Effects of using Face Book Social Network on Learning Some Handball Individual Defense Skills for First Year Female Students

DR .Zainab Ismail Mohamed Ismail

Introduction and Research Problem:

Social networks on the internet are the most recent communication channels since the telecommunication revolution. Its use covers all political, social, cultural and educational aspects of users. As university students became more willing to use social networks due to its global benefits including immediate feedback, improving technological skills, expressing diverse opinions and increasing interactivity through group work, universities nowadays are dealing with a new generation of digital students who use these networks extensively.

By the end of the 20th century and the beginning of the 21st century, the internet flourished greatly and became one of the most common and most acceptable communication channels in almost all nations. Major developments in information technology and the internet increased the numbers of users for social networks and literally turned the world into a small digital village (17)

Social networks depend on users in activation and content generation. It provides users with various interactive activities like chat rooms or e-mail. It enables exchange of thoughts, opinions and experiences. In addition, it provides several services like text messages, video calls, blogging, file sharing …. Etc. (11: 17)

Facebook is one of the most popular social networks that spread significantly during recent years all over the world. It role is no longer limited to communicating friends or exchanging discussion. Instead, it is now used in creating an interactive educational environment based on self-learn outside the classroom. In addition, it fulfills learners' needs and develops their skills instead of wasting time in mere entertainment.

Therefore, it is clear that social networks spread among university students. Its role becomes bigger and its effect is clear on the educational process. The number of its users is ever increasing and its effects are very significant on their lives, characters and opinions. Due to these significant effects, several studies tried to verify its effects on university students. Zaher, R. (2003), Al-Masry, S. (2012), Stanciu et al (2012), Hasanain, B. (2014), Ibrahim, K. (2014) and Farag, M. (2015) agreed that social networks are very effective in university students' academic achievement as they use it in learning and assignments in addition to using them as extracurricular activities that increase their abilities for discussion and exchange of ideas. (25) (5) (22) (11) (14) (9)

Defense in handball is the seond wing of the game and is never less important than attack. Defense strats at the moment the team loses the ball with a mian objective of regaining possession and preventing opponents from scoring a goal according to handball laws. Alas, defense training does not attract sufficient attention for coaches.

Ehoffman, E. (1999) and Smith & Porter (2011) indicated that reasons of weak defense include the use of unsuitable ways for teaching defensive skills, players' lack

of motivation to learn defense, negative experiences of players concerning officiating defensive moves and insufficient information of coaches and players concerning defense. Although technical and tactical aspects of handball have developed greatly, defense is still not having sufficient concern in identifying modern methods for teaching and coaching defense. Through review of related literature in handball, the researcher found out that most studies concentrated on attack, not defense, and there is a severe lack in studies dealing with defense, especially for students of faculties of physical education as beginners. Social networks nowadays play a significant role in supporting university curricula through tools that help students and faculty members to achieve the desired objectives via uploading these curricula on the internet. (8) (21)

Recommendations of the third international conference for e-learning and distance education (2013) indicated the importance of spreading e-learning culture and supporting its concepts among civil society associations and public education organizations. In addition, the recommendations asserted the importance of e-learning quality assurance, modern educational technologies used in supporting creativity and innovation and the use of social networks in education. Both the university and faculty seek to introduce distinguished learning and to produce creative research works that contribute to the welfare of the society and the building of knowledge economy through an educational environment supportive to learning and intellectual creativity (19)

Through teaching handball to first year female students of faculty of physical education – Tanta University, the researcher noticed that most students are not welling to learn defense skills compared to attack skills and their performance level during competitions performed at the end of each applied lecture is very poor. This is due to several reasons including the lack of excitement because no balls are used or no goals are scored during defensive exercises. In addition, time dedicated for training the defense part is not sufficient and the learning rate of these skills is too slow. This makes students feel bored and lead them to work none-cooperatively during performance. This led the researcher to try to develop defensive skills using a new way that attracts students for learning and practice. The researcher thinks that positive effects can be identified for using Facebook in learning defensive skills for those students.

Aim:

The current research aims to design a program – based on Facebook – and to identify its effects on learning some individual defensive skills for first year female students of Faculty of Physical Education – Tanta University.

Hypotheses:

1. There are statistically significant differences between the pre- and post-measurements of the research group on individual defensive skills tests
2. There are statistically significant differences between the pre- and post-measurements of the research group on the cognitive test

Materials and Methods:

Approach:

The researcher used the experimental approach (one-group design) with pre- and post-measurements.

Participants:

Research community included female students of Faculty of Physical Education – Tanta University during the academic year 2015-2016. The researcher randomly chose (30) students to participate in this research and another (20) students as a pilot sample.

Data collection tools:

Through review of related literature like Hasanain, M. (2001), Abd El-Hameed, K. and Hasanain, M. (2002), Darwish, K. et al (2002), the researcher identified the **Physical Abilities and Tests** measuring them (12) (3) (7)

Validity of Physical Tests:

The researcher used distinct validity to verify that the test distinguishes between the scores of distinct and non-distinct groups as seen in table (1)

Table (1): Statistical Significance between the upper and lower quartiles of physical tests for validity (n=20)

Physical tests	Upper quartile (n=5)		Lower quartile (n=5)		Means difference	(t)	P	ETA^2	Validity
	Mean	SD±	Mean	SD±					
30m running from high start	5.93	0.16	6.38	0.14	0.45	4.50	0.00	0.67	0.82
Vertical jump	44.50	2.11	37.50	1.78	7.00	5.07	0.00	0.72	0.85
Medicine ball throwing	21.30	1.63	16.00	1.86	5.30	4.31	0.00	0.65	0.81
Parow's Zigzag Running	20.10	1.88	25.60	2.23	5.5	3.77	0.00	0.59	0.77
Sit-up	19.40	1.42	14.00	1.46	5.40	5.35	0.00	0.74	0.86
Trunk forward bending from standing	14.60	2.13	8.20	1.75	6.40	4.64	0.00	0.68	0.83

(t) Table value on P≤0.05 = 2.30

Table (1) indicated statistically significant differences between the upper and lower quartiles of the pilot sample on the physical tests as (t) calculated values ranged from 3.77 to 5.35 which are higher than its table value. Validity values ranged from 0.77 to 0.86.

Reliability of Physical Tests:

The researcher used test/re-test procedure with (3) days interval to verify the reliability as seen in table (2)

Table (2): Correlation Coefficient between test and re-test for reliability of physical tests (n=20)

Physical tests	Test		Re-test		R
	Mean	SD±	Mean	SD±	
30m running from high start	6.20	0.26	6.10	0.24	0.93
Vertical jump	41.10	3.04	41.30	2.88	0.89
Medicine ball throwing	18.80	2.25	19.00	2.14	0.91
Parow's Zigzag Running	22.65	3.29	22.15	3.41	0.88
Sit-up	16.50	2.15	17.00	1.67	0.92
Trunk forward bending from standing	11.60	2.87	12.00	2.48	0.90

(R) Table value on P≤0.05 = 0.44

Table (2) indicated statistically significant correlation between test and re-test on all physical tests as (R) values ranged from 0.88 to 0.93 and these values were higher than its table value. This proves the tests reliability.

Through analyzing the handball curriculum of the first year, the researcher concluded the **Individual Defensive Skills** including defensive moves, opposition and coverage, defensive block and ball cut.

The researcher reviewed the related literature including Dabour, Y. (1997), Abd El-Hameed, K. & Hasanain, M. (2002), Darwish et al (2002), Hasanain, M. (2001), Ibrahim, M. (2004), Hammouda, M. & Salem, G. (2008) to choose the tests measuring the individual defensive skills. Tests were presented to (9) experts who verified the suitability of these tests (6) (3) (7) (12) (15) (10).

Validity of Technical Tests:

The researcher used distinct validity to verify that the test distinguishes between the scores of distinct and non-distinct groups as seen in table (3)

Table (3): Statistical Significance between the upper and lower quartiles of technical tests for validity (n=20)

Physical tests	Upper quartile (n=5)		Lower quartile (n=5)		Means difference	(t)	P	ETA^2	Validity
	Mean	SD±	Mean	SD±					
One-way defensive block	4.58	3.39	2.64	0.48	1.94	6.26	0.00	0.80	0.89
Forward/backward defensive moves	5.51	0.47	3.95	0.62	1.56	4.01	0.00	0.62	0.78
Varied defensive moves	24.25	1.84	18.15	2.08	6.10	4.39	0.00	0.66	0.81
Forward move to cut the ball	19.85	3.78	8.90	3.21	10.95	4.41	0.00	0.66	0.81

(t) Table value on P≤0.05 = 2.30

Table (3) indicated statistically significant differences between the upper and lower quartiles of the pilot sample on the physical tests as (t) calculated values ranged from 6.26 to 4.01 which are higher than its table value. Validity values ranged from 0.78 to 0.89.

Reliability of Technical Tests:

The researcher used test/re-test procedure with (15) days interval to verify the reliability as seen in table (4)

Table (4): Correlation Coefficient between test and re-test for reliability of technical tests (n=20)

Technical Tests	Tests		Retest		R
	Mean	SD±	Mean	SD±	
One-way defensive block	3.65	0.64	3.80	0.57	0.92
Forward/backward defensive moves	4.69	0.73	4.75	0.62	0.91
Varied defensive moves	21.15	2.89	21.45	2.56	0.89
Forward move to cut the ball	14.37	5.24	14.14	4.69	0.90

(R) Table value on P≤0.05 = 0.44

Table (4) indicated statistically significant correlation between test and re-test on all technical tests as (R) values ranged from 0.89 to 0.92 and these values were higher than its table value. This proves the tests reliability.

The Cognitive Test:

The researcher reviewed the related literature including Hasanain, M. (2001), Ibrahim, M. (2004). Hatal, N. (2005), Abbas, E. & Al-Shafee, M. (2007) and Adel, B. (2009) to design a cognitive test that measures knowledge and information related to individual defensive skills in handball (12) (15) (13) (1) (4). The researcher designed the test according to the following steps:

- The test aims to measure students' knowledge about some handball individual defensive skills under investigation.
- The researcher analyzed the scientific content of handball defensive skills included in the first year curriculum to identify the most important aspects to be measured through the test. The researcher proposed four axes (history – physical preparation – defensive skills – law) and presented them to experts. Experts agreed on the axes and the researcher developed the test accordingly.
- Test questions were on two forms: multiple choice questions (with 3 choices) and true or false questions.
- The preliminary draft of the test was revised and presented to experts. Accordingly, four items were deleted and another three items were modified. Total number of items reached (41).
- The researcher wrote down test instructions to facilitate students' responses.
- To calculate easiness, difficulty and distinct coefficients, the researcher applied the test to a pilot sample (n=20). Easiness coefficient was calculated according to the following equation:

Easiness coefficient = number of students who answered all items correct / total number of students

The relationship between easiness and difficulty coefficients are indirectly proportional as easiness coefficient – 1 = difficulty coefficient and vice versa

The researcher used the following equation to calculate distinctive coefficient:

Variance = easiness coefficient x difficulty coefficient

Values of easiness, difficulty and distinctive coefficients are seen in table (5)

Table (5): easiness, difficulty and distinctive coefficients for the cognitive test (n=20)

Item	Easiness	Difficulty	Distinctive factor	Item	Easiness	Difficulty	Distinctive factor
1.	0.45	0.55	0.25	22	0.50	0.50	0.25
2.	0.35	0.65	0.23	23	0.70	0.30	0.21
3.	0.65	0.35	0.23	24	0.65	0.35	0.23
4.	0.45	0.55	0.25	25	0.45	0.55	0.25
5.	0.50	0.50	0.25	26	0.70	0.30	0.21
6.	0.50	0.50	0.25	27	0.45	0.55	0.25
7.	0.45	0.55	0.25	28	0.35	0.65	0.23
8.	0.50	0.50	0.25	29	0.60	0.40	0.24
9.	0.40	0.60	0.24	30	0.55	0.45	0.25

10.	0.65	0.35	0.23	31	0.45	0.55	0.25
11.	0.45	0.55	0.25	32	0.55	0.45	0.25
12.	0.35	0.65	0.23	33	0.35	0.65	0.23
13.	0.60	0.40	0.24	34	0.65	0.35	0.23
14.	0.65	0.35	0.23	35	0.55	0.45	0.25
15.	0.50	0.50	0.25	36	0.65	0.35	0.23
16.	0.65	0.35	0.23	37	0.45	0.55	0.25
17.	0.30	0.70	0.21	38	0.55	0.45	0.25
18.	0.50	0.50	0.25	39	0.35	0.65	0.23
19.	0.65	0.35	0.23	40	0.60	0.40	0.24
20.	0.40	0.60	0.24	41	0.45	0.55	0.25
21.	0.65	0.35	0.23				

Table (5) indicated that the test is easy as easiness coefficient ranged from 0.30 to 0.70 while difficulty coefficient ranged from 0.30 to 0.70. distinctive coefficient values ranged from 0.21 to 0.25.

- The researcher prepared the correction key of the test with one mark for each correct answer and zero for each incorrect answer. Total marks of the test are (41).
- Test duration was calculated according to the following equation:

Mean duration = (duration of the first student + duration of the last student) / 2
Therefore test duration = (2.6 + 10.8) / 2 = 9.4 minutes.

Validity of Cognitive Test:

The researcher used distinctive validity for the cognitive test as seen in table (6)

Table (6): Statistical Significance between the upper and lower quartiles of the cognitive test for validity (n=20)

Physical tests	Upper quartile (n=5)		Lower quartile (n=5)		Means difference	(t)	P	ETA^2	Validity
	Mean	SD±	Mean	SD±					
One-way defensive block	18.80	2.12	11.10	1.57	7.70	5.83	0.00	0.77	0.87

(t) Table value on P≤0.05 = 2.30

Table (6) indicated statistically significant differences between the upper and lower quartiles of the pilot sample on the cognitive test as (t) calculated value was (5.83) which are higher than its table value. Validity value was (0.89).

Reliability of Technical Tests:

The researcher used test/re-test procedure with (15) days interval to verify the reliability as seen in table (7)

Table (7): Correlation Coefficient between test and re-test for reliability of the cognitive test (n=20)

Technical Tests	Tests		Retest		R
	Mean	SD±	Mean	SD±	
One-way defensive block	14.50	2.84	15.00	2.36	0.89

(R) Table value on P≤0.05 = 0.44

Table (7) indicated statistically significant correlation between test and re-test on the cognitive test as (R) value was (0.89) which is higher than its table value. This proves the test reliability.

The recommended program:

Preparation Stage: the researcher identified the aim of the program. The program aimed to learn some handball individual defensive skills via Facebook. The researcher analyzed the content to assure that the program is continuous, progressive and integrated.

Program Production Stage: The program should attract students' attention through interactivity. The program depends on multi-media to introduce the cognitive content (skill category – skill definition – rules and regulations) and the technical aspect (texts – photos – videos – motion pictures – applied drills).

Program Design Stage:

- Testing the program presentation via the Facebook
- Interring the cognitive content related to each skill
- Interring the technical content of the program
- Interring videos for the skills under investigation

Evaluation Stage: The cognitive, technical and physical tests were applied after design.

Program Procedures: The researcher considered the following:

- Warm up (5 min): to prepare the body and activate blood circulation through ball drills and small games.
- Physical and technical preparation (15 min): this part improves physical fitness components related to the skills under investigation.
- Main part (65 min): this part is divided into (40) minutes for attack skills and (25) minutes for defense skills (duration of the main experiment). This part includes sets of defensive exercises that start with the ready stance and then various defensive skills. Exercises were distributed over the weeks according to the suitable number of units and the difficulty level.
- Cool down (5 min): this part includes cool down and relaxation exercises so that the body can recover to normal condition.

Main Study:

Pre- measurements:

Pre-measurements on all research variables (physical – technical – cognitive) were taken from 24-2-2015 to 26-2-2015. Pre-measurements were used to verify data normality on all research variables for participants as seen in table (8).

Table (8): Descriptive Data of Participants (n=30)

Variable	Measurement	Mean	Median	SD	Flatness	Squewness
Growth factors:						
Age	Year / month	18.38	18.00	0.89	-0.16	0.43

Height	Cm	162.00	161.50	3.20	-1.07	0.11
Weight	Kg	63.06	63.00	4.78	0.14	-1.10
Physical tests:						
30m running from high start	Sec	6.10	6.00	0.61	-0.62	0.49
Vertical jump	Cm	38.08	38.00	2.69	0.33	0.09
Medicine ball throwing	M	19.29	19.50	3.38	1.07	-0.19
Parow's Zigzag Running	Sec	23.45	23.00	2.32	-0.38	0.58
Trunk forward bending from standing	Cm	13.78	14.00	2.01	0.63	-0.33
Technical tests:						
One-way defensive block		2.93	3.00	0.91	-0.53	-0.46
Forward/backward defensive moves		4.43	5.00	1.01	0.73	-0.78
Varied defensive moves		24.33	24.00	5.08	0.52	-0.48
Forward move to cut the ball		21.47	21.00	2.19	1.16	0.85
Cognitive test:	Mark	17.00	17.50	2.11	-0.95	-0.04

Table (8) indicated that flatness and squewness values were between (±3). This proves data normality.

Main application:

The program was applied to the main sample from 28-2-2015 to 4-4-2015 (one unit per week). Unit duration was (90) minutes. Total number of units was (6).

Post-measurements:

Post-measurements were taken from 7-4-2015 to 9-4-2015.

Statistical treatment:

The researcher used SPSS software to calculate the following: mean – SD – median – flatness – squewness – correlation coefficient – easiness, difficulty and distinctive coefficients – effect size – ETA^2 – (t) value.

Results:

Table (9): Difference significance and effect size between pre- and post-measurements of participants on technical tests (n=30)

Technical Tests	Pre-		Post-		Means Differences	Standard Error	(t)	ETA^2	Effect Size	Significance
	Mean	SD±	Mean	SD±						
One-way defense block	2.93	0.91	4.73	0.69	1.80	0.16	11.12	0.81	2.24	High
Forward/Backward defense moves	4.43	1.01	5.63	0.85	1.20	0.11	10.91	0.80	1.09	High
Varied defense moves	24.33	5.08	34.83	4.17	10.50	1.22	8.63	0.71	2.22	High
Forward moves for cutting the ball	21.47	2.19	9.87	1.07	11.50	0.93	12.37	0.94	5.26	High

(t) Table value on P≤0.05 = 1.69
Effect size levels: 0.20 = low – 0.50 = moderate – 0.80 = high

Table (9) indicated statistically significant differences between the pre- and post-measurements of participants on all technical tests as (t) values were from 8.63 to 11.21 which were higher than its table vale and the effect size was high for all tests in favor the post-measurements.

Table (10): Difference significance and effect size between pre- and post-measurements of participants on the cognitive test (n=30)

Test	Pre-		Post-		Means Differences	Standard Error	(t)	ETA^2	Effect Size	Significance
	Mean	SD±	Mean	SD±						
Cognitive test	17.40	2.11	37.27	2.35	19.87	1.16	17.13*	0.91	3.60	High

(t) Table value on P≤0.05 = 1.69
Effect size levels: 0.20 = low – 0.50 = moderate – 0.80 = high

Table (10) indicated statistically significant differences between the pre- and post-measurements of participants on the cognitive test as (t) value (17.13) was higher than its table vale and the effect size was high in favor the post-measurements.

Discussion:

Results of table (9) indicated statistically significant differences between the pre- and post-measurements of participants on all technical tests. The high values of effect size were between 1.09 and 2.24. The researcher thinks that is due to the recommended program. The program depends on watching and applying each skill in its technical sequence. In addition, the program uses individual and pair drills and all errors are corrected during performance. The video clips used in the program can be stopped and repeated. All these features helped the ability of students to imagine the correct performance of the skill. This makes them more excited and more motivated to exert more effort. Video clips with its colors, narration and texts improved the educational climate that attracted students to interact positively with the program. This has positive effects on learning the skills under investigation.

Salem, W. (2001) and Zaghloul, M. et al (2001) indicated that the use of computers in learning provides learners with a deeper and more exciting image about the topic to be learned and help learners avoid boredom. This leads learners to master the topics through these coherent and integral presentations which in turn help maintaining the learning effect (20: 2012) (23: 19).

These results are consistent with the results of Zaghloul, M. & Abu Harga, M. (2003), Othman, Maha I. (2005) and Abd Al-Monem, Gihan (2006) who indicated that the use of computer in learning various physical activities increase the effectiveness of learning and positivity of learners (24) (18) (2)

Zaghloul, M. et al (2001) indicated that using multi-media with all its potentials help increasing the effectiveness of teaching and positivity of learners. It motivates learners to acquire the desired skills effectively as it makes the lesson livelier. (23)

Studies of Hasanain, B. (2014), Ibrahim, K. (2014) and Farag, M. (2015) indicated the effectiveness of using social networks in the educational process. They recommended using them in teaching and learning due to its high effectiveness. (11) (14) (9)

This proves the first hypothesis stating that "There are statistically significant differences between the pre- and post- measurements of the research group on individual defensive skills tests".

Results of table (10) indicated statistically significant differences between the pre- and post-measurements of participants on the cognitive test. The effect size was high and reached 3.60. These results are due to the positive effect of the program as it helped students to acquire the cognitive part related to the individual defensive skills. This is improved by the use of Facebook as a platform for the program with all its features (texts – photos – videos) as this helped students to acquire the desired knowledge and to recall them when necessary.

The researcher thinks that the recommended program using Facebook helped creating an interactive learning environment where students can acquire knowledge and information easily and clearly. The program depends on integrating the cognitive aspect with the applied one via multi-media that clearly presented and categorized the skills through texts and photos that present them in the correct sequence of performance. Feedback for correcting errors helped learners greatly during performance. All these aspects helped students to learn the skills correctly, perform it via instructions and correct errors via feedback.

This is consistent with Jing-Ming (2005) who indicated that programs should be chosen according to the educational situation so as to integrate it into a specific system to achieve the desired objectives. This enriches the learning process and makes it more effective. In addition, this helps producing more coherent and integrated presentations that make learners more able to recall information in addition to creating an improved learning environment (16).

Farag, M. (2015), Ibrahim, K. (2014), Al-Masry, S. (2012) and Hasanain, B. (2014) indicated the importance of using social networks in education as they are easy-to-use via cell phones in addition to its easy language and controllability during education (9) (14) (5) (11).

This proves the second hypothesis stating that"There are statistically significant differences between the pre- and post- measurements of the research group on the cognitive test".

Conclusions:

In the light of this research aim, hypotheses, methods and results, the researcher concluded the following:

1- There are statistically significant differences between the pre- and post-measurements of the research group on individual defensive skills tests in favor of the post-measurements.
2- There are statistically significant differences between the pre- and post-measurements of the research group on the cognitive test in favor of the post-measurements.
3- The use of social network (Facebook) had positive effects on learning individual defensive skills

Recommendations:

According to these conclusions, the researcher recommends the following:

- Using the social network (Facebook) as an interactive educational tool for university students
- Using the recommended program to improve the technical and cognitive aspects of individual defensive skills
- Defensive aspect of handball should have an equal concentration like attack as these two parts can never be separated during the real performance of handball.
- More time should be dedicated for individual defensive skills during training units to improve them.

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Annex (1)

Final Version of the Cognitive Test

Choose the correct answer:

No.	Question	A	B	C
1-	Handball defensive skills are: a) Defender movements b) Cutting and deflecting the ball c) Both (a) and (b)			
2-	During defensive ready stance you should look: a) Forward and sideward b) To the opponent, forward and sideward c) To the opponent and forward			
3-	Mastering defensive moves provides players with: a) Time and decision making b) Time, effort and decision making c) Effort and decision making			
4-	Basic handball skills are divided into: a) Attack and defense skills b) Goal keeping skills c) Both (a) and (b)			
5-	Handball individual defensive skills are divide into: a) Skills against an attacker possessing the ball b) Skills against an attacker who is not in ball possession c) Both (a) and (b)			
6	Varied defensive movers happen: a) Separately b) In overlapping sets c) Both (a) and (b)			
7-	Moving forward, backward or sideward should be with: a) Short, fast and progressive steps b) Short and progressive steps c) Fast and progressive steps			
8-	Opposition (attacking the shooter) is done by: a) Attacking the shooting arm b) Attacking the attacker's body c) Attacking the attacker's body with concentration on the shooting arm			
9-	During defense, fingers should be: a) Open b) Relaxed c) Open and relaxed without stiffness			
10-	Moving sideward aims to: a) Prevent the attacker from finishing the attack b) Bridge a defensive gap c) Both (a) and (b)			
11-	Obstructing shots is a ……… skill:			

No.	Question	A	B	C
	a) Defensive b) Attack c) Defensive/attack			
12-	When a defender is inside the goal area and uses this immediately to score, the decision is: a) A penalty b) A free throw c) A goal throw			
13-	When a defender is inside the goal area and wasted the chance to score, the decision is: a) A free throw b) A goal throw c) A penalty			
14-	The spread of handball in Egypt is due to the efforts of: a) Muneer Gerges b) Hassan Mustafa c) Mohamed Al-Fadaly			
15-	The International Handball Federation accepted Egypt's membership in: a) 1962 b) 1960 c) 1958			
16-	Chairman of the Egyptian handball Federation in 1975 was: a) Hassan Mustafa b) Khaled Hammouda c) Muneer Gerges			
17-	The first handball federation was declared in: a) Czech Republic b) USSR c) Denmark			
18-	A match can be started with no less than ( ) players: a) 4 b) 5 c) 6			
19-	Match duration for (16) years or more teams is: a) Two halves (25 min each) b) Two halves (30 min each) c) Two halves (20 min each)			

Tick (√) or (x)

No.	Question	√	X
20-	Physical preparation is divided into general and specific		
21-	Objective of general preparation is balance and integration of body and posture		
22-	Objective of specific preparation is to prepare the player specifically for handball		
23-	Specific physical complements related to defense include muscular power of legs and agility		
24-	Beny Hassan Ancient Egyptian paintings indicated that throwing and catching the ball is an ancient game		
25-	Egypt is the third Arab country to introduce handball		
26-	Body center of gravity is distributed equally on both legs during defensive stance		
27-	After defensive moves, an unbalanced stop allows powerful defense		
28-	Defensive distance is long and decreases with attacker's approaching the goal zone		
29-	Individual defensive skills are the base for team defense in handball		
30-	Blocking is done by jumping high with arms stretched over and slightly leaning forward or from stance according to the shot type		
31-	Opposition (attacking the shooter) is a try to prevent the attacker from jumping for a jump shot		
32-	Individual defensive skills against an attacker with possession include defense against passing, shooting, dribbling and faking		
33-	Support (cover) is a process to secure the teammate penetrating for opposition		
34-	Court lines are 5cm wide except for the goal line which is 7 cm		
35-	Each team includes 14 players		
36-	Movements are done with hooping or jumping		
37-	Individual defense is a try to possess the ball or prevent the opponent from scoring according to the law		
38-	During support (cover), the trunk leans slightly so that the defender is not stumbled		
39-	A player is allowed to use both arms and hands to block or possess a ball		
40-	It is allowed to drag or hit the ball off the opponent's hands		
41-	It is not allowed to obstruct or push the opponent away with arms, hand or legs		

Correction Key:

No.	Answer	No.	Answer
1-	C	22-	√
2-	B	23-	√
3-	B	24-	√
4-	C	25-	x
5-	C	26-	√
6-	B	27-	x
7-	A	28-	√
8-	C	29-	√
9-	C	30-	√
10-	A	31-	√
11-	A	32-	√
12-	B	33-	√
13-	C	34-	x
14-	C	35-	x
15-	B	36-	√
16-	A	37-	√
17-	A	38-	√
18-	B	39-	√
19-	B	40-	X
20-	√	41-	√
21-	√		