Legalizing the Physical Fitness Test Battery for Employees of the Babylon Governorate Police Directorate and Installations

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Abstract

As for the research problem: There is a weakness in the physical fitness of the employees of the Babylon Governorate Police Department, which may create loopholes that prevent the achievement of the tasks and duties assigned to the employee of the police in pursuing wanted persons or raiding or confronting terrorists, and in light of the above, the researchers sought that the problem of the current study will answer on the following question: (What are the levels of physical fitness among employees of the Babylon Governorate Police Directorate and installations)?. Among the objectives of the research are: preparing and standardizing the physical fitness test battery for employees of the Babil Police Directorate and facilities, and getting acquainted with the special physical fitness of the employees of the Babylon Police Directorate and installations. The researchers used the descriptive method in the survey method for its suitability to the nature of work, and it represented the community of employees of the Babylon Governorate Police Department and the establishments included in the course of those eligible for promotion, the July schedule for the year (2021), and the research sample consisted of (142) affiliates, and they formed a percentage of (28.4%) of The research community, and they were chosen by a simple random method (lottery).

Keywords*: Special physical fitness, employees of Babylon Governorate Police Directorate and installations.*

Introduction

Feeling of security and safety is one of the most important human needs, whether in his home, at work, or in the other activities [1] of his daily life, and the members of the internal security forces are the most important pillar in achieving the stability on which the building of the modern state is based, as they assume many tasks, duties and responsibilities, through them, the citizen can enjoy the blessings of security and safety [2] in his homeland. In order for the security man to be able to fulfill the tasks and duties assigned to him, he must have the capabilities of special physical fitness and to the extent that helps the member to perform the tasks and duties assigned to him without feeling tired and exhausted [3].

The special physical fitness is one of the physical characteristics that the affiliate must have and to the extent that he can use all his muscles in the face of the various resistances encountered in performing the duties assigned to him by the institution in which he works and thus enables him to succeed in confronting and overcoming them, and also expresses the ability of the body and its muscles [4] to withstand fatigue during the exercise of a certain activity or job assignment without feeling tired, and this is the amount of special physical fitness that must be provided for those who work in conditions that require long and arduous hours of work.

The importance of the research lies in the need for security institutions to make private fitness one of the basic criteria that must be applied to members of the security forces to achieve the highest quality of performance that will achieve the highest level of performance in the tasks assigned to it and thus increase security and safety with the least possible losses. There are convictions in the development of a special physical fitness, there will be creativity and dedication to work, which will clearly affect the performance of the security

component of its tasks and then achieve security.

Research problem :

Through the researchers' observation and field follow-up of the many tasks and duties assigned to the security services in general and the police in particular, and the fact that the researchers are part of this security system, he noticed that there is a weakness in physical fitness, which may create gaps that prevent the achievement of the tasks and duties assigned to an affiliate. The police pursue wanted people, raid, or confront terrorists, in light of the foregoing, the researchers sought that the problem of the current study will answer the following question: (What are the levels of physical fitness among the employees of the Babylon Governorate Police Directorate and installations)?

Research Objectives:

- Preparing and standardizing the physical fitness test battery for employees of the Babil Police Directorate and facilities.

- Identify to the special physical fitness of the employees of the Babylon Police Directorate and installations.

Research methodology and field procedures:

Research Methodology:

The researchers used the descriptive approach to suit it for the current study.

Community and sample research:

The research community included the employees of the Babil Governorate Police Directorate and the establishments who were included in the course of those eligible for promotion, the July schedule for the year (2021), and the research sample consisted of (142) affiliates, and they formed a percentage of (28.4%) of the research community, and they were chosen by a simple random method (lottery)).

Search tools :

- Electronic balance industry (U.S.A) (2008 YA).
- Tape measure.
- (3) fox40 whistle.
- Five-pointed stadium, number (1).
- Suppression number (6).
- Manual stopwatch type (flott) count (3).

Field research procedures:

Fitness Battery:

After the researchers viewed a group of test batteries for a group of researchers, the researchers adopted a (physical - movement) test battery prepared by (Habib, 2016) [(1)] to accept students of the Military College, being the closest to the researchers' work in terms of the sample, work method and specialty.

Table (1) shows the target capabilities and abilities, the name of the tests, and the unit of measurement.

N	Targeted capabilities and abilities	Test name	Measuring unit
1	Speed	(40) meters ran Flying Mode	Second
2	Muscular strength	Abdominal exercises within (30) seconds	Number
3	Endurance	(600) meters ran around a square	Minutes and parts
4	Endurance	It ran in place (2) minutes	Number
5	Flexibility	Raise the torso up	Cm
6	Agility	Multidirectional slalom ran	Second

The researchers presented the battery to a group of (14) experts specialized in sports training and physical fitness to indicate whether the battery is valid or not, and it was found that the battery is suitable for the sample after the approval of all experts.

Fitness Battery Tests:

First - Maximum Speed:

Test name: Run (40) m from the flying start: [1]

Purpose of the test: Maximum speed measurement.

Test requirements: (2) stopwatch, number (3) funnel, (1) flag, football field.

Procedures: The test procedure area is defined by three lines, a first starting line and a second starting line 10 meters from the first line, and an end line 30 meters from the second line and 40 meters from the first line.

Test description: The tester stands behind the first line, when the start signal is heard, the tester runs at an incremental speed that reaches its maximum range at the second starting line. An observer is assigned at the second line and raises his arm up and when the tester cuts the second starting line, the proctor lowers his arm down quickly and then the timer turns on The clock with this signal, and when the tester crosses the finish line, the timer stops the clock and calculates the time that the test takes between the signal given by the observer and the moment he crosses the finish line.

Test administration:

- Permission to start: it gives the start signal.

- Number of (2) observers for the second starting line: The task of each observer is to give a signal with his arm when the contestant crosses the second starting line, as the timer starts the clock with this signal.

- Timer: records the time the laboratory takes between the signal given by the observer to the finish line.

Register: The time taken by the laboratory in its questionnaire in seconds, to the nearest (0.01) of a second.

Second : Speed strength: [2]

Test name: Sitting while lying on the back from a bent knees position for a period of (30) seconds.

Purpose of the test: Measurement of the force characteristic of velocity of the abdominal muscles

Test requirements: Stopwatch (timer, recorder, monitor)

Test description:

- The tester will lie on the back, then bend the knees and pull the seat toward the side so that the distance between them is as small as possible.

- The tester interlocks the fingers of the hands behind the neck.

- One of the testers (the colleague) fixes the two lab heels during the test.

- When the tester is given the start signal, he sits with the knees touching the elbows and alternately.

- The laboratory continues to repeat the previous performance as many times as possible, until the end of the specified time within (30) seconds.

Instructions:

- The feet should remain on the ground for the duration of the test and slightly apart.

- Every time the laboratory lies on the back, it must touch the ground with the backs of the hands before sitting again.

- The laboratory gives only one attempt.

Register: Calculates the number of sitting times from lying down correctly within (30) seconds.

Third : Respiratory Periodic Endurance: [3]

Test name: The 600 m from high start ran around a square.

Purpose of the test: Measuring competitive

periodic endurance.

Test requirements: Stopwatch, five football field (20 x 40m).

Test description:

- The tester is in the standby position behind the starting line in the high start position.

- When the signal is given, the laboratory runs around the pentathlon stadium five times, until it reaches a distance of 600 meters.

Register: Calculates the time for the tester from giving the start signal until it crosses the finish line to the nearest (0.01) of a second.

Fourth - General Endurance: [4]

Test name: It ran in place (2) minutes.

Purpose of the test: Measurement of general endurance.

Test requirements: Babil Police Training Directorate stadium.

Test description: The tester stands so that it faces the rubber thread, at the start signal stethoscope from the supervisor of the test, he runs steadfastly in a motion that does not allow him to leave his place, taking into account that the thread touches his knees while running, stops performing when he hears the signal of the supervisor of the timing after the lapse of (2) minutes from the start of the test .

Instructions: When the performance is compelled to climb the runway with both knees during the specified period of performance and not to allow partitions during the performance, the repetitions are canceled (the number of times the right leg is fixed from the knee and descends on the ground) that do not agree with the conditions

Register: Records the number of times the right foot hits the ground when performing the test correctly within a specified time of two minutes

Fifthly – Flexibility: [5]

Test name: Test the flexibility of lifting the torso from prone.

Purpose of the test: The test aims to measure the elasticity of the muscle material to the back.

Test requirements: A measuring tape or ruler is included.

Test description: The tester lies on the ground and intertwines the fingers of his palms behind his neck while his colleague helps him in stabilizing the hip and not allowing his body to move from under the belt, while the other colleague places the measuring tape or ruler perpendicular to the ground. Three seconds.

Register: The height of the chin is measured in centimeters in three seconds, to give us the degree of flexibility to be measured.

Sixth : Agility: [6]

Test name: Slalom jogging between brackets.

Purpose of the test: Agility measurement.

Test requirements: 5 signs, a stopwatch.

Test description: From stopping at the starting line (one meter wide) which is 3 meters away from the first barrier, running between the four signs, which is one meter between each barrier and another, the time is calculated for the laboratory in two cycles.

Register: The laboratory calculates the time for two continuous cycles of a fitness indicator

Exploratory experience:

The researchers conducted the exploratory experiment with the help of the assistant work team on Sunday 3/1/2021, as the tests were applied on a sample consisting of (10) associates, randomly selected from the research community, and after the explanation and clarification of the importance of interaction in performing the tests that numbered (6) test and respond to how to perform and adhere to the special instructions for each test, and a sample of how the test is performed was presented, and the purpose of this experiment was to

find out how the assisting work team was in harmony and to know the difficulties they face in order to overcome them, the method for recording results in the different measurement recording units, and to know the time taken to perform each test and the total time for the tests.

The scientific basis for the tests:

First: Validity.

The researchers used the validity of the content or the content through the questionnaire form that was distributed to a group of experts and specialists in the field of sports training and fitness, totaling (14) experts, and all experts agreed to approve the final extracted battery that contains the (6) candidate tests..

Second : Reliability.

On Monday, January 4, 2021, the researchers selected for this experiment a sample consisting of (40) affiliates from the Babil Governorate Police Directorate and the establishments included in the course for those eligible for promotion, schedule July 2021, and they formed a percentage of (8%) from the research community, and they were chosen randomly. Simple and after explanation and clarification of the importance of interaction in performing tests and responding to how to perform and adhere to the special instructions for each test, the purpose of this experiment is to measure the stability of the tests, and after the passage of (7) days and on Monday, 11/1/2021, the researchers repeated the tests on the same sample, who are (40) affiliates, in order to verify the scientific basis for the test as shown in table (2).

Table (2) shows the value of correlation for tests and statistical significance.

N	Test name	Measurement unit	Correlation value	Sig type
1	(40) meters ran Flying Mode	Second	0.81	Sig
2	Abdominal exercises within (30) seconds	Number	0.79	Sig
3	(600) meters ran around a square	Minutes and parts	0.80	Sig
4	It ran in place (2) minutes	Number	0.85	Sig
5	Raise the torso up	Cm	0.88	Sig
6	Multidirectional slalom ran	Second	0.86	Sig

Third - Objectivity of the tests: As for the objectivity of the tests, their selection by experts and specialists in the sports field indicates that these tests are characterized by high objectivity and far from self-bias.

Distinguishing Capacity of the Fitness Tests Battery:

The researchers used this type of validity to determine the adequacy of the tests to distinguish between the high-level and the low-level group, the researchers arranged the raw grades obtained by the testers and converted them into standard grades that were arranged in ascending order for the sample members consisting of (40) affiliates from the Babil Governorate Police Directorate and the establishments included in the course for those entitled to promotion, schedule July 2021, and they formed a percentage of (8%) from the research community , and their selection was in a simple

random way, and table (3) shows that.

Table (3) Shows the discriminatory ability of tests.

N	Test name	Higher group		Lower group		T value	Sig type
		Mean	Std. Deviations	Mean	Std. Deviations		
1	(40) meters ran Flying Mode	6.95	0.90	4.71	0.58	03.014	Sig
2	Abdominal exercises within (30) seconds	28.21	4.43	14.59	2.99	15.89	Sig
3	(600) meters ran around a square	4.80	0.36	2.53	0.25	31.91	Sig
4	It ran in place (2) minutes	1.77	22.85	82.95	22.38	3.48	Sig
5	Raise the torso up	8.98	0.77	8.01	1.09	2.85	Sig
6	Multidirectional slalom ran	39.92	6.28	37.31	6.17	2.21	Sig

Main experience:

On the date (01-4 / 2/2021), the main experiment was conducted on the rationing sample for the physical fitness test battery in the period on a sample consisting of (142) affiliates from the Babil Governorate Police Directorate and the establishments included in the course for those entitled to promotion, schedule July 2021, with a percentage of (28.4) %) Of the research community, and their selection was by a simple random method. Data were collected for the raw test scores because the units of measurement for the tests were different and were statistically processed, and the standard score was extracted for each test. The standard scores for the six tests were collected to be the standard score for each laboratory.

Statistical means:

Use the statistical bag (spss) in treating the results statistically.

Presentation, analysis and discussion of results:

View the battery standard score results for fitness tests:

In order for us to study the physical fitness situation of the employees of the Babil Governorate Police Directorate and the facilities, the most important data related to the description of the levels achieved by the sample members in terms of physical fitness elements must be presented, as these levels are expressed in central values of significance for the distribution of the values obtained by the sample members in the tests concerned with measuring the elements of physical fitness (transition velocity, muscle strength, elongation, flexibility, and agility). After the raw results were statistically processed and in accordance with the special laws to convert them into standard degrees bypassing the different units of measurement for the fitness battery tests, as shown in table (4).

Table (4) Shows the mean, standard deviations and torsion of the battery standard degrees and according to each test:

N	Physical attributes	Test name	Measurement unit	Mean	Std. Deviation	Skew ness
1	Speed	(40) meters ran Flying Mode	Second	5.004	0.99	0.801
2	Muscular strength	Abdominal exercises within (30) seconds	Number	5.00	0.99	0.718
3	Endurance	(600) meters ran around a square	Minutes and parts	4.99	0.99	0.49
4	Endurance	It ran in place (2) minutes	Number	5.005	0.99	0.081
5	Flexibility	Raise the torso up	Cm	5.0005	0.99	0.123
6	Agility	Multidirectional slalom ran	Second	4.99	0.99	0.901
Total				29.998	5.94	3.114

From Table (4) it becomes clear to us that the descriptive values of the physical fitness tests differ from one test to another, whether at the level of one test or at the level of all tests, for example (running 40 meters from the flying start) so the arithmetic mean of the test was (5.004) with a standard deviation (standard deviation). 0.99) and the torsion coefficient was (0.801), and with regard to the (Skew nesswithin (30) seconds) test, the arithmetic mean of the test was (5.004) with a standard deviation of (0.99) and the torsion coefficient was (0.718), with regard to the test (running 600 meters around a square), we find that an arithmetic mean of (4.99) was achieved with a standard deviation of (0.99) and a torsion factor of (0.49), the test (ran in place (2) minutes) was the arithmetic mean of (5.00) and a standard deviation of (0.99) and the torsion coefficient was (0.081), regarding the test which is (raising the torso up from prone), the arithmetic mean of the test was (5.0005) And a standard deviation of (0.99) and the Skew ness efficient was (0.123), the last test was (multidirectional slalom run), so the arithmetic mean of the test was (4.99) with a standard deviation of (0.99) and the torsion coefficient was (0.901). The researchers see the reason for this difference between the tests for one sample due to the fact that each of these tests measures a physical characteristic, a certain amount.

What the researchers seek in this research is to know the levels that the members of the research sample have for the purpose of comparison in each of the tests concerned with measuring the elements of physical fitness, since these tests are varied in the units of measurement, some of them are measured by the second and its parts, some of them are measured by the number of times and others are measured in centimeters, accordingly, this measurement must be standardized by converting the raw degrees (resulting from the tests) to standard degrees and from them to standard levels that the research sample members have in each of the physical elements measured in this way that facilitates the process of comparing the important facts on which the societal facts are determined.

In order for researchers to obtain the standard scores, they intended to extract the raw degrees of fitness as a whole, and for them, extracted the arithmetic mean and standard deviation for them, and they also set standards for them, after converting the raw grades to standard grades and placing them in special tables, the researcher

can extract any standard grade for any of the raw grades obtained by the sample members in any of the tests they underwent .

Table (5) shows the standard levels and their limits in standard scores and the frequencies observed at each level along with the percentage of the sample.

Levels	very high	high	Acceptable	Weak	Very weak	Total
Limits of degrees	33.75 – 37.13	30.37 – 33.74	26.99 – 30.36	23.61 – 26.98	20.23 – 23.60	
Duplicates	17	49	53	16	7	142
percentage	11.97%	34.51%	37.32%	11.27%	4.93%	100%
Mean	29.998					
Std. Deviation	5.94					

Researchers did not stop at this limit, and rather its purpose was beyond the standard levels. One level is considered, for example, the degree (20.23 - 23.60) has a level (very weak), so the number of iterations is (7), with a percentage of the sample of (4.93%), and the degree (23.61 - 26.98) had a (weak) level, so the number of iterations was (16), with a percentage of the sample of (11.27%), and the grade (26.99 - 30.36) had its level (acceptable), so the number of iterations was (53), and by a percentage of the sample of (37.32). %), And the score (30.37 - 33.74) had a (high) level, so the number of iterations was (49), with a percentage of the sample of (34.51%), and the degree (33.75 - 37.13) had a level (very high), so the number of iterations was (17) and by a percentage of the sample of (11.97%), and the arithmetic mean was (29.998) with a standard deviation of (5.94). In the ratios between what levels achieved.

(Abu Hatab and Othman 1976) indicated that "standard grades are the best picture of raw grades conversion, and they express the distance the individual gets from the mean in light of the standard deviation of the distribution. After calculating both the mean and the standard deviation, the difference can be found between the degree obtained by the individual and the group mean, then the value of this difference on the standard deviation of the group, and in this way we replace the raw score with a derived degree indicating the individual's position in relation to the group mean "(Abu Hatab and Othman: 1979) [7] .

Conclusions and Recommendations

Conclusions:

- Reaching the standardization of a special physical fitness test battery consisting of six tests and for the physical characteristics (velocity, Endurance, agility, muscle strength, flexibility) for the employees of the Babil Governorate Police Directorate and the facilities.

- Reaching the extraction of five standard levels (very high, high, acceptable, weak, very weak) on the basis of the lower and upper limits of the standard scores obtained by the sample.

- Most of the sample was concentrated in the (acceptable) level.

- The associate who enjoys high physical fitness helps him to perform the duties and tasks assigned to him and endure all difficulties.

Recommendations:

- Conducting continuous special fitness sessions, especially for those who are obese.

- One of the conditions for admission to the promotion courses from one rank to another for the police employee is to pass the physical fitness test battery, so it will be an incentive for the police employee to continuously maintain his own physical fitness.

- Paying attention to the provision of infrastructure, even in a simple form, such as sports halls and squares to perform sporting events in emergency regiments and divisions directorates, which makes it easier for the affiliated to perform sports even if it is in a recreational way, that a healthy mind is in a healthy body

- Activating and revitalizing the morning sport, there is always a curriculum for this topic, but it is not activated most of the time.

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Conflict of Interest: None to declare.

Ethical Clearance: "All experimental protocols were approved under the University of Babylon were carried out in accordance with approved guidelines".

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