	0.74
	Scroll and receive on the rectangle	number	8.64	8.00	2.56	0.75
	Jump on a specific target square size "60 × 60 s"	number	2.39	2.00	1.17	1.00

Table 1 shows **the following:**

The values of the torsion coefficient of growth rates and the physical and skill tests under consideration for the basic and exploratory research sample were limited to (1.0 0, -0.34) and all of them were limited to (+3, -3), indicating the moderation of the distribution of the basic and exploratory research sample in those variables.

Table (2)

Arithmetic average, median, standard deviation and torsion coefficient of growth rates and tests Physical and skill under research for the experimental and control groups ($n_1 = n_2 = 30$)

Variables		Unit of Measurement	Experimental Group				Control Group			
			Average	Medain	Standard deviation	Torsion coefficient	Average	Medain	Standard deviation	Torsion coefficient
Growth rates	Age	year	18.44	18.50	0.37	-0.49	18.54	18.55	0.36	-0.08
	Length	poison	163.13	163.50	5.18	-0.21	163.93	164.00	4.47	-0.05
	Weight	kg	61.87	61.50	6.28	0.18	62.73	63.00	5.26	-0.15
Physical tests	“ 50” yards sprint	second	14.07	14.35	2.17	-0.39	14.27	14.40	1.92	-0.20
	Running in Form 8	second	22.33	22.06	2.24	0.36	21.98	22.06	2.50	-0.10
	Sitting from lying down at "30 s"	number	14.53	14.00	3.29	0.48	14.90	15.00	3.39	-0.09
	Hand aiming at overlapping circles	degree	7.30	7.00	2.58	0.35	7.17	7.00	2.40	0.21
	Fleischman's zigzag running	second	24.85	24.80	3.11	0.05	24.44	24.60	2.87	-0.17
Skill tests	Scrolling and receiving at "30 s"	number	9.90	9.50	2.86	0.42	9.60	9.00	3.02	0.60
	Scroll and receive on the rectangle	number	8.60	8.00	2.84	0.63	8.33	8.00	2.48	0.40
	BaloJump Aiming on a Specific Target Square Size "60 ×60s"	number	2.50	2.00	1.28	1.17	2.33	2.00	1.09	0.91

Table 2 shows the following:

The torsion coefficient values for growth rates and the physical and skill tests under consideration for the experimental group ranged from (0). 91, -0. 20), while the control group ranged between (1.17, -1.34) and all of them are limited to (+3, -3) indicating the moderation of the distribution of the basic research sample in those variables.

Equivalence of the two research groups:

The researchers found parity between the experimental and control groups in light of the following variables: growth rates and physical and skill tests under consideration and Table 3 shows this.

Table (3)

Significance of differences between the average scores of the two tribal measurements of the two groups Experimental and control in the variables under research (n_1 = n_2 = 30)

Variables		Unit of Measurement	Experimental Group		Control Group		m1. m2	The value of "T"
			Average	Standard deviation	Average	Standard deviation		
Growth rates	Age	year	18.44	0.37	18.54	0.36	0.10	1.04
	Length	poison	163.13	5.18	163.93	4.47	0.80	0.63
	Weight	kg	61.87	6.28	62.73	5.26	0.86	0.57
Physical tests	" 50" yards sprint	second	14.07	2.17	14.27	1.92	0.20	0.37
	Running in Form 8	second	22.33	2.24	21.98	2.50	0.35	0.56
	Sitting from lying down at "30 s"	number	14.53	3.29	14.90	3.39	0.37	0.42
	Hand aiming at overlapping circles	degree	7.30	2.58	7.17	2.40	0.13	0.20
	Fleischman's zigzag running	second	24.85	3.11	24.44	2.87	0.41	0.52
Skill tests	Scrolling and receiving at "30 s"	number	9.90	2.86	9.60	3.02	0.30	0.39
	Scroll and receive on the rectangle	number	8.60	2.84	8.33	2.48	0.27	0.39
	Jump on a specific target square size "60 × 60 s"	number	2.50	1.28	2.33	1.09	0.17	0.54

Tabular value (v) at degree of freedom (58) and significance level (0.05) = 1.671

Table 3 shows **the following:**

There are statistically insignificant differences between the experimental and control research groups in both growth rates and the physical and skill tests under consideration as all calculated values of (T) are less than the tabular value of (T) at the significance level (0.05), indicating their equivalence in those variables.

Means of data collection:

Researchers will not useone to collect databy the following means:

First: The set of devices and tools .

Restameter device to measure height in centimeters, weight in kilograms - stopwatch - core hand - cones - medical balls - handball field.

Second: The forms used in the research.

- **Data Registration Form Appendix (2)**
- **Expert Survey Form in Physical Tests Appendix (3)**
- **Survey Formfor Experts in Skills Tests Appendix (5)**

1. Physical Tests Supplement(4):

Scientific Parameters of Physical Tests under Research:

The researchers calculated the scientific transactions of the physical tests under research from honesty and stability in the period from Sunday 21/2/2021 to Wednesday corresponding to 24/2/2 021AD, as follows:

A. Honesty:

The sincerity of the physical tests was calculated by the sincerity of the terminal comparison on a similar survey sample to the research community and from outside the basic research sample and their number (40) students, and their scores were arranged ascending to determine the highest quarters and their number (10) students and the lower quarters and their number (10) students and the significance of the differences between the two quarters was calculated as shown in **Table (4).**

Table (4)

Significance of the differences between the highest and lower quarters

In sisterBarat the physical under research ($n_1 = n_2 = 10$)

Physical tests	Unit of Measurement	Top Quarters		Lower Quarters		M1 - M2	The value of "T"
		M1	P1	M2	P2		
" 50" yards sprint	second	16.45	1.07	11.75	1.34	4.7	8.22
Running in Form 8	second	24.98	1.44	19.52	1.7	5.46	7.35
Sitting from lying down at "30 s"	number	18.40	2.07	10.60	0.84	7.80	10.47
Hand aiming at overlapping circles	degree	11.20	1.32	4.50	0.71	6.70	13.41
Fleischman's zigzag running	second	28.41	1.09	20.91	0.94	7.5	15.63

Tabular value (v) at degree of freedom (18) and significance level (0.05) = 1.734

Table (4) shows that there are statistically significant differences between the upper and lower quadrants in the physical tests under consideration and in the direction of the higher quadrant group as the probability value of error is a function at the level of significance (0.05), which indicates the validity of the tests andits ability to distinguish between the groups.

B. Stability:

To calculate the stability of the physical tests under research, the researcher used the method of applying the test and reapplying it to a sample of (40) students from the research community and from outside the basic sample and with a time interval between the application and re-application of (3) three days, and table (5) Jshows the correlation coefficient between the application and thehabit of application.

Table (5)

Link coefficients between the application and the re-application

In the physical tests under research (n = 40)

Physical tests	Unit of Measurement	Application		Reapply		Correlation coefficient
		M1	P1	M2	P2	
" 50" yards sprint	second	**14.25**	**1.90**	**14.46**	**1.58**	0.92
Running in Form 8	second	21.91	2.36	21.68	2.68	0.93
Sitting from lying down at "30 s"	number	14.23	3.15	13.93	2.89	0.93
Hand aiming at overlapping circles	degree	7.53	2.70	7.78	2.17	0.94
Fleischman's zigzag running	second	24.58	3.00	24.80	2.96	0.97

Tabular value (t) at degree of freedom (38) and significance level (0.05) = 0.257

It is clear **from** Table (5) **A** n The correlation coefficient between the application and re-application of the physical tests under consideration has ranged between (0.92 : 0.97) and all of them are statistically significant correlation coefficients where the calculated values of (t) are greater than the tabular value (t) at the level of significance (0.05), which indicates the stability of those tests.

2. Skill Tests Appendix (6):

The researchers selected the skill tests for offensive skills in handball (passing, receiving, shooting) under research based on scientific references "Barzan Othman" (2017)(5), Medhat Qassem "(2016)(15), Mohamed Tawfik" (2001)(13), Kamal Abdel Hamid and Mohamed Sobhi (2001)(12), and previous studies as a study Ahmed Majid (2020)(1),"Mohamed Mahmoud (2021)(14), Noura Abdul Majeed (2021)(17) was presented to a group of experts from the faculty members of the faculties of physical education and specialists in the field of handball and have experience of at least ten years Appendix (1) They agreed that the tests that measure each of the skills and based on the above tests were determined:

- Test (passing and receiving in 30s).
- Test (scrolling and receiving on the rectangle)
- Test (jump on a specific target in a box size 60×60 cm.

Scientific Parameters of the Skill Tests under Research:

The researchers calculated the scientific transactions of the skill tests under research from sincerity and stability in the period from Sunday 21/2/2021 to Wednesday corresponding to 24/2/2 021 AD, as follows:

A. Honesty:

The sincerity of the skill tests was calculated by the sincerity of the terminal comparison on a similar survey sample to the research community and from outside the basic research sample and their number (40) students, and their scores were arranged ascending to determine the highest quarters and their number (10) students and the lower quarters and their number (10) students and the significance of the differences between the two quarters was calculated as shown in **table (6).**

Table (6)

Significance of the differences between the highest and lower quarters

In the testthe skills in question (n 1 = n 2 = 10)

Skill tests	Unit of Measurement	Top Quarters		Lower Quarters		M1 - M2	The value of "T"
		M1	P1	M2	P2		
Scrolling and receiving at "30 s"	number	13.30	1.57	6.40	1.17	6.90	10.57
Scroll and receive on the rectangle	number	12.20	1.23	6.10	0.99	6.10	11.59
Jump on a specific target square size "60 × 60 s"	number	3.80	0.79	1.10	0.32	2.70	9.50

Tabular value (v) at degree of freedom (18) and significance level (0.05) = 1.734

Table (6) shows that there are statistically significant differences between the higher and lower quadrants in the skill tests under consideration and in the direction of the higher quadrant group as the probability value of error is a function at the level of significance (0.05), which indicates the sincerity of the tests andits ability to distinguish between groups.

B. Stability:

To calculate the stability ofsister Barat Al-Maharia in question, the researchers used the method of applying the test and reapplying it to a sample of (40) students from the research community and from outside the basic sample and with a time interval between application and reapplication of (**3) three days,** and **table (7)** shows the correlation coefficient between application and reapplication.

Table (7)

Link coefficients between the application and the re-application In the skills tests under research (n = 40)

Skill tests	Unit of Measurement	Application		Reapply		Correlation coefficient
		M1	P1	M2	P2	
Scrolling and receiving at "30 s"	number	9.63	2.76	9.33	2.28	0.87
Scroll and receive on the rectangle	number	8.90	2.45	9.33	1.98	0.93
Jump on a specific target square size "60 × 60 s"	number	2.35	1.17	2.43	1.01	0.83

Tabular value (t) at degree of freedom (38) and significance level (0.05) = 0.257

It is clear from Table (7) that the correlation coefficient between application and re-application of the physical tests under consideration ranged between (0.83 : 0.9 3) and all of them are statistically significant correlation coefficients as the calculated values of (t) are greater than the tabular value of (t) at the level of significance (0.05), which indicates the stability of these tests.

Steps to design a guideline supported by aquick response code:

The researchers reviewed many scientific references and studies and came up with the model "Abdul Latif Al-Jazzar" (2014)(19), which consists of five main stages of building thecore of the guideline, which are as follows:

1- Analysis and study.
2- Design.
3- Production.
4- Calendar.
5- Usage .

First is the stage of analysis and study.

- **Setting the overall objective:**

This research aims to find out the effect of using rapid response codes on learning some offensive skills in handball for students of the first division of the Faculty of Physical Education by designing a guide using the QR Code.

- **Identify the communityof the research and its characteristics.**

The researchers identified and investigated the research sample of the students of the first teams at the Faculty of Physical Education – Minya University andthe researchers identified a number of characteristics of this sample, including:

- ✓ Sample members own smartphones.
- ✓ Continuous availability of the Internet network for the sample members.

- **Studyof educational resources and resources.**

The content of the manual is determined by the description of the Special Rapporteur of the first handball course.

- **Determine the content of the guidebook:**

The guide contains the practical part and is represented in the educational and technical steps :

- ✓ Holding the ball in the hands
- ✓ Receive high and low balls with hands.
- ✓ Carbageal pass of stability and movement.
- ✓ The pendulum pass of stability and movement.
- ✓ Carbaji aiming from jump up and long jump.
- ✓ BrotherI's common to the skills under research.
- ✓ Qualitative training of skills under research.

Second, the intrinsic stage:

At this stage, secret response codesfor digital sources are designed and prepared by:

- **Identification and knowledge of digital sources:**

This is done after the completion of the preparation and arrangement of the content of the guidebook by identifying all aspects of the content of the guide that need response codes to support them and facilitate the content for students, as well as the researchers have determined the quality of the digital resources used that will be used within the guide for students from the defect of the scanning process to the form of the quick answer code and these sources:

- ✓ Videos illustrating the steps of theYemeni and technical elevation of the skills under research.
- ✓ Word and PowerPoint files.
- ✓ Photos of the skills under research.

- **Design and output of quick response codes:**

The researchers designed shapes for quick response symbols that will be integrated into the content of the guidebook in order to suspense and excite the students.

Third: Production Phase:

At this stage, the researchers produced some digital sources, as well as the production of the QR code, and the technical output of the guideline supported by the QR code for the skills under research, and this was done according to the following steps.

- ✓ Produce some digital sources such as somefiles and WordPress as well as some videos and images.
- ✓ The researchers downloaded some digital sources to one of the download sites to get a link that could be converted into a quick response code.
- ✓ Some PowerPoint files have been prepared, set up and converted into a response code.

Production of the guideline and its artistic direction:

The researchers produced the guideline according to the content of the skills under research, and added quick response codes in the designated place in proportion to the explanation for clarification and support Appendix (7)

Fourth, Evaluation:

After the completion of the production of the guideline supported by the quick response code and its technical output, it was tried to become usable through the following steps.

- **Individual experimentation:**

The researchers experimented with the general guideline with the QR Code by reviewing it and using it many times to discover the capture of strength and weakness as well as to know the errors in it and address it, including formatting images, mixing in places of response codes with their own content.

- **Presentation to the arbitrators:**

The guideline supported by the QR Code was presented to a group of experts in the field of curriculum and teaching methods as well as the specialization of handball in the Faculty of Physical Education and Technology Annex (1) to test the guideline with the fast response code and detect accurate errors and ensure its suitability for use.

Fifth: Usage:

At this stage, the researchers distributed the guideline supported by the QR Code to the experimental group according to the previously specified experimental design, then the researchers set the dates of the specific meetings between them to address the topics of the guideline with the QR Code collectively for all the sample members and then each of the sample members studied the topic individually after the end of the meeting and conducted the scanning process for the QR code. QR Code

Exploratory Studies:

1- First Exploratory Study:

The researchers conducted the first survey during the period from Sunday 21/2/2021 to Wednesday corresponding to 24/2/2 021AD, on a sample of (40) forty students from the same research community and outside the original sample, with the aim of obtaining scientific transactions For data collection tools, physical testing and skilltests of handball skills under research, experimenting with data collection tools to find out what students understand these tools, this first study has provided that the data collection tools used in the research are of anacceptable degree of honesty and stability.

2- Second Exploratory Study:

The researchers conducted the second survey on Thursday, 25/2/2021AD on a sample of (40) forty students from the same meeting as the research and outside the original sample, in order to identify how to download and use the QR-Code and the extentto which the guideline is suitable for its use. , and the results resulted in the need to conduct a training course for students of the basic research sample to train on the possibility of downloading and using QR-Code programs through their use of smartphones and the Internet.

3- Training Course on How to Download and Use QR-Code Software**:**

The researchers conducted the training course on a sample of (30) female students who are members of the experimental group under research with the aim of training students on how to download and use QR-Code programs through their use of smartphones and the Internet in the period from Sunday 28/2/20 21 AD to Monday 1/3/2021 The researcher found out that all members of the group understand how to deal with QR-Code programs .

4- Third Exploratory Study:

The researchers conducted the third survey study on Tuesday, 2/3/2021 AD a sample of (40) forty students from the same research community and outside the original sample, with the aim of experimenting with an educational unit of the educational program under research, and the results resulted in the sample understanding of the educational unit and the absence of any problems hindering the implementation of the units of the educational program.

Execution of the experiment:

1- Tribal Measurement:

The pre-measurement of the experimental and control research groups in (physical and skill tests) was carried out on Wednesday, 3/3/2021 to Thursday, 4/3/2021.

2- Basic Experience:

- The researchers carried out the basic experiment of the experimental group, which uses the guideline supported by the rapid response code, in the period from Tuesday 9/3/2021 to Tuesday 27/4/2021 by one lecture per week on Tuesday and the lecture time was (120) s for a period of w Mania weeks by (8) wMania lectures, and an appendix (8) illustrates a model of the learning module of the experimental group.
- The researchers taught the control group, which uses the traditional method (explanation and modeling) in the period from Wednesday 10/3/2021 to Wednesday 28/4/2021 by one lecture per week on Wednesday and the lecture time was (120) s for a period of w Mania weeks by (8) wMania lectures, and an appendix (9) model of an educational unit for the control group.

3- How to carry out the experiment:

- Researchers conducted a preliminary meeting with the research students (30) students at one of thebottom of the college to introduce them to the nature of the research, as well asthe MAM that they will be assigned to after each meeting.
- It was confirmed that smartphones were available with all the sample members, and thatthey are all connected to the Internet, and it was confirmed by the researchers writing their e-mail on the board, and asked all the sample members to send an email to her immediately, and then make sure that the email arrived from all members of the sample.
- The researchers made a simple presentation to explain the concept and what the QR code is as well as the idea of its work and display the names of some applications on Android for the rapid response code scanning process.
- The researchers asked all the sample members to search the Stor Play Store via their smartphones and turn it on, then search for a program that reads the QR code, by typing the QR-code Reader inside the place allocated for the search, and then clicking the stream of the program and downloading it to their smartphones.
- The researchers distributed a paper with some different forms of rapid response code, and the researchers asked them to scan the form of the rapid response code using the program they downloaded to their smartphones to make sure that all the sample members mastered the skill of using the program and perform the scanning of the response code easily, as well as to make sure again that there are no problems to access the Internet.
- The guideline supported by printed QR-code was distributed to each individual of the sample AFRD.

4- Telemetry:

After the end of the specified period of implementation of the program, the researchers conducted the post-measurement of the experimental and control groups in the tests used in the pre-measurement on Thursday, 28/4/2021, and all measurements were done as performed in the pre-measurement

.

Statistical treatments used:

The researchers used the following statistical treatments:

"Arithmetic mean deviation torsion coefficient correlation coefficient test (v) for differences Man-Whitney Labarometric Percentage Change Level Significance".

The researchers satisfied the **level of significance at (05,0), and the researchers** used the statistical **spss program to find statistical coefficients**.

Presentation and discussion of the results:

Table (8)

Significance of Differences Between Average Scores of Pre- and Post-Measurements of the Experimental Group In theskill variables under research (n = 30)

Skill variables	Unit of Measurement	Tribal measurement		Telemetry		M1 - M2	The value of "T"
		Tribal average	Standard deviation	Dimensional Average	Standard deviation		
Scrolling and receiving at "30 s"	number	9.90	2.86	16.73	3.34	6.83	8.36
Scroll and receive on the rectangle	number	8.60	2.84	14.23	2.93	5.63	7.43
Jump on a specific target square size "60 × 60 s"	number	2.50	1.28	4.60	1.45	2.10	5.85

Tabular value (v) at degree of freedom (29) and significance level (0.05) = 1.699

It is clear from the results of Table (8) that there are statistically significant differences between the average scores of the pre- and post-measurements of the experimental group in the handball skill tests under consideration and in favor of telemetry as all the calculated values of (T) are greater than the value of (T) tabular at the level of significance 0.05. , suggesting that the tutorial using the QR code has a positive impact on the development of some of the handball skills under research.

The researchers attribute the progress made in the experimental group in learning some of the skills of handball under research to the integration, comprehensiveness, organization and good arrangement of the content of the guide program generalized with the QR code, where

the guide contained many quick response codes, which contain inside them the technical stages and educational steps as well as the selection and design of the best educational videos and images that help in learning the skill and display them in an interesting and smooth way, as well as the possibility of viewing, watching and repeating more than once, and the possibility of viewing and repeating more than once, and the possibility of The student of determining the part to be seen again and knowing how to apply it, as the use of this technique worked to create a new learning environment that involved all the senses of the student and provoked her motivations towards learning and the educational process, which prompted the student to feel herself and the value of her role in the educational process, which led to her understanding of the facts and knowledge associated with the methods of performing the correct skills.

This is consistent with the results of the study of "**Reda Mohammed (2019**)(**7**), Amira Mahmoud, Rasha Yahya (2020)(4), Saleh Ahmed" (2020)(8) to the effect that the use of the booklet supported by response codes has a positive impact on the development and upgrading of the level of skill performance of the members of the experimental groups under their research.

Chicioreanu and Billa point out the importance of using rapid response codes, as they facilitate and facilitate learning and knowledge sharing, help enhance the learning process, and help improve the performance and productionof the Maine to support the educational process (18:180-187).

Asthe results of the study of Hassan Shehata (2013)(6) and Kamal Abdel Hamid (2004)[11] show, the use of educational technology contributes better to learning and mastering mathematical skills in less time.

The researchers attribute these results to the fact that the use of a QR code in educational situations may lead to the creation of differentiated teaching by directing appropriate support to some distinguished students and sometimes struggling students through some audio or visual sources, instead of waiting for some students to complete some complementary aspects or ask for some of theirambiguous points, the response code is one of the quick solutions to those situations and more effectively. , and away from the intensity of anxiety that students face while performing skills.

In this regard, Leone&Leo2011 (**22**) mentions some of the benefits that the use of the rapid response code can provide in learning, including low cost and ease of use, as well as the element of suspense and attraction while uncovering the mystery of the identity of the rapid response code, and that the use of the rapid response code helped the teacher in enabling him to the educational process in terms of displaying the rapid response codes for each of the technical stages of the skills under research, all of which led to the full benefit of Lecture for the benefit of students, and increase the proper perception of motor performance and skills.

The researchers also believe that the use of the response code helps to save time and effort, and since it takes into account the individual differences between students by referring to the use of the code in a timely manner for students both inside and outside the lecture, all worked to give students self-confidence and the abundance of information they have in a virtual education, which increased the enthusiasm and motivation for the learning process, in addition to increasing the interaction with the guideline supported by the QR code. The researchers also attribute this progress in learning the skills under research to the guideline supported by the rapid response code, where it helped to provide feedback to students, and develop the motor perception of the performance of the skill, in addition to the survival of the impact of learning as a result of the use of auditory and visual stimuli, all of which helped greatly to learn the motor skills under research correctly.

Thus, the first hypothesis, which states that "there are statistically significant differences between the average scores of the pre- and post-measurements of the experimental group in learning some offensive skills in handball under research and in favor of dimensional measurement."

Table (9)

Significance of differences between the average scores of the pre- and post-measurements of the control group In theskill variables under research (n = 30)

Variables	Unit of Measurement	Tribal measurement		Telemetry		M1 - M2	The value of "T"
		Tribal average	Standard deviation	Dimensional Average	Standard deviation		
Scrolling and receiving at "30 s"	number	9.60	3.02	11.97	2.86	2.37	3.07
Scroll and receive on the rectangle	number	8.33	2.48	10.97	2.04	2.64	4.43
Jump on a specific target square size "60 × 60 s"	number	2.33	1.09	3.20	0.89	0.87	3.33

Tabular value (v) at degree of freedom (29) and significance level (0.05) = 1.699

It is clear from Table (9) the following:

There arestatistically significant differences in the average scores of the pre- and post-measurements of the control group in the handball skill tests under research and in favor of telemetry as all calculated (T) values are greater than the tabular value of (T) at the significance level of 0.05.

Theresearcher attributed this result to the use of the traditional method (verbal explanation and model performance), through what the teacher does from the explanation and performance of a model of the method of performance of the handball skills under research, in addition to the teacher explaining the skill and presenting a model for it and the gradation in the process of providing feedback during each stage of education.

This progress is also due to the student's practice of the model of practical presentation of skills and training on them, and the concomitant strengthening of the skill performance by the teacher or correcting errors, and giving appropriate exercises that help them understand the technical aspects of the skill helps to form a clear picture of those skills under research, and also helped students to understand the motor sequence of skills under peat .

Theresearcheralso attributed this progress to the discipline and commitment of the students of the members of the control group in maintaining the following instructions, correct performance and continuous training, for the continuation of learning and the bitter educational process that positively influenced the learning of handball skills in the field of research.

Thus, the second hypothesis, which states that there are statistically significant differences between the average scores of the pre- and post-measurements of the control group, is achieved in the learning of some offensive skills in **handball under consideration and in favor of dimensional measurement.**

Table (10)

Significance of differences between the average scores of the two dimensional measurements of the experimental and control groups

In theskill variables under research ($n_1 = n_2 = 30$)

Variables	Unit of Measurement	Experimental Group		Control Measurement		M1 - M2	The value of "T"
		Dimensional Average	Standard deviation	Dimensional Average	Standard deviation		
Scrolling and receiving at "30 s"	number	16.73	3.34	11.97	2.86	4.76	5.83
Scroll and receive on the rectangle	number	14.23	2.93	10.97	2.04	3.26	4.92
Jump on a specific target square size "60 × 60 s"	number	4.60	1.45	3.20	0.89	1.40	4.43

Tabular value (v) at degree of freedom (58) and significance level (0.05) = 1.671

It is clear from Table (10) the following:

The existence of statistically significant differences between the two dimensional measurements of the experimental and control research groups in the skill variables under research and in the direction of the experimental group as all the calculated values of (T) are greater than the value of (T) tabular at the level of significance (0.05).

It is clear from this that the students of the experimental group advanced over the students of the control group in the level of learning the skills of handball under research, and the researchers attribute this result to the use of the guideline supported by the rapid response code, which worked to save time and effort for the students in the learning process, where all the details of the skill were presented in an interesting and attractive way as well as the students get the excitement through the filing of the rapid response code, where this contributed to the

simplification of information and its sequence in addition to the organization Nabil Gad states that "quoting Francis Dwiro and David Mike (2015)[9] "individuals are able to keep the information provided to them visually as long as possible than reading it only verbally.

The researchers also attributed this improvement of the students of the experimental group in the level of skill performance of some offensive skills in handball under research to the importance of the guideline in presenting the educational content in an interesting and organized way as well as quick response codes and the possibility of replaying and playing the video of the skill more than once, and thus increases the preparation for achievement in the students as well as the speed of their understanding of difficult parts and unclear steps and understanding of information related to motor skills under research, in addition to the use of images, drawings, videos and attractive colors Storing it inside the quick response code and calling the students to it through the process of scanning the form of the response code worked to attract the attention of the students and increase their excitement to follow-up, retain and retrieve when the practical application of skills to remain the impact of learning and retain the technical and educational points and form a complete mental perception of the skill.

Thus, the third hypothesis of the research, which states that there is a statistically significant difference between the average scores of the two dimensional records of the experimental and control groups in learning some offensive skills in handball, and in favor of the experimental group, has been achieved.

First: Conclusions:

In light of the results of the research, the **researchers will conclude the following:**

1- The use of the QR Code has a positive effect on learning some offensive skills in handball under consideration.
2- The traditional method of using (verbal explanation and modeling) has a positive effect on learning some offensive skills in handball under research.
3- The use of a guideline supported by a QR code has a more positive effect than the traditional method of using (verbal explanation and modeling) to learn some offensive skills in handball.

Second: Recommendations:

In thelight of what resulted from the results of the research orthe researcher recommended the following:

1- Using the Guideline Supported by the QR Code to Develop Handball Skills for Students of the Faculty of Physical Education, Minya University
2- Training students in the faculties of physical education on the design and use of the QR Code in teaching and learning processes.
3- The need to include the educational program using the QR Code within the courses in the faculties of physical education.
4- Conducting more studies and research on the use of other educational programs with the QR Code as a tool for teaching and evaluating on samples and other variables .

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Abstract

The effectiveness of using a guideline supported by a quick response code to learn some skills Offensive Handball for Students of the Faculty of Physical Education

· **Prof. Dr. Hisham Mohamed AbdelHalim**

· **Prof. Yasser Abdul Rasheed Sayed**

· **Rania Ali Badawi Breiqa**

The **researchers** aimed to **find out** the **effectiveness of using a guideline supported by** a **rapid response code to learn some offensive skills in a ball toD for students of the Faculty of Physical Education.**

This course was used for the amateurs of the experimental design of two groups, one experimental and the other controlling, to achieve the goal of this research. The research community included for the first time at the Faculty of Physical Education, Minia University, in the second semester of the year, number / m, totaling (307) female students, based on a random sample of (30) Thirty female students from the research community as the research sample.

The most important results have indicated that the use of the guideline supported by the QR Code has a positive effect D more than the traditional method using (verbal explanation and modeling) learning some offensive skills in handball for the students of the first division of the Faculty of Physical Education, and the researchers recommended the use of the guideline supported by the QR Code to develop the skills of handball for students of the Faculty of Physical Education Minya University, The need to include the educational program using the QR Code in the courses in the faculties of physical education.

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ملخص البحث باللغة العربية

فعالية إستخدام دليل إرشادى مدعم برمز الإستجابة السريع على تعلم بعض المهارات الهجومية فى كرة اليد لطالبات كلية التربية الرياضية

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• م.م/ رانيا على بدوى بريقع

استهدف **الباحثون إلى معرفة فعالية إستخدام دليل إرشادى مدعم برمز الإستجابة السريع على تعلم بعض المهارات الهجومية فى كرة اليد لطالبات كلية التربية الرياضية.**

استخدم الباحثون المنهج التجريبى ذو التصميم التجريبى لمجموعتين إحداهما تجريبية والأخرى ضابطة وذلك لملائمته لتحقيق هدف هذا البحث واشتمل مجتمع البحث على طالبات الفرقة الأولى بكلية التربية الرياضية جامعة المنيا وذلك في الفصل الدراسي الثانى للعام الجامعي /م، والبالغ عددهم (307) طالبة ، وقام الباحثون باختيار عينة عشوائية قوامها (30) ثلاثون طالبة من إجمالي مجتمع البحث كعينة لتطبيق البحث عليها .

وقد أشارت أهم النتائج إلى أن استخدام الدليل الإرشادى المدعم برمز الاستجابة السريع Qr Code له تأثير إيجابى دال اكثر من الطريقة التقليدية باستخدام (الشرح اللفظى وعمل نموذج) تعلم بعض المهارات الهجومية فى كرة اليد لطالبات الفرقة الأولى بكلية التربية الرياضية ، وأوصى الباحثون استخدام الدليل الإرشادى المدعم برمز الاستجابة السريع Qr Code لتنمية مهارات كرة اليد لطالبات كلية التربية الرياضية جامعة المنيا ، ضرورة إدراج البرنامج التعليمي باستخدام كود الاستجابة السريع Qr Code ضمن المقررات بكليات التربية الرياضية.

• أستاذ ورئيس قسم المناهج وطرق التدريس بكلية التربية الرياضية جامعة المنيا.
• أستاذ مساعد بطرق التدريس بقسم المناهج وطرق التدريس بكلية التربية الرياضة جامعة المنيا.
• مدرس مساعد بقسم المناهج وطرق التدريس بكلية التربية الرياضة جامعة المنيا.