

Degree of Owning Cognitive Efficiency of Physical Propriety Connected With Health at the Directorate of Education at the University District/ Governorate of Amman – Jordan, by Instructors of Physical Education

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Abstract

This study aimed at reconnoitering the degree of owning cognitive efficiency of physical propriety connected with health at the Directorate of Education in Jordan by instructors of physical education, in accordance with variables of sex, experience, and the supervising authority. The sample of study consisted of (96) instructors; (53) of them males and (43) females. They were randomly chosen. The researcher employed the cognitive test as an instrument to collect data and information.

It consisted of (32) questions, distributed among five spheres: nutrition, physiology of exercise, physical training, tests of physical propriety, injuries, and the first aids. The study deduced that the test as a whole amounted to (40.34%). It is a value expressing a weak degree of owning cognitive efficiency of the physical propriety connected with health by instructors of physical education.

It showed non-existence of differences with statistical indication in the degree of owning cognitive efficiency, ascribed to the variable of sex, except for physiology of exercise for the interest of males, by instructors of physical education.

And non-existence of differences with statistical indication in the degree of owning cognitive efficiency ascribed to the supervising authority, except for the physiology of exercise for the interest of private schools, by instructors of physical education.

Besides, there is no existence with statistical indication, a scribed to the variable of experience years, by instructors of physical education.

Key words:Physical propriety connected with health cognitive efficiency

Introduction and Problem of Study

The term of physical propriety reached a great limit of spreading and promotion, not only among specialists and professionals, but also among the people of all classes. Practicing physical training did not become confined to a certain class, sex, or certain age, but became the concern of all people; every individual wants to be healthy and wishes to gain good health for himself. To be able to perform his daily work properly, his body should be qualified to fulfill this job. To reach this condition, regular physical trainings should be done, supervised by professionals and specialists in the field in order to attain the required health condition and reserve it for a long time. This is what we seek and what we aspire for. It is called ‘the physical propriety’. Reaching this condition is considered one of the basic factors which share in planting happiness and pleasure in individuals and their feeling of life liveliness and tastefulness. In modern age, in which information technology and modern outputs of technology dominate all parts of life, the matter that shared in elevating the level of individual’s welfare, and increased the margin of physical rest in them, and formed the health retreat for all people. It is the tax paid by humanity in return for the contemporary pattern of life.

This thing urged experts and the concerned scholars to blow the alarm bell and start to spread awareness of the significance of practicing the regular physical training and activities to prevent from diseases of the age (Bakeer& et.al., 2009), the matter that formed a great challenge throughout years for healthy people through their serious attempts, and scientific studies which uncover the benefits of physical propriety exercises to the individual’s health, and their role in preventing from diseases of few movement.

It is the thing that caused them to call the physical training exercises “the free marvelous drug”. Their state prevents expression of truth about this type of medication by the simplest statement; “use your body, or lose it” (Mayo Clinic, 2005).

The researcher asserts the significance of practicing all types of physical propriety trainings in our age, by inserting the means by which we achieve health and physical objectives, already available at a higher degree of efficiency. Al-Rabadi (2012) indicates that states started to give the extreme significance to protect the health of individual through their concern about the physical propriety and the necessity of practicing physical exercises by the community to achieve this destination. The best evidence of that is King Abdullah the Second’s Prize for physical propriety, concerning school students, as a sample followed at all institutions of the state, for this prize is considered basic and important in enlightening the Jordanian community with the significance of propriety and the extent of its connection with health.

The researcher views that it is a must to enroot this concept at all classes of the community, especially the travel of the age is difficult and very tough in all requirements of life; such as the basic elements and the duty of its stay. So the best friend of man is health. The individual “who is still quick on earth” and lives for a long time losing his physical propriety, finds life a tough travel, full of pain and diseases. He spends his age transferring among physicians and hospitals, searching for his recovery from this disease or that. For all this physicians and scholars of health in most states of the world, especially the developed states, concentrated on the necessity of individual’s enjoying with a high level of physical and physiological propriety, because this level reflects the appearances of individual’s health condition (Shihatah & et.al., 2009), and decreases the danger of catching different diseases of the age. For owning the physical propriety through practicing the physical exercises regularly has positive effects on most – if not on all – organic systems of the individual. And as a result of that, it enables individuals to avoid suffering at a wide extent from problems and health diseases (Mayo Clinic, 2005).

Cognitive efficiency is considered one of the most important requirements with which the instructor of physical education is characterized. There is no amore terse saying than the Caliphate’s, Omar Bin Abdel Aziz “he who works without a legal science, his work damages more than reforms”. Ghokhshaw (2012), reported from the center of legal opinion, and the saying of Good Ancestors, Abu Abdullah who said “worker who works without clear-sightedness is like the walker who walks on no way, the speed of walking does not increase him except remoteness” (AlKaleeni, 2005). To personify these sayings as reality and significance, the instructor of physical education owns cognitive efficiency and damage caused by its loss or decrease, especially in the age of cognition in which we live, the thing that increased their responsibilities and forced, in addition to the necessity of gaining a high degree of specialty, increase of knowledge and cognizance of all what is new and beneficial for their specialization in the first sciences with their variety (Blansheih, 1986).

Here, emerged the role of academic institutions and scientific edifices in preparing cadres of qualified and efficient human resources, and granting them certificates that form a difference for the bearer – and adapt himself with requirements of labor market and share in raising its productivity, as the psychologist (William James) says: the first law scholars have to follow is the following: “the difference that does not result in a difference is not a difference”, and the certificate that does not lead to a difference in performance is not an efficiency and has no meaning (Spenser & Spenser, 1993). And when the cognitive efficiency of the instructors of physical education bears in its folds this amount of significance, the researcher has trended from this point to the study of measuring the extent of owning cognitive efficiency in the field of physical propriety, connected with health by instructors of physical education in the Directorate of Education, the University District – Amman Governorate – Jordan.

Significance of Study

The significance of study conceals in the results which can be deduced from recognizing the extent of owning the cognitive efficiency, of the physical propriety connected with health by the instructor of physical education, and laying these results in the academic and educational institutions, within which specializations is the specialization of preparing the instructor of physical education.

The researcher also views that the Ministry of Education in Jordan has to get benefit from the results of this study in finding the places of power with its instructors and supporting them, and uncovering the places of weakness, avoiding them and processing them.

Objectives of Study and its Questions

The study aimed at reconnoitering the degree of owning the cognitive efficiency of physical propriety connected with health by the instructor of physical education in the Directorate of Education in the University District / Governorate of Amman, through answering the following questions:

1. What is the extent of owning the cognitive efficiency of physical propriety connected with health by instructors of physical education in the Directorate of Education at the University District/ Governorate of Amman?
2. Are there differences with statistical indication in the degree of owning the cognitive efficiency of physical propriety connected with health due to sex variable by instructors of physical education?
3. Are there differences with statistical indication in the degree of owning the cognitive efficiency of physical propriety connected with health due to the supervising authority by instructors of physical education?
4. Are there differences with statistical indication in the degree of owning the cognitive efficiency of physical propriety connected with health due to the variable of years of experience by the instructor of physical education?

Limits of Study

Human sphere: consisted of the instructor of physical education in the Directorate of Education at the University District/ Governorate of Amman.

Place sphere: schools following the Directorate of Education in the Governorate of Amman.

Time sphere: study was prepared in the scholastic year 2013, the second semester.

Limits of Study instrument: results of study were specified by the instrument used in it. It is a cognitive test consisted of (32) questions, distributed on (5) spheres.

Terms employed

1. **Cognition:** it is information owned by the person in certain cognitive sphere (Spenser & Spenser, 1993).
2. **Cognitive efficiency:** Aldrej (2004) defined them as acquired abilities that enable behavior and labor at a certain context. Their content consists of cognitions, skills, abilities and consolidated trends at a combined form, and the individual who acquired them initiate to stir, recruit, and employ them for the purpose of facing a certain problem and solving it at a specified situation.
3. **Physical propriety:** the individual should be free from diseases, strong, elegant with patience, endurance and enough skill to confront daily life requirements, and to be able to rationally and sentimentally adaptation with what fits his age (At Rabadi, 2012).
4. **Physical propriety connected with health:** the researcher procedurally defined it as man enjoys good health, free from diseases and stature deformities. And the ability of the body to resist tire-some and fatigue when performs any occupational, or physical work.

Procedures of Study

Employed method: the researcher employed the descriptive method, the way of surveying studies, due to its propriety to the nature of study and achieving its objectives.

Community of Study

The community of study consisted of instructors of the physical education in the Directorate of Education at the University District/ Governorate of Amman, amounting to (340) instructors, male and female out of them (167) males, and (173) females.

Sample of Study

The sample of study was randomly chosen and amounted to (96) instructors, male and female, at the rate of 28% from the community of study, of them (53) male instructors, and (43) female instructors.

Table (1): Description of Sample of Study individuals due to their demographic Variables

Variable	Class	Number	Rate
Sex	Males	53	55.3
	Females	43	63.5
	Total	96	100
Authority	Government	35	36.5
	Private	61	63.5
	Total	96	100
Experience	Less than (5) years	45	46.9
	5 less than (10) years	29	30.2
	10 years & more	22	22.9
	Total	96	100

Instrument of Study

Cognitive test was determined in the field of physical propriety, connected with health. Performed by Ghokhishaw (2012), where the researcher depended on the statistical styles to reach performing the test, from part of truthfulness and steadiness, coefficient of difficulty, easiness and distinction.

Table (2): Steadiness of cognitive test by Koder & Richardson's style in the degree of owning cognitive efficiency of the physical propriety connected with health at the Directorate of Education by instructors of physical education

Mean Deduction on Test	Standard Deviation	Number of Question	Steadiness Value
12.91	5.34	32	0.753

The value the test steadiness amounted to 0.753 and it is a high value and fulfills purposes of the study.

Truthfulness of Choice

The researcher showed the test to a group of referees, experts and specialized in the field of physical propriety and health, appendix (1), where five fields of the scale prepared by the researcher, Ghokhishaw (2012) were shown valid to measure the physical propriety, connected with health at instructors of physical education. The following table illustrates these fields. The number of their questions are (32) questions.

Table (3): Fields approved by specialized experts

Field	No. of Questions
Nutrition	8
Physiology of Exercise	6
Physical Training	8
Test of Physical Propriety & Health	6
Injuries & First Aids	4
Total	32

Variables of Study

Independent variables:

1. Sex: males, females.
 2. Supervising authority: public schools, private schools.
 3. Experience from (5) years, from (5) years to less than (10) years, more than (10) years.
- Subordinate variable: the cognitive efficiency of the physical propriety, connected with health.

Degrees of employed scale

The following rates were depended in distributing degrees according to the studies of AlBaradi'(2004), Khasawneh&Azzu'bi (2007), and Ghokhashaw (2012):

90 and above	-	Excellent
80 and below 90	-	Very good
70 and below 80	-	Good
60 and below 70	-	Medium
Below 50	-	Weak

Statistical Processing

1. Arithmetic means, standard deviations and percentages of answering the first question.
2. T-test to answer the second and the third questions.
3. Test of mono – difference analysis of answering the fourth question.
4. Shifei test

Previous Studies

Al Amir (1997) prepared a study aimed at evaluating the cognitive level of directors and administration staff of the football in the State of Kuwait at the field of physical nutrition. The sample of study consisted of (79) administrative trainer. The researcher employed the descriptive method and questionnaire as a means in collecting data. Results showed existence of shortage in specialized and important information in the field of physical nutrition at the directors and administration staff.

Miller &Hounser, 1998 did a study aimed at reconnoitering the cognitive deduction of physical propriety connected with health at instructors of physical education, working and non-working staff, and post-graduate students specialized in physical education, and specialization of physiology of physical training. Both researchers employed the surveying method. Results of study showed the distinction of the post-graduate students, specialized in the physiology of physical training, surpassing others in the cognitive deduction of physical propriety, connected with health. Results also showed dropping of cognitive deduction level of physical propriety, connected with health at non-working instructors.

Al-Wazeer (2000) performed a study, aimed at reconnoitering the cognitive physical deduction of instructors of physical education at the Medina Munawwarah area in Saudi Arabia Kingdom. The sample of study consisted of (66) instructors of physical education. The researcher employed the descriptive method, and a cognitive test was established and included eight dimensions (bases of motional and skillful education, and bases of physical training and strategy of teaching). Results showed the significance of physical cognition for instructors, and the necessity of owning it at a distinguished form.

Chan, et.al. 2001 prepared a study entitled: “Instructors of Physical Education Knowledge about Emergency Administration of teeth – injuries in Hong Kong”. Researchers employed the descriptive method, where a special cognitive test was designed, and distributed among (100) secondary schools from Hong Kong’s schools. The answer came from (65) schools, and (166) instructors answered the test. Results of study showed that the cognitive level at the administration of teeth – injuries at instructors of physical education in Hong Kong is weak in general. And the study recommended organizing awareness campaigns to improve their levels in providing the first aids correctly.

Al-Hawari (2003) prepared a study, aimed at reconnoitering the scientific cognitive deduction at the trainers of Karati in Jordan, in the fields of mechanic movement, nutrition, physical injuries and training, and acknowledging the differences of study spheres due to variables of study. The sample of study consisted of (91) of Karati trainers in Jordan. The researcher employed the descriptive method, and prepared a cognitive test including (57) questions (multiple choice) to cover the spheres of study. The results showed that the level of cognitive attainment attrainers was at a weak degree, and also showed the existence of differences in the variable experience for the interest of experience more than ten years.

Arrahahleh&Shoukeh (2007) performed a study, aimed at reconnoitering the level of cognitive deduction in the field of physical propriety at students of the Faculty of Physical Education in the University and Yarmouk University and acknowledging the differences in the cognitive deduction due to the variable of sex, education level and physical practice. Both researchers employed the descriptive method by the surveying way, where the sample of study was chosen randomly, of students of the four-studying levels. Their number amounted to (215) male and female students of the University of Jordan, and (201) male and female students of the Yarmouk University, and the total of the sample is (416). And the cognitive level scale was employed in the physical propriety prepared by Al-Khouli et.al. After the assertion of his truthfulness and steadiness on the sample of study. The results of study showed the existence of weakness in the level of cognitive deduction at students of the University of Jordan and Yarmouk University. The results also showed the elevation of the cognitive deduction level, from an educational year to another, and to non-existence of differences among students, practicing physical activities at the level of clubs and curves among students of both faculties.

Al-Saleh&et.al. (2009) did a study entitled: “Measuring the Cognitive Deduction at Students of the Faculty of Physical Education in the University of Jordan in Physical Propriety”. Researchers depended on descriptive method by its surveying style. The sample of study consisted of (174) male and female students, at the rate of 23.7% of the original community of study, and the sphere duration of this study was specified by the educational year (2004 – 2005). The researchers employed the test designed by Amin Al-Khouli, AadliBaoumi and Fathi Abed Rabbu. It was divided into three parts. The first part included (19) paragraphs from questions of (yes or no), the second part consisted of (19) paragraphs too, from questions of the multiple choice, meanwhile, the third part, and the last of this test consisted of the corresponding questions, with an average of (6) paragraphs.

Results of study showed dropping of the cognitive deduction in the physical propriety at individuals of the sample at degree of very weak and the rate of 53.8%. And it was pin-pointed the non-existence of differences with statistical indication ascribed to variable of sex, and to variable of students’ class (player, non-player). Meanwhile, this study found differences with statistical indication ascribed to the variable of the educational year and for the interest of the fourth year students. The researchers recommended with the necessity of introducing more than one subject connected with physical propriety and its elements and all what is new to it.

Mishaal (2010) prepared a study entitled: “The Cognitive Attainment of Nutritional Culture and Level of Air Propriety at Students of the Faculty of Physical Education in the University of Jordan”. Mishaal employed the descriptive method with its surveying style, and chose a random sample consisted of (25) male and female students of the Faculty of Physical Education students in the University of Jordan. And the instrument of collecting data consisted of three parts. Part one: is the general nutrition questionnaire (GNKQ), included four axes (nutritional bits of advice), groups of nutrition, choice of nutrition, lastly health problems or diseases. But part two: is testing trend towards food (EAT – 26). This test consists of twenty – six paragraphs. The last part included basic data to prophesy with the extreme limit of consuming Oxygen (VO₂MAX). results of study showed to the existence of dropping in the nutritional cognition in general among students of the Faculty of Physical Education in the University of Jordan, where they achieved an arithmetic mean equals (55.231) out of the original total of grades and it is (110) points. And the results also indicated to females owning a higher nutritional culture than males, mean-while results did not show differences with statistical indication ascribed to the variable of educational year.

Ghokhshaw (2012) did a study, aimed at building a scale of physical efficiency for the trainers of physical propriety working at centers for physical propriety in Jordan, in the sphere of physical propriety connected with health, and reconnoitering the degree of owning cognitive efficiency by trainers, in the sphere of physical propriety connected with health. The sample of study consisted of (125) male and female trainers, working at the centers for physical propriety in Jordan. They were randomly chosen.

The researcher employed the descriptive method and depended on the cognitive choice, which was designed by her in accordance with the scientific bases. And was a consisted of (42) paragraph measuring seven spheres (nutrition, anatomy, exercise physiology, physical training, tests of physical propriety and health, programs of special classes from the community and physical injuries). Results showed that the degree of owning trainers came in a medium degree at the choice of 51% for each, and their cognitive efficiency at spheres of study came between medium and weak, meanwhile results did not show differences ascribed to both variables of sex and experience.

Results & Discussion

The First Question

What is the degree of owning cognitive efficiency of the physical propriety connected with health at the Directorate of Education at the University District/ Governorate of Amman by instructors of physical education?

Table (4): The degree of owning cognitive efficiency of physical propriety connected with health at the Directorate of Education by instructors of physical education

Sphere	Number of Questions	Arithmetic Mean	Standard Deviation	Mean Percentage	Degree of Owning	Arrangement
Nutrition	8	2.89	1.41	36.12	Weak	5
Physiology of Exercise	6	2.19	1.15	36.50	Weak	4
Physical Training	8	3.64	1.35	45.50	Weak	1
Physical Propriety	6	2.70	1.12	45.00	Weak	2
Injuries & First Aids	4	1.50	0.83	37.50	Weak	3
The Whole Degree of Test	32	12.91	5.34	40.34	Weak	

Table No (4) illustrates values of arithmetic means of the degree of owning cognitive efficiency of physical propriety connected with health at the Directorate of Education by instructors of physical education, aiming at unification the highest values of cognition spheres to arrange them, then prefer in between them to limit the highest degree of owning.

The researcher counted the percentage of arithmetic means, where the highest degree of cognitive owning was represented in sphere of physical training, which achieved the rate of (45.5%). It expresses a weak degree of owning, followed by the degree of cognitive owning in sphere of physical propriety, which was achieved in a weak degree, amounted to (40%). Then came third, the sphere of first aids with the rate of (37.50%), then the sphere of physiology of exercise with a rate of (36.5%). Meanwhile, nutrition occupied the last sphere, which was achieved in a weak degree of (36.12%). The percentage of the whole test amounted to (40.34%). It is a value expresses the extent of weak owning in cognition at instructors of physical education.

Results of this study agree with what (Miller & Hounser, 1998) indicated of dropping in the level of cognitive deduction of physical propriety connected with health at non-acting instructors, and agreed with what Al-Hawari (2003) indicated that cognitive deduction at trainers of Karati was with a weak degree. It also agreed with (Al-Saleh & et al., 2009) study in dropping of the level of cognitive deduction at sphere of physical propriety and its elements at students of the Faculty of Physical Education/ University of Jordan. It also agreed Ghokhshaw (2012) study which indicated that the degree of owning physical propriety by instructors of physical propriety of the cognitive deduction was medium and weak.

The Second Question

Are there differences with statistical indication in the degree of owning cognitive efficiency of physical propriety connected with health at the Directorate of Education at the University District/ Governorate of Amman, ascribed to the variable of sex, by instructors of physical education?

To answer this question T.Test was employed to compare between means of cognitive test spheres due to variable of sex. The following table illustrates the result of this test.

Table (5): T.Test results to discuss differences in means spheres of the degree of owning cognitive efficiency of the physical propriety connected with health at the Directorate of Education due to variable of sex by instructors of physical education

Sphere	Sex	Number	Arithmetic mean	Standard Deviation	T.value	Indication Level
Nutrition	Male	53	2.68	1.37	1.60	0.113
	Female	43	3.14	1.44		
Physiology of Exercise	Male	53	2.55	0.93	3.59	0.001
	Female	43	1.74			
Physical Training	Male	53	3.64	1.13	0.049	0.961
	Female	43	3.63			
Physical Propriety	Male	53	2.79	1.12	0.92	0.359
	Female	43	2.58	1.12		
Injuries & First Aids	Male	53	1.42	0.93	1.10	0.270
	Female	43	1.60			
The Whole Degree of Test	Male	53	13.08	3.76	0.53	0.597
	Female	43	12.70	3.08		

Table No. (5) clears that values of means differences that express spheres of owning degree of the cognitive efficiency of physical propriety connected with health, at the Directorate of Education by instructors of education were not with statistical indication, because all values of counted indication level were more than (0.05). That indicates that both males and females have a degree of cognitive owning adjacent at all spheres of the study, and also in the whole degree of the cognitive test except for the physiology of exercise sphere, where counted t.value amounted to (3.59) with indication level of (0.001) and the value of indication level was less than 0.05. This means existence of differences with statistical indication in this field between males and females, where indication was for the interest of male instructors whose arithmetic mean was the bigger (2.55).

Results of this study

Agree with what Al-Saleh& et al., (2009) indicated to non-existence of differences with statistical indication between both males and females in the cognitive deduction in the sphere of physical propriety. It also agreed with what Ghokhshaw (2012) indicated to non-existence of differences ascribed to variable of sex in the sphere of cognitive efficiency of the physical propriety connected with health. And disagreed with what Mishaal (2010) indicated that females owned nutritional culture higher than males.

The Third Question

Are there differences with statistical indication in the degree of owning cognitive efficiency of the physical propriety connected with health at the Directorate of Education at the University District/ Governorate of Amman, by instructors of physical education, ascribed to the variable of the supervising authority? To answer this question T.Test was employed to compare between spheres means in the degree of owning cognitive efficiency of the physical propriety connected with health at the Directorate of Education, by instructors of physical education, due to the variable of the supervising authority. The following table illustrates this test.

Table (6): Results of T.Test to discuss differences in spheres of owning of cognitive efficiency of physical propriety connected with health at the Directorate of Education by instructors of physical education due to the variable of the supervising authority

Sphere	Sex	Number	Arithmetic mean	Standard Deviation	T.value	Indication Level
Nutrition	Government	35	2.89	1.25	0.002	0.999
	Private	61	2.89	1.51		
Physiology of Exercise	Government	35	1.57	0.85	4.31	0.000
	Private	61	2.54	1.16		
Physical Training	Government	35	3.69	1.23	0.27	0.783
	Private	61	3.61	1.42		
Physical Propriety	Government	35	2.74	1.12	0.29	0.767
	Private	61	2.67	1.12		
Injuries & First Aids	Government	35	1.43	0.70	0.63	0.528
	Private	61	1.54	0.91		
The Whole Degree of Test	Government	35	12.31	2.48	1.27	0.206
	Private	61	13.25	3.89		

Table No. (6) pin-points values of means differences which express spheres of owning degree of cognitive efficiency of physical propriety connected with health at the Directorate of Education, by instructors of physical education. They did not have statistical indication, because all values of counted indication level were higher than 0.05 that indicates that the supervising authority at public and private schools have a cognitive owning degree adjacent at every sphere of study, and also at the whole degree of the cognitive test, except for the sphere of the exercise physiology, where counted T.value amounted to (4.31) with an indication level of (0.001) and the value of indication level at this sphere is less than 0.05.

The researcher ascribes these results to approaching the scientific attainment between both instructors of public and private sector, because they are obtaining university scientific qualifications, and most of them graduated from faculties of physical education in Jordan. Also programs and educational curricula introduced to them are alike, except for the sphere the exercise physiology, where instructors of private schools surpassed instructors of public schools. The reason of that may be because most of private schools instructors work at the centers for physical propriety training, and this is considered a source that may increase their knowledge in the sphere of exercise physiology.

The Fourth Question

Are there differences with statistical indication in the degree of owning cognitive efficiency of physical propriety connected with health at the Directorate of Education at the University District Governorate of Amman, by instructors of physical education ascribed to experience years?

To answer this question (One Way ANOVA) test was chosen to compare among means of cognitive test spheres due to the variable of experience years. The following table clears results of this test.

Table (7): Arithmetic means and standard deviations of the owning degree of cognitive efficiency spheres of the physical propriety connected with health at the Directorate of Education, by instructors of physical education due to the variety of experience years

Sphere	Experience	Number	Arithmetic Mean	Standard Deviation
Nutrition	Less than five years	45	3.07	1.53
	5 less than Ten years	29	2.62	1.32
	Ten years & more	22	2.86	1.28
Physiology of Exercise	Less than five years	45	2.47	1.22
	5 less than Ten years	29	1.86	1.03
	Ten years & more	22	2.05	1.09
Physical Training	Less than five years	45	3.73	1.45
	5 less than Ten years	29	3.45	1.21
	Ten years & more	22	3.68	1.32
Physical & Health Propriety	Less than five years	45	2.73	1.21
	5 less than Ten years	29	2.55	1.12
	Ten years & more	22	2.82	0.91
Injuries & First Aids	Less than five years	45	1.41	0.95
	5 less than Ten years	29	1.51	0.73
	Ten years & more	22	13.51	4.04
The Whole Degree of the Test	Less than five years	45	13.51	4.04
	5 less than Ten years	29	11.90	2.72
	Ten years & more	22	13.00	2.81

Table No (8) shows values of means that express spheres of owning degree of cognitive efficiency of physical propriety connected with health at the Directorate of Education by instructors of physical education. It was not with statistical indication, because all counted values of indication were higher than 0.05, that indicates that instructors have different experience years and have a degree of owning cognition adjacent to every sphere of the study and also at the whole degree of cognitive test. And the researcher ascribes the cause of that to educational curricula introduced by faculties of physical education to their graduates. They did not receive the required development, and also making the cognitive scientific changes in the field of physical propriety connected with health, for cognitive abilities equaled between owners of different types of experience.

This result differed with what the study deduced (Al-Hawar, 2003). The cognitive deduction came for the interest of experience for more ten years. Meanwhile agreed with what Mashaal (2010) indicated of non-existence of differences in the level of cognitive deduction of nutritional culture among students of different years of study.

Table (8): Results of (One Way ANOVA) for spheres of the owning degree of cognitive efficiency of the physical propriety connected with health at the Directorate of Education, by instructors of Physical education due to the variable of experience years

Sphere	Variety Source	Squares Total	Freedom	Squares mean	T.value	Indication Level
Nutrition	Experience	3.52	2	1.76	0.88	0.419
	Mistake	186.22	93	2.00		
	Whole	189.74	95			
Physiology of Exercise	Experience	7.2	2	3.51	2.73	0.070
	Mistake	119.60	93	1.29		
	Whole	126.63	95			
Physical Training	Experience	1.49	2	0.75	0.41	0.667
	Mistake	170.75	93	1.84		
	Whole	172.24	95			
Physical and Health Propriety	Experience	0.99	2	0.50	0.39	0.675
	Mistake	117.25	93	1.26		
	Whole	118.24	95			
Injuries & First Aids	Experience	0.40	2	0.20	0.29	0.752
	Mistake	65.60	93	0.71		
	Whole	66.00	95			
The Whole Degree of Test	Experience	46.22	2	23.11		
	Mistake	108.93	93	11.72		
	Whole	136.16	95			

Results

In light of objectives of study and showing results and discussions, the researcher deduces the following points: weakness of cognitive deduction in sphere of physical propriety connected with health at instructors of physical education.

And the cognitive deduction equaled in sphere of physical propriety connected with health at instructors, both males and females, and variables of experience years did not have any effect in increasing or decreasing cognitive deduction in sphere of physical propriety connected with health.

Recommendations

1. Enlisting special course in spheres of the study such as (nutrition, exercise physiology, physical training and tests of physical and health propriety and injuries and first aids) as basic condensed courses in educational curricula at faculties of physical education in Jordan.

2. Concluding training courses specialized in the sphere of physical propriety connected with health of acting instructors.

3. Preparing follow-up studies in measuring cognitive deducing for instructors of physical education in the field of physical education and training.

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“By the Name of God, Most Graceous, Most Merciful”

Dear Colleague: (Male& Female Sequire)

Salams& Greetings:

The researcher is preparing a study entitled “Degree of owning cognitive efficiency of physical propriety, connected with health at the Directorate of Education at the University District/ Governorate of Amman by instructors of physical education”.

Thank you for cooperation

Dr. Mahmoud Al-Hadidi**General Information**Sex : Male FemaleSupervising authority : Public PrivateExperience years : Less than 5 years 5 less than 10 years 10 years and more**Appendix****Put a circle round the correct answer as follows:**

1. **Which of the following is considered a good source to provide the body with energy?**
 - a. Iron.
 - b. Zinc.
 - c. Vitamin B12.
 - d. Nothing of It is mentioned.
2. **Carbohydrates rate in the balanced daily nutrition is estimated with:**
 - a. 25 – 35%.
 - b. 35 – 45%.
 - c. 45 – 55% B12.
 - d. 55 – 66%.
3. **Which of the following materials is considered one of the ANABOLIC STEROID forms?**
 - a. Arginine.
 - b. Deca – Durabolin.
 - c. Glutamine.
 - d. Creatine.
4. **Which of the following materials is not considered one of the main factors that affect in the average of basic body metabolism (BMR)?**
 - a. Sex (male/ female).
 - b. Age.
 - c. Daily waste of food.
 - d. Size and structure of the body (fat cells/ muscle cells).
5. **Natural need of a person to protein is estimated with about grams for each kilogram from the weight of the body:**
 - a. 1.
 - b. 50.
 - c. 100.
 - d. 150.

6. Which of these statements is a correct one of what concerns ANABOLIC STEROID?

- a. Miss using it may cause baldness and sadness.
- b. Miss using it may cause thinness of both testicles and decrease in producing sperms.
- c. Miss using it may lead to irregularity of menstruation at females.
- d. All what is mentioned.

7. What advice do you introduce to one of your students who drink physical drinks including carbohydrates to increase energy & compensate for lost liquids?

- a. Choosing kinds of drinks including a rate of (2 – 4%) carbohydrates.
- b. Choosing kinds of drinks including a rate of (6 – 8%) carbohydrates.
- c. Choosing kinds of drinks including a rate of (10 – 12%) carbohydrates.
- d. Choosing kinds of drinks including a rate of (14 – 16%) carbohydrates.

8. Oxidization of (1) gram of fats gives kilo calorie:

- a. 4.
- b. 6.
- c. 9.
- d. 12.

9. To get rid of (1) kilo gram of the body fat, that required burning kilo calorie:

- a. 550.
- b. 750.
- c. 1500.
- d. 7500.

10. At performing strength exercises, characterized with high repetitions “more than 30 repetitions” you expect that:

- a. Training decreases from the whole fatness of the body.
- b. Training decreases from the muscles’ elasticity.
- c. Training decreases the elasticity of the nerves.
- d. All what is mentioned.

11. Which of these compounds analyzes at the absence of Oxygen?

- a. Amino acids.
- b. Fat acids.
- c. Glucose.
- d. All what is mentioned.

12. Commitment of a training programme of heavy weights to enlarge muscles extends to (6) months, it should lead to:

- a. Increasing the number of muscle fibers.
- b. Increasing the size of muscle fibers.
- c. Increasing the number and size of muscle fibers.
- d. Nothing of what is mentioned.

13. Which of these statements is correct in what concerns the cardiac output?

- a. Cardiac output = stroke volume x average of heart rate.
- b. Cardiac output is the amount of blood pumped by the heart in one heart beat (rate).
- c. Amount of blood pumped by the heart in a minute between the left ventricle is bigger than that pumped by the right ventricle in a minute.
- d. All what is mentioned.

- 14. Which of these statements is correct in what concerns the ANAEROBIC THRESHOLD?**
- It is a transferring point from stages of getting energy from operations of analyzing phosphate creatine to operations of analyzing fats.
 - It is a transferring point from stages of getting energy from ANAEROBIC Metabolic operation to EROBIC Metabolic operations.
 - It is a transferring point from stages of getting energy from EROBIC Metabolic operations to ANAEROBIC Metabolic operations.
 - Nothing of what is mentioned.
- 15. White muscle fibers are characterized FT (type llb) with:**
- Slow contraction.
 - Swift exposure to fatigue.
 - High thickness of blood capillaries in it.
 - Improving its efficiency through aerobic exercises.
- 16. Which of these choices are considered safe and recommended as an objective to decrease weight at designing special programmes for fat people in general?**
- Dropping an average of 0.5 – 1 kilo gram a week.
 - Dropping an average of 1-2 kilo grams a week.
 - Dropping an average of 2-3 kilo grams a week.
 - Dropping an average of 3-4 kilo grams a week.
- 17. To develop the breathing hearty propriety, the training burden should be formed of:**
- High strength, and a short period of time.
 - High strength, and a long period of time.
 - Moderate strength, and a short period of time.
 - Moderate strength, and a long period of time.
- 18. At practicing the exercise of (Bench Press), breathing process is done in the following way:**
- Inhalation is taken in during lifting the weight, and taking exaltation out during putting down the weight and so on.
 - Inhalation is taken in during putting down the weight, and taking out the exaltation during lifting the weight and soon.
 - Inhalation is taken in, and keeping breath (reserving breath) during performing the complete movement, that is lifting and putting down the weight, then taking out exaltation and taking in the inhalation and reserve in it, and so on.
 - There is no specifying rule.
- 19. At starting with strength exercises, it should start with:**
- Small muscles, then with big muscles.
 - Big muscles, then with small muscles.
 - Succession between small and big muscles.
 - There is no rule that specifies with what should we start.
- 20. For the sake of achieving benefit from resistance exercises in increasing the muscle strength without injuries training burdens should be characterized with being:**
- Less than what the muscle was used to.
 - More than what the muscle was used to.
 - Equal to what the muscle was used to.
 - There is no rule that specifies that.

21. **Which of the following choices is considered one of the basic constituents at putting the training programs?**
- Strength of sentences.
 - Size of sentences.
 - Thickness of sentences.
 - All what is mentioned.
22. **Heating that precedes the basic part of the training draft, its strength should be:**
- Less than the strength of the basic part of training.
 - Higher than the strength of the basic part of training.
 - Equal to the strength of the basic part of training.
 - There is no rule that specifies that.
23. **To achieve the best results concerning the development of elasticity element, duration of steadiness at performing the steady elongation exercises must continue:**
- 10 – 30 seconds.
 - 45 – 60 seconds.
 - 60 – 80 seconds.
 - 75 – 90 seconds.
24. **Which of these items is considered a mistaken procedure at taking measures of the body to referee the body structure?**
- Braichium measure is taken at the nearest point of the elbow joint.
 - Hip and closed feet are measured (closed to each other).
 - Ankle measure is taken at the smallest periphery of it.
 - Calf (of the leg) is measured at the biggest periphery of it.
25. **Which of the following equations is used for the interest of body mass index?**
- Body mass index = weight by kilogram length with the meter.
 - Body mass index = weight by kilogram ÷ (length with square meters).
 - Body mass index = length with the meter ÷ weight with kilo gram.
 - Body mass index = length with the meter ÷ (weight with kilogram).
26. **Which of the following is the natural dimension of the extent of heart beats during rest, and if passed this extent, dropping, or increasing, the client with low physical propriety should consult the physician?**
- 50 – 100 beats per minute.
 - 60 – 100 beats per minute.
 - 50 – 110 beats per minute.
 - 60 – 110 beats per minute.
27. **The highest average of heart beats of a man at the age of 40 years is:**
- 160 beats per minute.
 - 180 beats per minute.
 - 200 beats per minute.
 - 220 beats per minute.
28. **At sit – and – reach flexibility test, one of the following behavior violate conditions of the test:**
- Performing elongation exercises before test.
 - Bending both knees during the test.
 - Placing both arms over each other.
 - All what was mentioned.

29. Which of the following tissues results in a cicatrioial tissue at being exposed to injury negatively affects the efficiency and strength of this tissue?
- Bone tissue.
 - Muscle tissue.
 - Sinews tissues.
 - Binding's tissues.
30. When one of your students complains of simple tear occurrence at one of his muscles, which of the following pieces of advice you will introduce to him to perform through the first (24) hours of the injury?
- Practicing the muscle elongation exercises.
 - Make a warm water bath directed to the place of injury.
 - Fraction, massage and pressure on the muscle.
 -
31. When you do the first aids to a person injured by a closed break (bones do not penetrate the skin) at his foot, which of the following procedures is considered wrong?
- Placing snow on the injured part and around.
 - Skeletal binding of the organ (pulling bones and referring them to the natural convenience), then fixing them with any available materials.
 - Elevating the injured organ higher than the level of the heart.
 - Nothing of what was mentioned.
32. If one of your students was exposed to twistedness of the ankle joint, and when you diagnosed the injury at time of occurrence, you found him complain from great pain and difficulty in walking and carrying the whole body on the ankle, he seeks instead of that to walk on tips of his fingers, so you will decide to fix his ankle joint firmly for a while:
- One week.
 - Three weeks.
 - Six weeks.
 - Eight weeks.

Correct answers

No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Answer	D	D	B	C	D	B	B	C	D	A	C	B	A	C	B	B	D	B	B

No.	20	21	22	23	24	25	26	27	28	29	30	31	32
Answer	C	D	A	A	A	B	B	B	B	B	D	D	B