

The Effectiveness Of A Training Program Using Multimedia On The Level Of Physical Fitness Of Female Police Officers

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The study Problem:

There is no doubt that carrying out the duties of a policeman tasks requires that the policeman be an individual other than the rest of society, as his job duties require that his performance be characterized by general efficiency, excellence and accuracy, to achieve the best results, which are the outcome of his preparation, continuous training, and his physical, mental, psychological and social capabilities. And special skills, and his experiences gained in the field of police work, all of this contributes to carrying out work and tasks in a manner characterized by accuracy, ease, control, and speed of achievement in order to achieve higher and better results, and to save his efforts and time (Al-Salmi, 1999: p. 23).

In view of the continuous development in crime, and in order to limit this development and tackle it, it is necessary to benefit from the data of the scientific progress witnessed in this era in the methods of preparing, rehabilitating and developing the modern police college student who is able to achieve his mission at the desired level, and prepare him in a way that enables him to face the difficulties that may encounter him, To reach an officer with a high degree of competence, physical fitness and skill commensurate with the responsibility placed upon him (Adly, 2002: 2).

These abilities depend on the close, interrelated and balanced relationship of the individual's physical, mental, emotional and spiritual components (Mahmoud. Alaa, 2003, p. 131).

It was confirmed by Matthews Fox (1987) and Muhammed Foli Sayed (1987) quoting from Shafiq. Ehab Kamal El-Din (2002) that there is no doubt that physical fitness is the aspect on which a lot of police work is built, as police work requires many physical requirements, which the police officer must characterize to keep pace with the needs of his police work. Physical fitness is the first weapon that The police officer is based on it, which enables him to address the tasks assigned to him and which helps him to continue working and the ability to take decisions, as well as the impact of his physical fitness on the extent of his psychological and nervous state discipline, which is reflected in the extent of his general health and his ability to perform the tasks assigned to him with the least possible effort, Self-confidence, high morale, overcoming daily difficulties and obstacles with minimal effort, good performance of work, self-defense in case of necessity are directly affected by the level of physical fitness of the police officer (Shafiq, 20002, p. 14).

In view of the researcher's work in the police field, and in particular in the field of training and testing of female police officers, and given the rapid development and creation of crimes that exceed the level of physical programs used to improve the physical abilities of police officers, so the problem of the study is to identify the effectiveness of a training program using multimedia on the level of Physical fitness of female police officers.

Objectives of the study:

The study aims to identify the effectiveness of a training program using multimedia on the level of physical fitness of female police officers, through the following:

1. Designing a proposed training program using multimedia to improve the level of physical fitness of female police officers for the age group (25:35) years, and from the rank of (captain to major).
2. Identifying the effectiveness of the training program using multimedia on the level of physical abilities of female police officers for the age group (25:35) years, and from the rank of (captain to major).

Study assignments:

1. There are statistically significant differences between the pre- and post-measurement of the experimental group in the scores of the study sample in the physical abilities tests under study, in favor of the post-measurement.
٢. There are significant differences between the post-measurement of the control group and the experimental group in the scores of the study sample in the physical abilities tests under study, in favor of the post-measurement of the experimental group.

Review of Literature:

1-AL Siddiq. Muhammad Abdul Rahman (2014) A study entitled: "Physical fitness programs and their relationship to psychological state (motor satisfaction) among the regular police forces in Khartoum State (an evaluation study). The researcher aimed to evaluate physical fitness program and their relationship to psychological state among the regular police forces in Khartoum State, and the researcher used the descriptive approach and the research community consisted of officers and members of the regular police forces in the State of Khartoum, and a group consisted of (300) members and officers of the regular police forces in the state of Khartoum, where he used the kinetic satisfaction scale and a fitness questionnaire form to collect data. Results:١ - There are

statistically significant differences between the Khartoum, Omdurman and Bahri sample in favor of Khartoum on the axes (program goals).

٢- There is a direct correlation between the axis (program content) and the psychomotor satisfaction scale (psychological state) for each of the Khartoum, Omdurman and Bahri regions.

2- Abdel-Fattah & Amir Fattouh (2012) conducted a study entitled: "The effect of a proposed exercise program on some physiological variables and physical fitness for new recruits in the central security sector in view of the police work requirements." The research aimed to know the effect of a program for new recruits in the central security sector on some physiological variables and some physical fitness variables for the sample under research, the researcher used the experimental method by applying the tribal and remote measurements to two groups, one experimental and the other controlling, and the research sample amounted to (120) recruits from the new recruits in the Assiut Central Security Sector, they were chosen in a deliberate way, which represents 30% of the original community, where their ages ranged between (19 to 21) years old, they were divided into two equal groups, one experimental and the other a control group, each of (20) recruits. The data collection tools include: an electronic rastamer to measure height (in centimeters) and weight (in kilograms), and a dry spirometer to measure the vital capacity of the lungs, And the plus Accutrend device to measure the level of lactic acid in the blood. A ruler is included to measure reaction speed. A stopwatch for recording time, and a divider box for measuring flexibility. One of the most important results of the research is that the proposed exercise program has a positive effect on all physiological and physical variables (under research) for the experimental group more than the control group, which is

evidenced by the higher rate of improvement in all these variables for the experimental group than the control group.

3- Abd al-Hadi. Abd al-Rahman Muhammad (2012) conducted a study entitled: "Building a test battery of physical fitness for members of the Palestinian army" and then build standard levels of battery vocabulary learned. The researcher used the descriptive approach for its suitability to the nature and objectives of the study, and the society consisted of army members whose ages ranged between (18-32) years. The study sample was chosen by the stratified random method, where the entire study sample amounted to (1885) military, they were divided into two groups. The first sample to build the Palestinian battery has reached (618) military and the second is a sample for building the levels, consisting of (1267) military ,Two categories according to the age stage. The researcher used tests and measures to collect the necessary data for the study. He applied (21) tests that measure the levels of the following elements of physical fitness: (periodic respiratory endurance, muscular strength in its maximum sections, explosive velocity and explosiveness, and explosiveness agility and flexibility). To process the data, the researcher used the Statistical Package for Social Sciences (SPSS). Among the most important results of the study, a battery was built to test the physical fitness of the members of the Palestinian army.

4- A study conducted by Muhammad. Ali Suleiman (2010) a study entitled: "The level of physical fitness of public security officers in the Northern Region Security Command in Irbid Governorate - Jordan." The aim of the research was to identify the level of physical fitness elements of public security officers in the Northern Region Security Command in Irbid Governorate - Jordan. The researcher used the descriptive approach for its suitability to the nature of the body, and the research

sample consisted of (103) officers who were chosen randomly. The researcher used a test battery (The prudential fitness Gram) which include a run (1600m), prostration, raise the onyx high, lying down(squatting), the thickness of fat, and the homogeneity of the sample was confirmed in the variables of height, weight and age, and the results indicated that there was no difference in the level of fitness among the members of the research sample, and the results showed that there was no difference in the level of fitness among the members of the research sample according to the difference in rank and age group.

5- A study conducted by Douche. Bandar Ali (2006), entitled: "The Role of Security Skills in Raising the Level of Performance - A Survey - of Directors of the Holy Capital Police Stations", the study aimed to identify the role of security skills in determining the mechanism for nominating police station managers. And the role of security skills in raising the level of performance of police managers. And also to identify the obstacles that limit the performance level of police station managers. In addition to revealing the significance of the differences between the views of police station managers towards these roles and obstacles according to their personal variables. The researcher used the descriptive approach in the study, and the researcher applied the questionnaire as a tool for the study, and for the sample, the researcher used the comprehensive survey method due to the limitations of the study community and its concentration in one area. Accordingly the study sample is the study population consisting of (28) officers working with (11) centers and (3) outposts. One of the most important results of the study is that the study population is very agreed that there is a role for security skills in raising the performance level of police station managers. And that the study community very much agreed that the mechanism for nominating police

station managers must focus on the security skills component of the candidate, when security skills must have a role in the nomination.

6- A study conducted by Shafiq. Ehab Kamal El-Din (2002) entitled: "A proposed physical program to reduce the rate of injuries for students of the Police College." And to identify the impact of the proposed physical program, The researcher used the experimental method on two groups, one of them is experimental, and only the proposed physical program has been applied to them, and the other is a control group, and the traditional program has been applied to them only, with the use of experimental design pre and post measurement. The research sample was randomly selected for 200 first-year students at the Police College at Mubarak Security Academy. One of the most important results of the study is that the proposed physical program has a positive impact on the level of physical components and the reduction of injuries among first-year students at the Police College. And that its effect was more positive than the traditional program in the incidence of injuries resulting from the weak level of physical elements for first-year students at the Police College.

7- Mahmoud. Ahmed Naji (2001) a study entitled: "A proposed training curriculum to develop the impact of the level of physical and functional fitness among internal security forces officers." The experimental approach to achieve the objectives and hypotheses of the research, and the research sample included (20) twenty articles, their ages ranged between (20-25) years. One of the most important conclusions that the researcher has reached is that the proposed training curriculum was significantly in developing the functional and physical devices of the fighter in a manner that facilitates him to carry out his duties with extreme accuracy without the appearance of signs of fatigue.

Comment on reference studies:

The reference studies included a number of (7) Arab studies, the time range ranged between (2014 AD) to (2001 AD), and these studies were presented from the most recent to the oldest, and the researcher attributed the number of reference studies shown to a scarcity of studies - within the limits of the researcher's knowledge - that dealt with The subject of physical fitness and knowledge education for police officers in particular and police officers in general.

The reference studies varied according to the diversity of their objectives. The study of (Abdul-Hadi, 2012) Abd al-Rahman aimed to build a battery of physical fitness for members of the army, while the study of (Mohammed, 2010) aimed at the level of physical fitness elements of public security officers, and some studies aimed to identify The effect of physical fitness programs on security men, as a study (Abdel-Fattah, 2012), which aimed to identify the effect of an exercise program for new recruits in the Central Security Sector on some physical fitness variables for the sample under research, and a study (Shafiq, 2002), which aimed to identify the effect of a program Physically to reduce the rate of injuries resulting from poor physical level for first-year students at the Police College, while the study (Mahmoud, 2001) aimed to identify the impact of a proposed program to develop the impact of the level of physical fitness and functional level of internal security forces officers, while the study (Al-Siddiq, 2014) aimed to) Evaluation of physical fitness programs and their relationship to the psychological state (kinetic satisfaction) among the regular police forces. The objectives of the previous studies differed from the study (Dosh, 2006), where the study aimed to identify the role of security skills in determining the mechanism for nominating police station managers.

The reference studies differed in terms of the method used according to the objectives and nature of the research. In some studies, the experimental method was used, such as a study conducted (Abdel-Fattah, 2012), a study (Mohammed, 2010), a study (Shafiq, 2002), and a study (Mahmoud, 2001). And other studies in which the descriptive approach was used, such as the study (Al-Siddiq, 2014), the study (Abdul Hadi, 2012), and the study (Dosh, 2006).

In terms of the sample, the reference studies differed in the method of selecting the sample and its size, as it is noted that most of the studies in which the descriptive approach was used had a relatively large size, and were randomly selected as a study (Al-Siddiq, 2014), and the number of the sample was (300) individuals, and a study (Al-Siddiq, 2014). Abdel-Hadi, 2012) the sample size was (1885) military, and the study (Mohamed, 2010) the sample size was (103) officers. As for the studies in which the experimental method was used, the method of selecting the sample was deliberate, and the sample size was relatively small, such as a study (Abdul-Fattah, 2012), and the sample size was (20) recruits, a study (Shafiq, 2002), and the sample number was (200) students, and a study (Mahmoud, 2001), and the sample number was (20) fighters.

One of the most important results of these studies is that the training program that aimed to raise the level of physical fitness of the research sample had a positive effect, such as the study (Abdel-Fattah, 2012), the study (Shafiq, 2002), and the study (Mahmoud, 2001).

Study Procedures:**Study Approach:**

The researcher used the experimental method with an experimental design for the two groups (experimental and control) due to its relevance to the objectives and nature of the study.

Study community:

The original research community was represented by all female police officers of the age group (25:35) years, and from the rank of (captain to major) at the Ministry of Interior in Cairo Governorate.

The study sample:

The researcher selected a deliberate sample of (80) female police officers of the age group (25:35) years, and from the rank of (captain to major), and they agreed to implement the proposed program for them, which included (50) officers (25 experimental groups, 25 control groups), (30) controls (a survey sample for conducting scientific transactions), and table (1) showing the description of the research sample, and table (2) showing the homogeneity of the two groups.

(١) Table**Statistical characterization of the research sample n = 50**

Variables	SMA	standard deviation	flatness	skewness
Height	170.14	3.44	-0.77	-0.399
Weight	75	2.73	0.471	-0.391
the age	32.56	1.61	-0.73	-0.344
Zigzag running test	2.78	0.22	-1.664	-0.24
Step switch test	2.21	0.46	0.989	-0.555
Abdominal test	2.605	0.28	-0.017	-0.446
mindset test	2.205	0.30	-0.979	0.893
pressure test	2.265	0.31	-1.371	0.597
Test run 400m	2.21	0.37	0.487	1.432

It is clear from **Table (1)** that all the values of the torsion coefficient, whether for the variables of age, height, weight and the variables of the physical tests of the research sample ranged (± 3), and this means the homogeneity of the research sample in those variables.

(2) Table

The homogeneity of the research sample, the control group and the experimental group in the variables - under investigation

To signify differences using the Mann-Whitney test

N = 50

Variables	control group n = 25		experimental group n = 25		U	Sig.	indication
	M	SD	M	SD			
height	170.2	٣.٦٤	١٧٠.٠٨	٣.٣٠	٣٠٢	٠.٨٣٨	Not sig.
weight	74.44	٢.٨١	٧٥.٥٦	٢.٥٧	٢٥١	٠.٢٢٨	Not sig.
the age	32.36	١.٧٣	٣٢.٧٦	١.٤٨	٢٧١	٠.٤١١	Not sig.
Zigzag running test	2.77	٠.٢٣	٢.٧٩	٠.٢١	٢٩٨.٥	٠.٧٧١	Not sig.
Step switch test	2.1	0.43	2.25	0.42	٢٥٣.٥	٠.٢١	Not sig.
Abdominal test	2.58	٠.٣٠	٢.٦٣	٠.٢٥	٢٩٤.٥	٠.٧١٤	Not sig.
mindset test	2.35	0.35	2.18	0.24	٢٣٩	٠.١٢١	Not sig.
pressure test	2.28	0.41	2.14	0.31	٢٥٩	٠.١٨٨	Not sig.
Test run 400m	170.2	٣.٦٤	١٧٠.٠٨	٣.٣٠	٣٠٢	٠.٨٣٨	Not sig.

It is clear from **Table (2)** that there are no statistically significant differences at the level of significance (0.05) between the control group and the experimental group in the variables under study, where all the values of the significance differences (Sig.) are greater than (٠.٠٥).

Study tools:

To collect the data required for the research, the researcher used the following tools:

1. Personal interview.

2. A suggested program using multimedia to improve the level of cognitive fitness of female police officers for the age group (25: 35) years / researcher design - annex (2).
3. The battery of physical fitness tests / approved by the Ministry of Interior - Attachment (3).

Designing a training program to improve the level of physical fitness of female police officers:

Objectives of the proposed program:

The goal of the program is to improve the level of physical fitness of female police officers for the age group (25:35) years, and from the rank of (captain to major), using technological means for remote training under the conditions of the Corona pandemic (Covid-19), which swept the country a year ago. 2020.

Survey of experts' opinion on the main themes of the program:

The researcher surveyed the opinion of the experts about the main axes of the physical program, where a questionnaire was presented to (10) sports training experts - Annex (1), where the physical abilities were determined according to the specific capabilities of the police officers, and according to the battery of physical tests approved by the The Ministry of Interior, and Table (3) shows the agreement of experts' opinions towards these axes.

(3) Table

**Agreement of expert opinions towards the main axes
Of the proposed training program**

N = 50

The main axes	Approval number	Percentage
Arm muscle strength	٩	% ٩٠
Abdominal muscle strength	10	% 100
respiratory circulatory endurance	10	% 100
muscular capacity	10	% 100
respiratory circulatory endurance	10	% 100

It is clear from Table (3) that the percentage of agreement of the experts on the sub-themes of the training program ranged between (90% to 100%) , where the researcher agreed with an approval rate of (80%), and therefore all the main axes were accepted.

In the light of polling the opinions of the experts towards the main axes of the proposed program for police officers for the age group (25:35) years, as follows: (Strength of the muscles of the arms, strength of the abdominal muscles, endurance of the respiratory cycle, muscular endurance, and endurance of the respiratory cycle).

The content of the proposed program:

In light of the objectives of the research and the proposed program, the proposed training programs were designed for all sports activities, and these various topics were presented in the form of advanced electronic presentations, and they were copied onto a CD, and presented to the experts - Attachment (1), for an opinion poll towards the content for modification. Or change, omission or addition, and all the comments of the experts have been modified.

The content of the proposed program:

According to the opinions of experts, the general framework of the program has been defined as follows:

- **Program duration:** (4) weeks.
- **Number of weekly units:** (6) per week.
- **Number of program units:** (24) training units.
- **Training unit time:** (45: 60) minutes.
- **Training method:** low-intensity interval training.
- **Training load:** from average load to less than maximum, and 1 day per week (negative load)
- **Training intensity:** (50: less than 85%) of max.
- **Training volume:** Repetition (10:40) times.
- **Evidence rest:** (10:60) seconds.

Determine the equipment and tools used:

The researcher used the following tools and devices: (Swedish chair, training cones, wall ladder, medical ball, chalk, skipping rope, medical ball, relay stick, basketball).

Physical proficiency level tests:

The researcher used a battery of physical fitness tests for police officers, which is a battery of test whose objectivity, validity and reliability have been proven. Physical fitness tests for female police officers.

In light of the expert opinion poll on the fitness tests of police officers, the physical level of police officers - the research sample - was measured through the following tests:

- Glass run test between cones to measure agility.
- A test on a graduated switch to measure the muscle capacity of the legs.

- Running test (400m) to measure the periodic endurance respiratory capacity.
- Abdominal test to measure the strength of the abdominal muscles.
- A stress test to measure the strength of the arm muscles.

Statistical processing:

The researcher used the following statistical treatments: (arithmetic mean, standard deviation, percentages, Mann-Whitney test to calculate the significance of differences, Wilkson test to calculate the significance of differences, Black earning rate).

View study results:

The results of the first hypothesis:

To test the validity of the first hypothesis, which states: "There are statistically significant differences between the pre- and post-measurement of the experimental group in the scores of the study sample in the physical fitness tests, in favor of the post-measurement".

(4) Table

The significance of the differences between the pre- and post-measurement of the experimental group in the physical

Fitness tests Using Wilcoxon's test

the exams	Tribal measurement n = 25		telemetry n = 25		(Z) value	sig.	Statistical sig.
	M	SD	M	SD			
Zigzag running	2.79	0.21	4.23	0.51	٤.٣٩٦-	000	Sig.
Step switch	2.25	0.42	3.56	0.87	٣.٨٤٤-	000	Sig.
Abdominal	2.63	0.25	4.52	0.31	٤.٤٤٩-	000	Sig.
pressure	2.18	0.24	4.08	0.79	٤.١٢٥-	000	Sig.
run 400m	2.14	0.31	4.08	0.37	٤.٤٢٤-	000	Sig.

It is clear from Table (5) that there are statistically significant differences between the tribal and remote measurements of the experimental group in the physical fitness tests, at the level of significance (0.05), where the value of the differences (Z) ranged between (-3.844: -4.449), and the significance value came for all differences. (0.000), which is a value less than (0.05), which indicates that the differences are statistically significant.

It is clear from table (5) that:

- There are statistically significant differences between the pre and post measurement of the experimental group in the zigzag running test at the level of significance (0.05), where the value of these differences reached (-4.396), and the statistical significance value was less than (0.05); Which indicates the positive impact of the proposed program on improving the agility of female police officers - the research sample.
- There are statistically significant differences between the pre and post measurement of the experimental group in the step switch test at the level of significance (0.05), where the value of these differences was (-3.844), and the statistical significance value was less than (0.05); Which indicates the positive effect of the proposed program on improving the speed ability of female police officers - the research sample.
- There are statistically significant differences between the pre and post measurement of the experimental group in the abdominal test at the level of significance (0.05), where the value of these differences was (-4.449), and the value of the statistical significance was less than (0.05); Which indicates the positive effect of the proposed program on improving the capacity of the abdominal muscles of female police officers - the research sample.
- There are statistically significant differences between the pre- and post-measurement of the experimental group in the stress test at the level of significance (0.05), where the value of these differences was (-4.125),

and the statistical significance value was less than (0.05); Which indicates the positive effect of the proposed program on improving the strength of the arm muscles of the female police officers - the research sample.

- There are statistically significant differences between the tribal and remote measurements of the experimental group in a test run 400m at the level of significance (0.05), where the value of these differences was (-4.424), and the value of the statistical significance was less than (0.05); Which indicates the positive effect of the proposed program on improving the cyclic respiratory endurance of female police officers - the research sample.

In light of the results of Table (5), the alternative hypothesis is accepted, which states: "There are statistically significant differences between the pre- and post-measurement of the experimental group in the scores of the research sample in the physical fitness tests, in favor of the post-measurement." Which indicates the positive impact of the proposed program on the cognitive and physical level of female police officers - the research sample. The results of this study, with regard to the lower side, agreed with the results of Abdel-Fattah's study. Amir Fattouh (2012), and Shafiq's study. Ehab Kamal El-Din (2002), and Mahmoud's study. Ahmed Nagy (2001). These studies confirmed that the training program aimed at raising the level of physical fitness of the research sample had a positive impact on the research sample.

The presence of statistically significant differences between the tribal and remote measurements of the experimental group is due to the positive effect of the training program, which included many diverse exercises, including: exercises to improve the ability to move, exercises to improve strength characterized by speed, exercises to improve agility, exercises to improve compatibility, and exercises to improve muscle strength

Abdomen, arms and legs. As these physical abilities become one of the basic demands of police officers to carry out their job duties, as well as their link to public health, as Amr points out. Ahmed (2017) considers physical fitness as one of the basic elements on which the security or military structure depends, and this importance comes because of its impact on their work, as the process of developing physical fitness helps the security man perform all the tasks assigned to him, and works to activate cells The body raises its ability to focus, and contributes to the implementation of tasks without fatigue, boredom, or a quick feeling of fatigue, which also enables it in its field work to respond effectively to any emergency or event (Amr, 2017: p. 1). As pointed out by Ismail. Kamal Abdel Hamid, Hassanein. Muhammad Sobhi (2000) that health is linked to physical fitness, whether it is in prevention, treatment or rehabilitation, and says that a medically fit person is able to bear physical and psychological fatigue for a long time, and those who continue to practice sports have better performance for their work and fewer diseases, And their exercise of sports activity delays the appearance of signs of aging (Ismail and Hassanein, 2000: p. 39).

The results of the second hypothesis:

To test the validity of the second hypothesis, which states: "There are significant differences between the post-measurement of the control group and the experimental group in the scores of the study sample in the physical fitness tests, in favor of the post-measurement of the experimental group".

(٥) Table

The significance of the differences between the post-measurement for each of the control group and the experimental group Fitness tests

Using the Mann-Whitney test

the exams	Tribal measurement		telemetry		(U) value	sig.	Statistical sig.
	n = 25		n = 25				
	M	SD	M	SD			
Zigzag running	2.7	0.28	4.23	0.51	...	000	Sig.
Step switch	2.22	0.48	3.56	0.87	٧٥.٥	000	Sig.
Abdominal pressure	2.58	0.30	4.52	0.31	...	000	Sig.
run 400m	2.43	0.45	4.08	0.79	٣٧	000	Sig.
	2.38	0.44	4.08	0.37	...	000	Sig.

It is clear from Table (5) that there are statistically significant differences between the post-measurement for each of the control group and the experimental group in the physical fitness tests, at the level of significance (0.05), where the value of the differences (U) ranged between (0.000: 37), and the significance value came For all differences (0.000), a value less than (0.05), which indicates the statistical significance of the two measurements differences in favor of the experimental group.

It is evident from Table (5) that:

- There are significant differences between the post-measurement of the control group and the experimental group in the scores of the study sample in the zigzag running test, at the level of significance (0.05), where the value of these differences reached (000), and the statistical significance value was less than (0.05); In favor of the post-measurement of the experimental group, which indicates the positive effect of the proposed program on improving the level of agility of female police officers
- the research sample.

- There are significant differences between the post-measurement of the control group and the experimental group in the scores of the study sample in the step switch test, at the level of significance (0.05), where the value of these differences reached (75.5), and the statistical significance value was less than (0.05); In favor of the post-measurement of the experimental group, which indicates the positive effect of the proposed program on improving the level of speed-distinguished force ability of female police officers - the research sample.

- There are significant differences between the post-measurement of the control group and the experimental group in the scores of the study sample in the abdominal test, at the level of significance (0.05), where the value of these differences reached (000), and the statistical significance value was less than (0.05); In favor of the post-measurement of the experimental group, which indicates the positive effect of the proposed program on improving the level of abdominal muscle strength ability of female police officers - the research sample.

- There are significant differences between the post-measurement of the control group and the experimental group in the scores of the study sample in the stress test, at the level of significance (0.05), where the value of these differences reached (37), and the statistical significance value was less than (0.05); In favor of the dimensional measurement of the experimental group, which indicates the positive effect of the proposed program on improving the level of arm muscle strength ability of female police officers - the research sample.

There are significant differences between the post-measurement - of the control group and the experimental group in the scores of the study sample in the 400m running test, at the level of significance (0.05), where the value of these differences reached (000), and the statistical

significance value was less than (0.05); In favor of the post-measurement of the experimental group, which indicates the positive effect of the proposed program on improving the level of periodic respiratory .endurance of female police officers - the research sample

In light of the results of Table (5), the alternative hypothesis is accepted, which states: "There are significant differences between the post-measurement of the control group and the experimental group in the study sample's scores in physical abilities tests, in favor of the post-measurement of the experimental group." Where these results confirmed the results of Table (4), which indicate the positive impact of the proposed program on the physical level of female police officers - the research sample.

The reason for the existence of statistically significant differences between the post-measurement for each of the control group and the experimental group is due to the physical fitness tests of the proposed physical program as it was prepared in a scientific and codified manner. , muscular capacity, and cyclic respiratory endurance. The researcher also took into account, when designing the program, the semi-daily regularity of training, the duration of the program is (4) seven weeks, with a number of weekly units (6) weeks., the total threat to the units is (24) training units. The research, the researcher also took into account the appropriate training method, load, intensity, volume of training, and evidence potential, and in this regard Mahmoud pointed out. Ahmed Naji (2001) that the number of training programs and their implementation in the correct scientific method, which will be a dilemma with a positive outcome, it is necessary to develop the vocabulary of the curriculum according to studied and effective foundations. Mahmoud, 2001: p. 26). As pointed out by Abdel-Magsoud. Mr. (2001) that the individual who practices all

aspects of sports activity on a regular and directed basis acquires the physical fitness that qualifies him to perform his work efficiently; Thus, it increases its production, which in turn affects the increase in the national income of the country (Abdel-Maqsoud, 2001: p. 5).

(٦) Table

Calculating the effectiveness of using the proposed program in the scores of the experimental group laboratories in fitness tests in terms

Of the earning rate of Black

the exams	Tribal measurement n = 25		telemetry n = 25		The end of the test score	Adjusted Gain Ratio	Statistical sig.
	M	SD	M	SD			
Zigzag running	2.79	0.21	4.23	0.51	5	0.94%	unacceptable
Step switch	2.25	0.42	3.56	0.87	5	0.74%	unacceptable
Abdominal	2.63	0.25	4.52	0.31	5	1.18%	acceptable efficacy
pressure	2.18	0.24	4.08	0.79	5	1.05%	acceptable efficacy
run 400m	2.14	0.31	4.08	0.37	5	1.07%	acceptable efficacy

It is clear from Table (6) that the average gain ranged between (0.74: 1.52), most of the percentages came between (1%: 2%), so the following tests are accepted: (abdomen, pressure, running 400m), while the running test Zigzag and step switch test proportions came out optimal (1%); So it is ineffective.

It is evident from Table (6) that:

The percentage of gain for the effectiveness of the proposed physical program in the abdominal test reached (1.18%), which is an acceptable effectiveness rate, which confirms the effectiveness of the proposed physical program using multimedia in improving the level of abdominal muscle strength among police officers - the research sample.

The percentage of gain for the effectiveness of the proposed physical program in the stress test reached (1.05%), which is an acceptable effectiveness rate, which confirms the effectiveness of the proposed

physical program using multimedia in improving the level of muscle strength of the arms of the police officers - the research sample.

The percentage of gain for the effectiveness of the proposed physical program in the 400m running test reached (1.07%), which is an acceptable effectiveness rate, which confirms the effectiveness of the proposed physical program using multimedia in improving the level of periodic respiratory endurance of police officers - the research sample.

- The percentage of gain for the effectiveness of the proposed physical program in the zigzag jogging test was (0.94%), which is an unacceptable effectiveness rate, which confirms the ineffectiveness of the proposed physical program using multimedia in improving the level of agility of female police officers - the research sample.

The percentage of gain for the effectiveness of the proposed physical program in the step-switch test was (0.74%), which is an unacceptable effectiveness rate, which confirms the ineffectiveness of the proposed physical program using multimedia in improving the level of speed-distinguishing strength ability of female police officers - the research sample.

In the light of the results of Table (6), it is clear that the percentage of gain for the effectiveness of the program in improving the ability of muscle strength of the abdomen (1.18%), which is an acceptable effectiveness rate, and the percentage of gain for the effectiveness of the program in improving the ability of muscle strength of the arms (1.05%), which is an acceptable percentage of effectiveness. As for the effectiveness of the program in improving the ability of periodic respiratory resemblance, it reached (1.07%), which is an acceptable effectiveness rate. While the percentage of gain for the effectiveness of the program in improving the ability of agility and strength characteristic of speed was less than (1%); Which indicated that it was necessary to focus on increasing the load, intensity and volume of training for agility and strength characteristic of speed.

Conclusions: There are statistically significant differences between the pre-test and the post-measurement of the experimental group in the scores of the research sample in the physical abilities tests _ under study (the zigzag running test, the step switch test, the abdominal test, the pressure test, the test run 400m), in favor of the post-measurement ";

Refers to the positive effect of the proposed program on the physical level (agility, strength characterized by speed, strength of the abdominal muscles, strength of the arm muscles, endurance of the respiratory cycle) among female police officers - the research sample.

1. There are statistically significant differences between the post-measurement of the control group and the experimental group in the scores of the study sample in the physical abilities tests - under study (zigzag running test, step shift test, abdominal test, pressure test, test run 400m), in favor of the post-measurement of the experimental group. Which indicates the positive effect of the proposed program on the physical level (agility, strength characterized by speed, strength of the abdominal muscles, strength of the arm muscles, and endurance of the respiratory cycle) for the female police officers - the research sample.
2. The percentage of gain for the effectiveness of the program in improving the muscular strength ability of the abdomen reached (1.18%), which is an acceptable effectiveness rate, and the percentage of gain for the effectiveness of the program in improving the muscular strength ability of the arms reached (1.05%), which is an acceptable effectiveness rate, as for the effectiveness of the program in improving the muscular strength ability of the arms. The program in improving the cyclic respiratory endurance capacity reached (1.07%), which is an acceptable effectiveness rate. This indicates the effectiveness of the proposed physical program using multimedia in improving the level of the following physical abilities: (muscular strength of the abdomen, muscular strength of the arms, endurance periodic respiratory).
3. The percentage of gain for the effectiveness of the program in improving the ability of agility and strength characteristic of speed is less than (1%), which indicated that it was necessary to focus on increasing the load, intensity and volume of training for agility and strength characteristic of speed.
4. The proposed multimedia training program has a positive effect on the fitness level of police officers - the research sample.

Recommendations:-

1. Interest in using the proposed training program based on multimedia in the process of improving the physical level of female police officers

because of its positive impact on developing and improving their physical abilities.

2. Designing multimedia programs to develop the knowledge and personal and professional police skills needed by female police officers through the use of modern methods and techniques.
3. Urging the officials of the training sector at the Ministry of Interior to train the trainers on the use of multimedia programs and modern training strategies and encouraging them to employ it within the training courses for police officers.

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Summary of the research in English

The effectiveness of a training program using multimedia on the level of physical fitness of female police officers

The study aimed to identify the effectiveness of the training program using multimedia on the level of physical abilities of female police officers for the age group (25:35) years, and from the rank of (captain to major). The researcher used the experimental method with an experimental design for the two groups (experimental and control) due to its relevance to the objectives and nature of the study. The proposed program for them, which included (50) officers (25 experimental groups, 25 control groups), (30) officers (a survey sample to conduct scientific transactions), to collect the data required for research, the researcher used the following tools: (a suggested program using multimedia to improve the level of physical fitness, the battery of fitness tests), and the most important results of the study are the following:

The percentage of gain for the effectiveness of the program in improving the muscular strength ability of the abdomen reached (1.18%), which is an acceptable effectiveness rate, and the percentage of gain for the effectiveness of the program in improving the muscular strength ability of the arms reached (1.05%), which is an acceptable effectiveness rate, as for the effectiveness of the program in improving the muscular strength ability of the arms. The program in improving the cyclic respiratory endurance capacity reached (1.07%), which is an acceptable effectiveness rate. This indicates the effectiveness of the proposed physical program using multimedia in improving the level of the following physical abilities: (muscular strength of the abdomen, muscular strength of the arms, endurance periodic respiratory).

The percentage of gain for the effectiveness of the program in improving the ability of agility and strength characteristic of speed is less than (1%), which indicated that it was necessary to focus on increasing the load, intensity and volume of training for agility and strength characteristic of speed.

ملخص البحث باللغة العربية

فاعلية برنامج تدريبي باستخدام الوسائط المتعددة على مستوى اللياقة البدنية لدى ضابطات الشرطة

هدفت الدراسة التعرف علي فاعلية البرنامج التدريبي باستخدام الوسائط المتعددة على مستوى القدرات البدنية لدى ضابطات الشرطة للمرحلة العمرية (٢٥ : ٣٥) سنة، ومن رتبة (النقيب إلى الرائد). استخدمت الباحثة المنهج التجريبي ذو التصميم التجريبي للمجموعتين (التجريبية والضابطة) لمناسبته لأهداف وطبيعة الدراسة، قامت الباحثة باختيار عينة عمدية قوامها (٨٠) من ضابطات الشرطة للمرحلة العمرية (٢٥ : ٣٥) سنة، ومن رتبة (النقيب إلى الرائد)، ومما وافقوا على تطبيق البرنامج المقترح عليهم، حيث تضمنت عدد (٥٠) ضابطاً (عدد ٢٥ مجموعة تجريبية، عدد ٢٥ مجموعة ضابطة)، عدد (٣٠) ضابطاً (عينة استطلاعية لإجراء المعاملات العلمية)، لجمع البيانات المطلوبة للبحث قامت الباحثة باستخدام الأدوات التالية: (برنامج مقترح باستخدام الوسائط المتعددة لتحسين مستوى اللياقة البدنية، بطارية اختبارات اللياقة البدنية)، ومن أهم نتائج الدراسة الآتى:

- أن نسبة الكسب لفاعلية البرنامج فى تحسين قدرة القوة العضلية للبطن قد بلغت (١.١٨٪)، وهى نسبة فاعلية مقبولة، وجاءت نسبة الكسب لفاعلية البرنامج فى تحسين قدرة القوة العضلية للذراعين قد بلغت (١.٠٥٪)، وهى نسبة فاعلية مقبولة، أما بالنسبة لفاعلية البرنامج فى تحسين لقدرة التحمل الدورى التنفسي فقد بلغت النسبة (١.٠٧٪)، وهى نسبة فاعلية مقبولة. مما يشير فاعلية البرنامج البدنى المقترح باستخدام الوسائط المتعددة فى تحسن مستوى قدرات البدنية التالية: (القوة العضلية للبطن، القوة العضلية للذراعين، قدرة التحمل الدورى التنفسي).
- أن نسبة الكسب لفاعلية البرنامج فى تحسين قدرة الرشاقة والقوة المميزة للسرعة أقل من (١٪)، مما يشير أن كان من الواجب تركيز فى زيادة حمل وشدة وحجم التدريب الخاص بالرشاقة والقوة المميزة للسرعة.