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Comparison Results of Physical Fitness Estimation between Physical Education Students for University of Babylon and Sulaimaniah

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ABSTRACT

Study aimed to comparison results of physical fitness estimation between physical education students for University of Babylon and Sulaimaniah. In addition to place significant levels and degrees of physical fitness for the girl's students of fourth level for each faculty. 40 students were participated in present study divided in two groups, 20 students from University of Babylon and 20 students from University of Sulaimaniah. Researchers used descriptive search design method which included survey style and connection studies because it is suitable to the nature of the study. Different tests were used to measure fitness such as (Test of torso bending from stand, test of throw medicine ball, test of wide jump from stable, test of stand on the instep, test of run for a distance 300m and starting from high, test of 30m run, and shuttle test). Study concluded that a significant difference in physical fitness tests between students of both faculties and in favor of Sulaimaniah students; in addition both groups achieved different ratios in deviation levels of tests.

Keywords: Comparison, Fitness, Students, Physical education, Measure fitness.

1. Introduction

Physical fitness and its tests are playing an important role in the process of right preparation for students of the physical education faculty, especially girl's students because physical fitness offers true and right anatomical and physiological structure for girl's students to reach an acceptable level of physical fitness from which to develop many sport skills (Ahmed &Ahmed., 1984). An interesting in the students preparing of the physical education faculty and development level of physical fitness to them in addition to building skill level and scientific level in the years of their studies can't be done only through attention to objectivity and scientific curriculum accurately according to the variety modalities and means which work to find correlation formulas between physical characteristics and curriculums of physical education, to ensure the physical fitness level of girl's students and maintain them over the four years within the faculty curriculum (Qasim., 1998).

The problem of present study was about knowing physical fitness levels for girl's students and effects of faculty curriculum on development and maintains physical fitness during four years. It is clear that physical education has an important, basic, and active role in developing physical fitness level through different learning stages. So we can see the correlation between physical fitness levels of girl's students of faculty of physical education because they will be teachers of future and hold the changing and advancement motto of the sport school through owning to the elements of physical fitness, from which will be applied the curriculums of physical education in a right scientifically because it can't apply the skills and sporting events properly if teacher of Physical Education does not have good and outstanding levels of physical fitness to be a model of exemplary by students in all study levels (Ali., 2004).

The important of the present study is to know the levels of physical fitness for the girl's students of fourth level because this level is the final level then students will be graduated to start their working at schools and give us the true results of these levels and the relation it to a lot of curriculums for four years, given that will give us true scientific answer regarding physical student ability to experience the practical application in schools. However, the aim of current study is to comparison results of physical fitness estimation between physical education students for University of Babylon and Sulaimaniah. In addition to place significant levels and degrees of physical fitness for the girl's students of fourth level for each faculty.

2. Methodology

2.1 Subject

40 students were participated in present study divided in two groups, 20 students from University of Babylon and 20 students from University of Sulaimaniah. Researchers used descriptive search design method which included survey style and connection studies because it is suitable to the nature of the study. Study was conducted on 2013-2014.

2.2 Selection of physical fitness elements and their tests

After reviewing the many studies and researches on the components of physical fitness, in order to identify the most important elements of physical fitness and tests, the researchers prepared a questionnaire to identify the most important elements of physical fitness and the most important tests, they distributed to a set of experts in the field of training and physical fitness for purpose identify the most important elements of physical fitness that are commensurate with the students of the fourth stage in the faculties of physical Education. Researchers have used the percentage law in determining the skills and selection of tests with the adoption rate of 80% or more, as shown in table (1).

Table (1)
Shows selection of physical fitness elements and their tests

N	Physical characteristics	Testing	Measure unite	Number of agreements	%	K3 value		Significant
						Calculated	Tabulated	
1	Explosive for limbs muscles	throw medicine ball	M	7	%87,5	4,5	3,84	S
2	Explosive strength for lower limbs muscles	wide jump from stable	M	8	%100	8		S
3	Speed	Run 30 m and starting from flying	S	8	%100	8		S
4	Endurance	run for a distance 300m and starting from high	S	8	%100	8		S
5	Stable balance	stand up on the one leg	S	8	%100	8		S
6	Agility	shuttle test	S	8	%100	8		S
7	Flexibility	Torso flexibility	Cm	7	%87.5	4.5		S

2.3 Measurements and tests

Researchers used different tests which are suitable to the nature of the study and they are really measurement of the physical fitness characteristics such as torso bending from stand (Ali, 2004), this test measures the flexibility of torso and thigh during movements of bending to the front from standing position. We used also Medicine ball throwing (2kg) test to measure muscle power of arm and shoulder. Furthermore, researchers used wide jump from stable to measure strength of legs and stand on instep to measure stable balance, in addition to run for a distance 300m and starting from high to measure endurance (Roa, 1999). However, we used run 30 m test which starting from flying to measure maximum speed, and shuttle test 2 x 10 to measure agility. These tests are reliable and honest to measure physical fitness characteristics and were used by many of studies and most of them confirmed that using such these tests help to measure physical fitness elements. Some other studies found that Medicine ball throwing test is used to measure muscle arm and shoulder power (Laila, 2003).

Whereas study of Qassim (1998) showed that wide jump from stable is important test to measure strength of legs and he found also that stand on instep is used to measure stable balance.

2.4 Main experiment

Main experiment was conducted on April 11, 2014 to April 15, 2014. We had done the tests at same time of days for both Universities (Babylon and Sulaimaniah), in dead, it is two tests in first and second days but three tests at third time.

2.5 Statistical analysis

Researchers used following statistical: (Mohammed &Marwan, 2001). (Mean, Median, Standard deviation, Mode, Standard error, Skewness coefficient, F value test, Percentage, Modified standard grade.

3. Results and Discussion

Because of researchers seek to know the levels of subject of present study for the purpose of evaluation the physical fitness level which enjoyed by girl's students of the fourth class/ Faculty of Physical Education in both Babylon and Sulaimaniah in the tests which measure the components ofphysical fitness. In facts, these testsvariedin measure units some of them is measured by secondhand its parts, and other is measured by mater and its parts, whereas others are measured by the number of times. In order to integrate these measures, we converted raw grades which concluded from tests to standard grades and then converted to standard levels to be easier to evaluation the physical level of the research subject. Table (2) showed specific standard grades of study subject.

After researcher has got the raw grades of physical fitness of girl's students in both Babylon and Sulaimaniah, they have been starting to convert raw grades to standard grades so as to build the standard levels. We placed three standard levels (good, middle, and weak), on the basis that every two standard grades from decimal division of standard grades in the one level except the middle-level which representing three standard grades. We have indicated above to the standard levels which help to evaluate physical fitness level that subject of present study is enjoined, here we are mention that the method used by the researchers in the development of these levels is a method of natural distributing curve, as this method is considered one of the fittest methods in the placing standard levels for the purpose of the statement the most important levels achieved for the subject shed light on what come in the table (3).

Table (2)
Shows raw and standard grades of physical fitness tests

Standard grade	Raw grades of tests						
	Torso flexibility	Run 30 m and starting from flying	throw medicine ball	run 300m and starting from high	shuttle test	stand up on the one leg	wide jump from stable
2	2,48 –	4,87	1,99	5,82	13,79	88,6	1,40
3	2,59	4,49	2,76	4,95	13,37	79,11	1,42
4	7,66	4,11	3,53	4,08	12,95	69,62	1,44
5	12,73	2,73	4,3	3,21	12,53	60,13	1,46
6	17,80	3,35	5,07	2,34	12,11	50,64	1,48
7	22,87	2,97	5,84	1,47	11,69	41,15	1.50
8	27,94	2,59	6,61	0,6	11,27	31,66	1,52

Table (3)
Shows percentage of the achieved standard levels of physical fitness elements

Standard level	Physical tests							
	Torso flexibility	Run 30 m & starting from flying	throw medicine ball	run 300m & starting from high	shuttle test	stand up on the one leg	wide jump from stable	Physical fitness
Weak	8,69	8,69	Zero	8,69	13,04	8,69	34,78	4,34
Middle	86,95	91,30	95,62	91,30	60,68	82,60	8,69	86,95
Good	4,34	Zero	4,34	Zero	26,08	8,69	56,52	8,69

The table above is reflected for us, a difference in the ratios between the achievements of the subject in the same test and the other tests and in the one standard level, as well in order to know the differences in physical fitness tests between students of both faculties. Researchers calculated the value of (F) to see significance of differences between them, as shown in table (4).

Table (4)
Shows results of physical fitness between girl's students

N	Tests	Subject	Mean	SD	Calculated F value	Tabulated F value	Significant
1	throw medicine ball	Babylon	3,35	1,77	2,55	3,23	No S
		Sulaimaniah	5,18	0,98			
2	wide jump from stable	Babylon	1,40	1,45	2,64	3,23	No S
		Sulaimaniah	1,48	0,87			
3	Run 30 m and starting from flying	Babylon	10,22	0,98	2,32	3,23	No S
		Sulaimaniah	17,12	0,76			
4	run for a distance 300m and starting from high	Babylon	3,30	1,75	5,02	3,23	S
		Sulaimaniah	2,73	0,95			
5	stand up on the one leg	Babylon	5,07	1,22	4,12	3,23	S
		Sulaimaniah	4,02	1,02			
6	shuttle test	Babylon	41,12	0,84	3,94	3,23	S
		Sulaimaniah	69,62	0,65			
7	Torso flexibility	Babylon	13,20	1,23	4,16	3,23	S
		Sulaimaniah	11,90	0,93			

Tabulated F value at the freedom degree (2, 38) under significant (0.05) is (3.23).

Table (2, 3, 4,) showed different ratios in the achievements grades within the standard levels for the subject of the study in the most physical tests that were made by the researchers, we note that there are acceptable degrees within the standard level (good) in tests of (shuttle run, stand on one foot, jump from stable), while the grades were not accepted in the standard level (good) in tests of (flexibility of the torso, ran 30 meters, throw a medical ball 2 kg, ran 300 m). Researchers attribute the reasons of these results into curriculum of fourth class which is including only five scientific subjects such as (Basketball, Volleyball, Handball, Track and field, Physical fitness), whereas there are six theoretical subjects and one day for practical applied which is affected on decreasing level of students performance in some physical tests specially tests of speed, speed endurance and flexibility which shows that these practical lessons are not enough to develop these physical fitness, which requires reconsideration of the curriculum of the fourth class in order to maintain the level of fitness of the students at this level because they are the basic and important stage in life of a student Faculty of Physical Education. In this level of the study we have to maintain acceptable level of physical fitness for girl's and boy's students so as to demonstrate in a good appearance in front of students during the period of practical application.

There were significant differences between Babylon and Sulaimaniah students in tests of (30m, 300m, Balance, and Agility) in favor of Sulaimaniah students, whereas no significant differences were showed between both Faculties in tests of (Throw a medical ball 2 kg, Jump from stable, and Flexibility) because of plenty of sport halls and courts at Sulaimaniah University which attribute to improve physical fitness level of students.

4. Conclusion

Study concluded that significant differences in physical fitness tests between students of both faculties and in favor of Sulaimaniah students; in addition both groups achieved different ratios in deviation levels of tests.

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