

## **Effectiveness of distance education using mobile applications on performance level some sports activities in P.E. lesson**

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### **Abstract**

The study aimed to using distance education through WatsApp messenger application via the educational group and monitor its effectiveness on performance level some sports activities of P.E. lesson (Skills of: shooting in basketball “the free throw”, underhand serve in volleyball and running with the ball in handball) for preparatory stage pupils. the researcher used the experimental method by the experimental design of one group using pre-post measurements, the study was conducted on a sample of (20) pupils of preparatory stage with 33.33% of the total population in the year 2016/2017, results indicated that distance education via the educational group (through WatsApp application) led to a higher level of skills under research.

**Keywords:** Distance education, Educational group, Applications, WatsApp, P.E. lesson, Volleyball, Basketball, Handball.

Distance education, or distance learning, sometimes called e-learning, is a formalized teaching and learning system specifically designed to be carried out remotely by using electronic communication. Because distance education is less expensive to support and is not constrained by geographic considerations, it offers opportunities in situations

where traditional education has difficulty operating. Students with scheduling or distance problems can benefit, because distance education can be more flexible in terms of time and can be delivered virtually anywhere. [23]

Distance education can truly be defined as the way of getting education without visiting a school or attending a class physically. Earlier the material

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related to the distance education course was delivered through mail but due to increasing use of internet and technological advancements today it is available on your computer or mobile screen with the help of various tools like email, multi-media learning tools, interactive communication. Such as networks, educational groups, educational packages and video conferencing tools like ezTalks Cloud Meeting etc. [50]

Distance education is the delivery of instruction and the fulfillment of course work from remote locations; allowing instructors and students to interact without being in the same place. New technologies have made distance education an increasingly popular option for institutions and students alike. The Internet, e-mail, educational groups, video conferencing, and other interactive systems allow schools to experiment with unique modes of teaching and learning, use resources that do not reside on their own campuses, and attract faculty and students who are far from campus or cannot travel to

campus very often. The first Open University is United Kingdom Open University (UKOU) that was established in the late 1960s and initially utilized television and radio as its main methodologies. Now a days almost all open universities use distance education technologies as basic teaching approach. [38]

Now, the advent of the educational groups, the internet, Social networks and widespread use of the mobiles & computer has led to a huge growth in distantly delivered tuition and study. [47]

With the development of technology, distance education is becoming increasingly popular in students' education. A learner can complete a large amount of the classes at convenience. Most of the classes under distance education programs don't require even to attend a session at a particular time and place. A learner can do and review the assignments and can do homework at its convenience. [42]

Information technology made the whole affairs very easy as online or networks classes solved all possible

convenience concerns. Through use of technology it becomes easier to quickly look through study materials and can be well mastered. Distance education is so designed that it allows a learner focus more strongly on curriculum, time and effort in fields that contain new information and proficiency. Distance education also allows a learner to obtain study materials at convenience and amount at a faster speed against that of slow pace of the normal classroom settings. The learners join conversations in the discussion areas with flexibility and get instant feed back in form of reviews from networks or online classmates' comments. [14]

Distance education will remain distinctive in future as well as an innovative approach for electronically delivering, well-designed, learner oriented at anywhere, anytime through use of the internet. Distance education will remain as part of E learning, web based learning through virtual classrooms and digital teamwork, where contents will continue to be delivered through internet, audio, video tape, and

conferencing through video; satellite and etc. [19]

He rapid and intense use of Information and communication Technology in education will continue to play a role in developed countries facilitating them to establish more and more information and communication technology based universities. [52]

Although distance education is not a new trend, but has got a huge increase due to developing technology. Distance education delivery will finally emerge as strong education approach with use of phone, desktop and TV at a same time in future. When distance education commenced using information technology, it was not well accepted and the equipment needed to provide it was expensive. That has now radically changed. And technology is being well used in video, audio text, graphics, animation, and simulation. Distance education is undergoing huge transformation and has and will never reach to a stage of saturation as much is yet to be explored and presented in this field. New and well established institutions are coming up with latest equipment and large data base to provide distance education to a growing population that wants higher

education out of traditional classroom setting. [18]

**Benefits of Distance education** Tabor, Sharon (2011) [50] points to the benefits of distance education as follows:

**\* Adaptability and Freedom:**

One of the main advantages of distance education can be the personalized approach to get education regardless of the channels or mediums you are using for this purpose. Whether you are getting study materials online or through post you can learn only when a connection is developed between the material of the course and you. You get freedom to deal with the study material in distance education process. You can plan your learning process as per your convenience instead of sticking with a fixed schedule.

**\* Self-inspiration:**

The distance education encourages you to motivate yourself to learn due to the absence of a traditional teacher to guide you. You will have to create a learning environment and control it effectively so that a band of self-motivation develops in you to inspire you to learn for your personal growth. You can cultivate this band in you by engaging yourself in distance education methods.

**\* Flexibility to Choose:**

You will have to follow a set schedule of learning as per the curriculum of the school if you are following traditional ways of learning. But different types of distance education allows you to set your learning schedule as per your convenience without following a regular schedule of learning. Even if you are out of touch from learning process, distance education program offers you flexibility to choose your course of learning.

**\* Easy to Access:**

If you cannot attend regular classes due to various reasons like time constraints and distance etc. then distance education can be the best option for you to access the benefits of your education. If you opt for correspondence course for distance education then you will have to make postal delivery as a connection between you and your distance education center. But if you have a computer and internet connection then you can opt for an online learning method by using some video conferencing software like ezTalks cloud Meeting etc. It will allow you to interact with your teachers

face-to-face to resolve your problems. Moreover you can continue learning even without taking leave from your job.

**\* Earn While You Learn:**

Those who want to improve their resume by getting higher education and without breaking their existing job then distance education can be the best option for them. You can go on earning your livelihood along with improving your qualification as distance education will accommodate both, learning as well as earning.

**\* Saves Money and Time Both:**

By joining a distance education course you can save money and time spent in travelling to nearby educational institution. Distance education allows you to access your learning center online without any additional cost. Moreover the course offered at distance education centers are cheaper than the courses provided at traditional education centres.

**\* Easy Access to the Experts:**

The students in traditional classes have limited options to guide them but distance education by video conferencing will provide you

expanded opportunities to access the experts in your course even if they are not located in your town or country. They can easily get connected with you from any part of the world to share their expertise and experiences with you. Such facility is not possible in traditional classrooms.

**\* Communicate with Other Educational Institutions:**

You can also be in touch with several other e-schools by getting distance education through video conferencing software. You can also connect with the students located at far of locations from you, anywhere in the world, to mutually share the experiences and problems along with solving problems of each other. The distance education through video conferencing also allows you to hone your interactive skills by collaborating with others from different work environments and cultures. Such facilities will not be available in traditional classroom education system. [50]

Thus, distance education, or distance education, is a field of education that depends on the

Information technology, and instructional systems that plan to provide learning to students who are physically not present in a class room setting. In stead of attending courses personally, teachers and students communicate at times of their convenience and choosing and exchange printed or electronic material through any suitable technology; There are many different methods that are used in the distance education. The most popular and effective are e-mails, forums, faxes, educational groups, audio and video recordings, print materials, web and video conferencing, internet radio, telephone, live streaming and much more others. [52]

Therefore, this study is based using of distance education via an educational group through WatsApp application, which offered content of lessons for the purpose of learning some skills in P.E. lesson, The researcher observation through his supervision of schools that methods and means used to skills learning in general lacks the motivation of the learner and the desire to learn more skills, as period after using these methods the learner sense monotony and boredom, these traditional methods doesn't commensurate with what the world reached of technological

uses and applications in the educational process.

Thus, through the practical observation, the researcher noted that sports activities skills`s for preparatory stage pupils of P.E. lesson in is characterized by randomness, poor performance and lack of coordination in motor sequence, and pupils cannot develop a correct perception of the skills in mind which leads to weak performance level in some sports activities of P.E. lesson.

Therefore, this study is an attempt to raising the level of pupils' performance with one of the most modern methods in the field of P.E. lesson, by using distance education via an educational group for studying its effect on some sports activities of P.E. lesson.

#### **Objective:**

The aim of this study was studying effect of using distance education via an educational group (through WatsApp messenger application) on performance level some sports activities of P.E. lesson for preparatory stage pupils (performance level of; Shooting "the free throw" skill in basketball, Underhand serve skill in volleyball & Running with the ball skill in handball).

#### **A research hypotheses:**

There are statistically significant differences between the average of the pre-and post-measurements for research group in the level of skills performance under research in favor to the post measurement.

### **Methodology**

#### **Method:**

The experimental approach was used for one group, using pre- post measurements.

#### **Research sample:**

The research society consisted of 60 pupils in the second graders in Sadat City Languages School - City Sadat for the year 2016/2017. The basic sample was randomly selected from the pupils of the research society. The total number of the sample was (20) pupils with 33.33% of the total population. And (15) pupils by 25% of the total research community and outside the basic research sample as exploration sample. Thus, the basic sample and outside the basic research sample consisted of (35) pupils by 58.33% of the total population.

#### **Tools:**

1- Data recording forms: Forms for recording the data for the research sample were prepared. (Appendix 1)

2- Tools and devices: Restameter device for measuring height and weight, distance tape measure, bearings, medical balls, tennis

balls, volleyballs, basketballs and handballs.

3- Fitness elements tests: (Appendix 2, 3) The fitness elements tests for the skills under research were identified through the following references:

\* Basketball: (Mohamed, Abdel-Dayem 2009) [37], (Mohamed 2003) [35], (Ahmed 2014) [4], (Hassan, Nahar 2012) [17], (Moustafa 2007) [40], (Gamal, El-Deeb 2008) [16].

\* Volleyball: (Ahmed 2013) [5], (Zaki 2012) [55], (Farid et al. 2012) [15], (Mohamed, Hamdy 2005) [36], (Mohamed Alhefnawi 2013) [31], (Ayman 2006) [13], (Tarek, Ayman 2006) [51], (Mohamed, Ayman 2005) [32], (Ayat 2009, 2016) [10,11], (Ali 2014) [9], (Ahmed, Ali 2005) [3], (Marwan 2012) [30], (Ali 2010) [8], (Ayat, Eman 2016) [12] and (Rehab et al. 2013) [46].

\* Handball: (Sobhy 2012) [48], (Kamal, Mohamed 2001) [22], (Kamal 2003) [21], (Mohamed Nasr 2016) [33].

These references were used to identify:

- Fitness elements needed to perform the skills under research.

- Measurement tests for the fitness elements (physical tests).

The experts' opinion (Appendix 6) was reviewed.

The experts pointed out that the fitness elements (accuracy, strength, capacity, coordination, and flexibility) Shown in Appendix (2).

The experts also pointed to the most appropriate tests (Table 1 & Appendix 3) for measuring these physical elements, which obtained an agreement rate higher than 75% as follows:

- Aiming at overlapping rectangles test. (Arm accuracy)
  - The fist strength using the dynamometer test. (Strength)
  - Push a medical 3 kg ball a distance test. (Arm capacity or Arm power) "Power = speed & strength"
  - The vertical jump (Jump up) to measure the muscular capacity of the legs. (Legs capacity or Legs power) "Power = speed & strength"
  - Through tennis ball on wall and receive it test. (Coordination)
  - Trunk bending forward down (Standing. folding) test. (Flexibility)
  - Zigzag running or the winding run test (Running between impedes). (Agility).
  - 50 metre Sprint test. (Speed)
- 4- Skillful tests: Through the following scientific studies and references: **Basketball;** (Marzouk 2011) [29], (Abdel-

Nasser 2016) [1], (Mohamed, Abdel- Dayem 2009) [37], (Mohamed 2003) [35], (Ahmed 2014) [4], (Hassan, Nahar 2012) [17], (Moustafa 2007) [40] and (Gamal, El-Deeb 2008) [16]. **Volleyball;** (Ali 2014) [9], (Ahmed, Ali 2005) [3], (Ayman 2006) [13], (Tarek, Ayman 2006) [51], (Mohamed, Ayman 2005) [32], (Ayat 2009, 2016) [10,11], (Marwan 2012) [30], (Rehab et al. 2013) [46], (Afaf et al. 2014) [2], (Ayat, Eman 2016) [12] and (Mohamed, Hamdy 2005) [36]. **Handball;** (Sobhy 2012) [48], (Kamal, Mohamed 2001) [22], (Kamal 2003) [21], (Abdel-Nasser 2016) [1] and (Mohamed Nasr 2016) [33]. The skillful tests were determined to measure performance level of the skills under research. In addition, the expert opinion (Appendix 6) was used to determine the tests to measure the skills, Experts agreed to the tests of (Shooting "the free throw" test in basketball, Accuracy of underhand serve test in volleyball, Running with the ball test in handball) as shown in Table (1) & Appendix (4).

**Table (1)**  
**Percentage of experts' agreement on physical, skillful tests (N=3)**

Variables	Physical and skillful tests	Agreement ratio
Accuracy	Aiming at overlapping rectangles test. (Arm accuracy)	100%
Strength	The fist strength using the dynamometer test. (Strength)	67%
Arm capacity	Push a medical 3 kg ball a distance test. (Arm capacity)	100%
Legs capacity	The vertical jump (Jump up) to measure the muscular capacity of the legs (legs capacity)	100%
Coordination	Through tennis ball on wall and receive it test. (Coordination)	100%
Flexibility	Trunk bending forward down (standing. folding) test. (Flexibility)	100%
Agility	Zigzag running or the winding run test (Running between impedes). (Agility)	100%
Speed	50 metre Sprint test. (Speed)	100%
<b>Skillful tests:</b>		
	Shooting “the free throw” test in basketball	100%
	Accuracy of underhand serve test in volleyball	100%
	Running with the ball test in handball	100%

It is clear from the table that experts agreement percentage on the physical and skillful tests was at (67, 100%).

**Table (2)**

**Validity and stability of physical and skillful tests N=20 (test validity), N=10 (test stability)**

Variables	unit	Distinct N <sub>1</sub> =10		Non distinct N <sub>2</sub> =10		Mean differences	T. value
		M	±SD	M	±SD		
Accuracy	Degree	7.96	2.17	4.55	2.01	3.41	6.45 *
Strength	Kg	19.93	2.78	16.31	2.72	3.62	6.80 *
Arm capacity	meter	3.88	0.62	2.72	0.56	1.16	3.81 *
Legs capacity	Cm	20.35	4.22	12.39	3.12	7.96	13.28 *
Coordination	Degree	5.98	0.65	3.86	0.59	2.12	4.06 *
Flexibility	Cm	7.42	1.04	5.09	1.21	2.33	4.59 *

**Follow Table (2)**

**Validity and stability of physical and skillful tests N=20 (test**

**validity), N=10 (test stability)**

Variables	unit	Distinct N <sub>1</sub> =10		Non distinct N <sub>2</sub> =10		Mean differences	T. value
		M	±SD	M	±SD		
Agility	Second	10.04	2.02	13.67	2.04	3.63	6.91 *
Speed	Second	9.95	1.55	14.43	1.42	4.48	7.96 *
Shooting "the free throw" test in basketball							
	Degree	12.57	2.8	5.95	2.04	6.62	11.57 *
Accuracy of underhand serve test in volleyball							
	Degree	12.84	1.61	7.35	2.99	5.49	9.75 *
Running with the ball test in handball							
	Degree	39.25	5.68	22.58	5.21	16.67	24.63 *
Variables	unit	1 <sup>st</sup>		2 <sup>nd</sup>		CC	
		M	±SD	M	±SD		
Accuracy	Degree	4.55	2.01	4.62	2.15	0.91*	
Strength	Kg	16.31	2.72	16.29	2.65	0.93*	
Arm capacity	meter	2.72	0.56	2.71	0.54	0.96*	
Legs capacity	Cm	12.39	3.12	12.41	3.17	0.94*	
Coordination	Degree	3.87	0.59	3.91	0.62	0.94*	
Flexibility	Cm	5.09	1.21	5.13	1.25	0.95*	
Agility	Second	13.67	2.04	13.64	2.02	0.93*	
Speed	Second	14.43	1.42	14.46	1.44	0.92*	
Shooting "the free throw" test in basketball							
	Degree	5.95	2.04	6.05	2.12	0.89*	
Accuracy of underhand serve test in volleyball							
	Degree	7.35	2.99	7.42	3.02	0.91*	
Running with the ball test in handball							
	Degree	22.58	5.21	22.56	5.17	0.95*	

The value of t-table at a significant level (18, 0.05)= 2.10 (two directions), the t-value (cc) at a significant level (8, 0.05) = 0.738 (two

directions) Sperman  
It is clear from Table (2) that there are statistically significant differences between the two distinct and non-

distinct groups, indicating the validity of the tests. It is also evident that there is a correlation between the first and second applications indicating the stability of the tests.

**Distance education style design through WhatsApp messenger application:**

Distance education style was designed via the educational group as shown below:

1- Objective of Distance education style: The distance education style through the educational group was aimed to know its effect on the performance level of (Shooting in basketball, Underhand serve in volleyball and Running with the ball in handball) for preparatory stage pupils.

2- Skillful level of the research sample: The skillful aspects was determined by the tests under research (Appendix 4).

3- Distance education style content: The distance education style content was determined through the following scientific references (Ayman 2006)[13], (Tarek, Ayman 2006)[51], (Mohamed, Ayman 2005) [32], (Suzanne 2007) [49], (Ayat

2009, 2016) [10,11], (Rehab et al. 2013) [46], (Afaf et al. 2014) [2], (Mohamed, Hamdy 2005)[36], (Ali 2014) [9], (Ahmed, Ali 2005) [3], (Marwan 2012) [30], (Ali 2010)[8], (Zaki 2012) [55], (Farid et al. 2012) [15], (Mohamed Alhefnawi 2013) [31], (Mahmoud 2016a,b) [26,27], (Marzouk 2011) [29] and (Abdel-Nasser 2016) [1] by including some multimedia; videos, pictures and texts in an educational group contains skillful aspects of Shooting in basketball, Underhand serve in volleyball and Running with the ball in handball skills. The stages of the technical performance of the skills under research were described (Appendix 5).

4- The educational group: An educational group was designed or created contain the reading and seeing the explanation, information and educational videos of the skillful aspects of the skills under research on the WhatsApp.

WhatsApp Messenger was chosen because of dealing ease with it and the spread of its use in mobile phones between pupils. Therefore, the

possibility of easily browsing at any time and from anywhere.

5- Style of teaching: The instructional style was used in the study was the individual or self-learning style through the use of each puple for the educational group (WhatsApp Messenger) by individually.

6- The educational group features:

- All pupils can communicate with each other in the educational group.
- Display and download text, images, graphics and video.
- Sound control during video playback.
- Repetition of images, graphics and video more than once.
- Pause during video playback.

7- The experts' opinion: The experts' opinion (appendix 6) of distance education style and

agreement was obtained on the educational group was designed, and the experts agreed to instructions and contents of the group.

8- The exploratory study: The distance education style was tested by presenting the educational group (WhatsApp) on the sample of the exploratory study in order to identify the clarity of the pictures, drawings and video were contained on the educational group. The result of this experiment was the clarity of all the contents of the distance education style on the educational group.

**Application:**

Distance education style was implemented on the basic study sample (50 pupils), as shown in table (3):

**Table (3)  
Time distribution of the research group**

Content	Time
Application Duration	12 weeks
Number of units (lessons) per week	2 units in week
Total number of units	24 units
Unit time	Open time (Time available 24 hours a day)

**Distribution of the educational content (skills) on the total units for the research group:**

The research group was study by the distance education style via the educational group,

Table (4) shows the distribution of educational content of the research group.

**Table (4)**

**Distribution of the educational content (the skills under research) on the total units for the research group**

Week	Units	The educational content (Study content) on the educational group
1	1, 2	Shooting in basketball "the free throw"
2	3, 4	Shooting in basketball "the free throw"
3	5, 6	Underhand serve in volleyball
4	7, 8	Underhand serve in volleyball
5	9, 10	Running with the ball in handball
6	11, 12	Running with the ball in handball
7	13, 14	Shooting in basketball "the free throw"
8	15, 16	Underhand serve in volleyball
9	17, 18	Running with the ball in handball
10	19, 20	Shooting in basketball "the free throw"
11	21, 22	Underhand serve in volleyball
12	23, 24	Running with the ball in handball

**Moderation of sample distribution:**

**Table (5)**

**Distribution moderation for basic and exploratory research sample (N=70)**

Parameters	Unit	Statistical analyses			
		Mean	Median	SD	SK
Age	year	13.14	13.00	0.54	0.78
Hight	Cm	141.71	142.00	8.50	-0.10
Wight	Kg	40.84	41.00	6.95	-0.07
<b>Physical Tests:</b>					
Accuracy	degree	4.54	4.60	2.00	-0.09
Strength	Kg	16.32	16.50	2.75	-0.20
Arm capacity	meter	2.71	3.00	0.54	-1.61

**Table (5)**

**Distribution moderation for basic and exploratory research sample (N=70)**

Parameters	Unit	Statistical analyses			
		Mean	Median	SD	SK
Legs capacity	Cm	12.41	12.00	3.14	0.39
Coordination	degree	3.91	4.00	0.61	-0.44
Flexibility	Cm	5.07	5.00	1.19	0.18
Agility	Second	13.69	14.00	2.05	-0.45
Speed	Second	14.44	14.50	1.41	-0.13
<b>Skillful Tests:</b>					
Shooting “the free throw” test in basketball	degree	5.97	6.00	2.06	-0.04
Accuracy of underhand serve test in volleyball	degree	7.40	7.50	3.01	-0.10
Running with the ball test in handball	degree	22.56	23.00	5.20	-0.25

Table (5) shows that the values of Skewness coefficients ranged from (+3, -3), indicating the moderated distribution of the basic and exploratory sample.

**Results**

**Table (6)**  
**Significance of the mean differences between the pre- post measurements of the research group in the performance level of (Shooting in basketball, Underhand serve in volleyball and Running with the ball in handball) skills**

Parameters	Research group (distance education style) N=20				Mean Differences	T. value
	Pre		Post			
	M	SD±	M	SD±		
Shooting “the free throw” test in basketball	5.97	2.06	11.40	2.64	5.43	8.47*
Accuracy of underhand serve test in volleyball	7.40	3.01	10.92	2.93	3.52	4.23*
Running with the ball test in handball	22.56	5.20	29.88	5.42	7.32	11.67*

T Table value at a significant level (19, 0.05) = 1.73 (one direction)  
 Table (6) shows statistically significant

differences between Pre-Post measurements of the research group at a significant level of 0.05.

### **Discussion**

The results of Table (6) show that there are statistically significant differences between pre and post mean values of this research group in performance level some sports activities of P.E. lesson for preparatory stage pupils at a significant level (0.05) for the post measurement.

These results indicate that the distance education style via the educational group was a positive effect on performance level of sports activities or the skillful level under research (Shooting in basketball, Underhand serve in volleyball and Running with the ball in handball skills). This indicates that the distance education style led to the correct perception of how to perform skills (performance level of sports activities under research). The images, drawings, texts and videos were attached to the educational group was a positive result on the level of sports activities of P.E. lesson. Also, The researcher attributed

the reason for these differences to the experimental variable only, which is represented in the distance education style. The researcher also attributes the progress made to the research group to clarifying the skillful performance (Skills of: shooting in basketball, underhand serve in volleyball and running with the ball in handball) through The educational videos on the educational group. Thus, the higher level of skillful performance for the research group.

The previous results is consistent with many studies which was indicated that use of the distance education style via WhatsApp and Internet in the educational process shows an improvement and effectiveness in the learning process and the higher level of skillful performance in general, such as the study of (Ahmed Talha 2011) [7], (Ahmed Saher 2011) [6], (Rania 2008) [43], (Rasha 2007) [44], (Mar Pérez et al. 2015) [28], (Koen et al. 2015) [24], (Rehab 2011) [45] and (Jean 2015) [20].

Thus, the researcher attributed the reason of differences between pre and post

measurements to the experimental variable only, which is the distance education style. The researcher also attributes the progress in sports activities or skills under research to relying on the distance education style via the educational group and its various media (texts, pictures, graphics, audio and video) and thus a positive effect on variables of research (Shooting, Underhand serve and Running with the ball) and this is due to the attractiveness and effectiveness of distance education style.

Accordingly, The distance education style contribute in a positive way in improving sports activities of P.E. lesson & skillful performance in general, and active learning using technology through WhatsApp (the educational group) contributes positively to enhance skillful variables under research.

On the other hand, The researcher attributes the progress of the experimental group to the interaction between the puiple and the learning through WhatsApp which the pupils controlled

what they are subjected to and controlled the sequence of the presentation, time. As WhatsApp help to learn according to the self-speed of each puiple, in addition to the formation of the optimal perception of the performance of skillful in how to emplement the skills under research through the educational group. Thus, provide the puiple feedback, which was helped to develop his movement perception. Therefore, the effectiveness of distance education style via the educational group, This previous results is consistent with (Magdy 2003) [25], (Osman et al. 2006) [41], (Yaseen 2006) [53], (Yogesh 2004) [54], (Mohamed, Makarem, Hany, 2001) [34] and (Moustafa 2009) [39].

Accordingly, This proves that distance education style leads to higher level of performance and learning as a result of the practice of what has been explained and presented on WhatsApp (the educational group). Thus, reflected in the level of pupils' performance.

Thus, A research hypothes is achieved, which stated that there are statistically

significant differences between the pre-and post-measurements for the research group (distance education style via the educational group through WhatsApp application) in the level of skillful Performance under research (sports activities of P.E. lesson) in favor to the post measurement.

### Conclusions

Distance education style via the educational group (through WhatsApp messenger application) has effective on performance level some sports activities of P.E. lesson (skills of: shooting in basketball “the free throw”, underhand serve in volleyball and running with the ball in handball) for preparatory stage pupils.

### Recommendations

- Encouraging the using distance education style via the educational group because of its positive effect in raising the sports activities level of P.E. lesson (skills of: shooting in basketball “the free throw”, underhand serve in volleyball and running with the ball in handball).

- Introducing learning through the distance education style within the curricula of the

scientific subjects in the faculties of physical education.

- Conducting further studies on the effectiveness of distance education style in other sports activities aspects.

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