

## **The Effect of a Cognitive Program for the Skill of the (DRAB) System for Paramedics for Physical Education Teachers When Injuries Occur Among Students**

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### **Abstract**

The current research aims to prepare a cognitive program to learn (DRAB system) for paramedics to first aid injuries for physical education teachers (in how to deal with injuries - and ways to rescue them) for secondary school students, while the research community of physical education teachers in the center of Muthanna Governorate and to achieve this goal the researcher used the two approaches The descriptive approach and the experimental approach, with the design of two experimental and control groups, in order to suit the nature of the research problem. This design came through a questionnaire that he submitted to the teachers of the schools of the Muthanna Governorate Center, which numbered (30) teachers for the academic year (2020-2021), and it was found that there are a group of the teachers have very weak experience, numbering (15) teachers, and a group with high experience, numbering (15) teachers. As for the sample on which the researcher conducted the test, which consisted of (15) the first group, where the researcher conducted a pre-test for the weak experimental group and the control group, and then the cognitive program was applied to train teachers on the (DRAB system) for paramedics for first aid and for students' injuries (theoretical and practical) For a period of 6 weeks, two sessions per week (Sunday - Wednesday) for the experimental group (with weak experience). As for the sample on which the researcher conducted the test, which consisted of (15) the first group, where the researcher conducted a pre-test for the weak experimental group and the control group, and then the cognitive program was applied to train teachers on the (DRAB system) for paramedics for first aid and for students' injuries (theoretical and practical) For a period of 6 weeks, two sessions per week (Sunday - Wednesday) for the experimental group (with weak experience).

### **1- Research**

The scientific and technological progress that the modern era is witnessing has cast a shadow over various fields of life and has brought about great and many changes and developments. Its main pillar in this progress and development is man, including

He possesses enormous and limitless energies and capabilities if the means are available to him to progress and develop, as caring for human capabilities is one of the important principles on which modern education is based in the current era .Physical education is one of these fields that has

enjoyed a large share of this development because of its effective role in development in its various dimensions. The physical education teacher is one of the most prominent axes through which educational and educational goals are achieved due to its great influence in the upbringing of its students and preparing them in a way that makes them able to serve their country. With dedication, sincerity and enthusiasm.

In view of the vital role played by the physical education teacher, one of the most important necessities is to take full and complete care of his preparation and qualification scientifically and pedagogically, which puts him in a prestigious and decent position. This interest in the scientific and technological revolution and the race of countries in the field of technical and scientific progress, and therefore professional preparation has taken a new image after it became an essential part in preparing each individual regardless of his specialization, including interest and awareness of how to use first aid. First aid is immediate and temporary medical care ;It is presented to a person for the purpose of trying to bring him to the best possible health condition with simple treatment tools or skills until the time of full medical assistance .It is usually a set of simple medical steps, but it usually leads to saving the life of the injured. The person who performs the first aid operation (paramedic) does not need high medical skills or techniques, as it is sufficient for him to practice the skills of doing first aid through the use of minimal equipment.The teacher has a role to act as a paramedic for injuries that occur in the school, such as fractures, lacerations, wounds, bruises, or other accidents that affect students in schools, so the teacher in the school must have a level of knowledge of the principles of first aid so that he can save The life of any student who suffers an injury at school, ensuring the student's recovery.

### **1-1. Research Problem:**

Through the researcher's work in schools as a physical education teacher and through his experience and specialization in the field of first aid, he found that the level of awareness of the principles of first aid is very low among many school teachers, due to the weakness of dealing or dealing with field injuries in schools or during classes, or even in tournaments Which is set up by the Directorate of Sports and School Activities, knowing that these first-aid duties fall on the shoulders of physical education teachers because of injuries or sudden accidents they face while practicing systematic and extracurricular sports activities. Sports when injury occurs to students.

### **1-2. Research Objectives:**

- 1- Prepare a cognitive program for how to use System (**DRAB**) Paramedic for physical education teachers in the Muthanna governorate center .
- 2- To identify the impact of the cognitive program in raising awareness of how to use basic first aid for physical education teachers in secondary schools in the center of Al-Muthanna Governorate.

### **1-3. Research hypotheses:**

- 1- There is a positive effect of the cognitive program in raising awareness of the use of basic first aid for physical education teachers for secondary schools in the Muthanna governorate center.
- 2- There is a positive effect of the cognitive program for first aid for common injuries and the learning of paramedic skills according to) **the system ofDRAB** (for teachers of physical education in the center of Al-Muthanna Governorate.

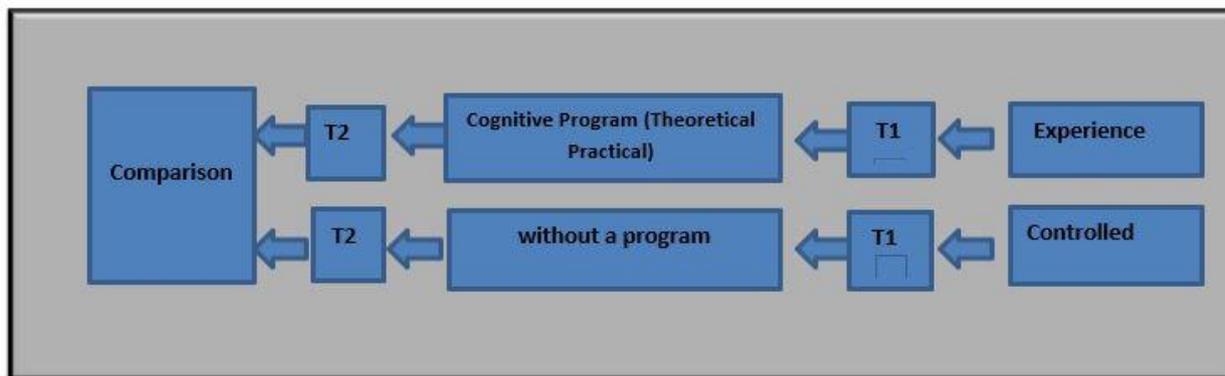
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## 1-4. Research Areas:

**1-4. human field:** Teachers of Physical Education in the province of Muthanna for the year school (2020-2021).

**2-4-1. Time range:** for the period from 26/11/2020 AD to 24/6/2021AD

**2-4-2. Spatial domain:** the halls of the College of Physical Education and Sports Sciences - University of Al-Muthanna.



## 3- Research Methodology and Field Procedures

This chapter includes a description of the method and procedures followed by the researcher in determining the study population, its samples, its performance, the steps that were followed in verifying the validity and reliability, and the statistical treatments in extracting and analyzing the results.

### 3-1. Research Methodology:

The experimental method was used in a pre and post measurement method for two groups (experimental and control).

### 3-2. Research community:

The research community consisted of physical education teachers in the schools of the Muthanna governorate center. The research sample were teachers who experienced very weak injuries in the field of casualty ambulance for the academic year (2020-2021).

### 3-3, Research Sample:

The research sample consisted of (15) teachers who had very weak experience in the field of casualty ambulance from the schools of the Muthanna Governorate Center, where they were given a knowledge program

#### 3-3.1. Homogeneity Of the Sample

In order to avoid the influences that may affect the results of the research for the individual differences that exist among teachers ,and to reach a single and equal level for the sample in the variables investigated, which are influential in the experiment that must be controlled, and for this reason,homogeneity was made and Table (2) shows that

**Table(2) : The Homogeneity of The Research Sample**

Indication level	Values F calculated	experimental group		control group		measuring unit	variable	T
		p	s	p	s			
0.170	1.987	0.990	6.53	0.737	6.40	Degree	cognitive test	1

Table (1) shows that the significance level values for the test (Leven) was greater than (0.05). This indicates that there is homogeneity among the sample members .

### 2- 3 - 3 Equality of The Research Sample

The researcher should form equal groups in order to avoid the influences that may affect the results of the research for the differences between an experimental group and two control groups. For this reason, the researcher conducted an equivalence procedure for the research group as in Table ( 3 ) showing the equivalence of the research sample members.

**Table( 3 ): Equivalence Between The Control And Experimental Groups**

Indication level	Values t calculated	experimental group		control group		measruing unit	variable	
		p	s	p	s			
0.679	0.418	0.990	6.53	0.737	6.40	Degree	cognitive test	

Table No (3) .shows that all values of the significance level were greater (0.05), and here it indicates that there are no differencessignificant among the three groups.

### 3- 3 . Means, Tools and Equipment Used In The Research Tools:

It is “the means or method by which the researcher can solve his problem, whatever it may include tools (data, samples, devices, tools)) Wajeih Mahjoub; 2003: 163. (In his study, the researcher used the following tools:

#### 3 -1-3. Means of Gathering Information:

- 1- Note
- 2- Scientific sources and references :
- 3- Test and Measure :
- 4- Studies and similar research :
- 5- Personal interviews
- 6- Questionnaire: -
- 7- The International Network (Internet)

### **3- 2-3-Equipment used in scientific research**

- 1- Camera
- 2- projector) (DATA-SHOW
- 3- Computer LAP-TOP) (DELL
- 4- laser pointer device

### **3-3- 3 Tools Used In Search**

1. Stationery (pens and paper)
2. Anatomical models
3. First aid kit:
4. Medical cotton, sterile gauze
5. Long ties \_ Compression strap, wrap
  - Adhesive or plaster
  - A piece of wide cloth with a size of 90 cubic centimeters
  - Wooden splints of different sizes and lengths
  - Sterilizers - (Dettol, Savlon)
  - Scissors and forceps.

### **3-4. Specifying the Research Variables**

The researcher conducted a survey on a number of sources, scientific references and previous studies, and the opinion of the supervisor about determining the research variables, and it was agreed on the programs and tests required in the current research

**First** - the knowledge program for first aid

**Second** - skill training) system **DRAB** .3Paramedic

### **First, the authenticity of the content**

It is intended to measure the extent of the test for the different aspects or components of the aspect to be measured) Amer Saeed Al-Khikani: 2002: 68. (In view of

Thus, the paragraphs that obtained the approval of the experts were accepted, and the paragraphs that did not obtain their approval were deleted

### **3-6.The exploratory experience (the cognitive program)**

The exploratory experiment of the cognitive program for first aid was conducted on (5) teachers. The tests took place on Thursday (3/11/2021) at exactly nine o'clock in the morning. The purpose of the exploratory experiment was

- 1- Knowing the time taken to conduct and implement the tests
- 2- Knowing the suitability of the test to the sampling sample
- 3- Knowing the difficulties that the researcher may face
- 4- Ensuring the efficiency of the auxiliary work team
- 5- Ensure the safety of the devices and tools used

### 3-7. The scientific basis of the test

#### 3-7.1. The stability of the tests

for stability means that if the test is re-applied to the same individuals, it will give the same results or close results. It also means the consistency of the test results with themselves if it is repeated once or several times) Marwan Abdul Majeed( 10 :1992 :. The reliability coefficient was extracted by re-testing the same individuals as the pilot sample, and by means of the simple correlation coefficient (Pearson) the reliability coefficient was found .(+1) It showed that the tests have a high degree of stability) ( Ali Salloum31 :2006 :)

#### 3.7.2. Validity of the tests:

It defined as " the degree to which the test measures the object to be measured) for Laila Mr. Farhat (64 :2001 :As the the validity coefficient depends on the stability coefficient as it increases with its increase and decreases with a decrease, as the researcher used the subjective honesty by means of the square root of the stability) Mustafa Hussein(45 :1999 :

#### 3.7.3. Objectivity of the Test

verified the two subjects of the tests by calculating the simple correlation coefficient (Pearson) between the results. The results showed that there is a high correlation relationship in all the tests, which confirms their objectivity. A higher level of stability means a higher level of objectivity. Validity, reliability, and objectivity coefficients of the tests used

### 3-8. Main Experiment

**3.8.1. Theoretical and practical knowledge program) main experience(** The pre - test The pre-test of the research sample was conducted through the scale questionnaire developed by the researcher on Sunday (14/3/2021) at exactly nine o'clock in the hall of the College of Physical Education and Sports Sciences, Al-Muthanna University, and after it was answered, the researcher applied the cognitive program.

VALIDITY	PERCENTAGE	CA2	DO NOT FIT	FIT	VERTEBRAE	T
fit	100%	15th	0	15th	First aid is:	Q1
					It is the immediate assistance that is provided temporarily to one or more persons who have suffered injuries or sudden illness	A
					They are immediate treatments that are provided temporarily to one or more people who have suffered injuries or a chronic disease	Ns
					It is the immediate treatment given to the patient in the health center	Ns
					What is the care after surgery?	Dr

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fit	100%	15th	0	15th	It is the first steps that are followed to take care of the injured in order to preserve his life	Q2
					first aid	Ns
					shock treatment	Ns
					Bleeding treatment	Ns
					Choking treatment	Dr
fit	100%	15th	0	15th	One of the success factors of the first aid operation provided to the injured is:	Q3
					Caring for the injured person	N S
					Carrying the patient and transporting him to the hospital	N S
					Pulmonary resuscitationcpr	N S
					wake up mode	Dr
fit	93.6%	11.267	1	14	/Immediate ambulance phone number is	Q 4
					(112)	N S
					(122)	N S
					(102)	N S
					(120)	Dr
fit	100%	5th	0	5th	In an emergency situation and you are a paramedic, who is the most important person ?	Q 5
					pedestrians	N S
					injured	N S
					You are	N S
					dead	Dr

and (system) DRAB Paramedics Hazard Breathing and Response

validity	percentage	Ca2	do not fit	fit	vertebrae	
fit	100%	15th	0	15th	It is the method of first aid for a person who has swallowed the tongue	6
					Transfer the patient to the hospital	
					artificial respiration CPR	S
					Chest massage	S
					Lift the victim's head back and press his lower jaw,	r
fit	100%	15th	0	15th	The correct method of cardiopulmonary resuscitation is carried out by the paramedic with	7
					Do 10 chest compressions and alternate one breath	S
					Do 15 chest compressions and two breaths alternately	S
					Do 20 chest compressions and take two breaths alternately	S
					Do 30 chest compressions and take two breaths alternately	r
fit	86.6%	8.667	2	13	When the pulse and breathing process of a person stops on the paramedic	8
					Transport the patient to the hospital as soon as possible	S
					Cardiopulmonary resuscitation	S
					Elevate the feet above the level of the	

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					heart	S
					The patient's heart is on one side	r
fit	93.6%	11.267	1	14	One of these cases that you cannot provide to a person who is suffocating and cannot speak	9
					Encourage him to breathe through his nose	S
					Help him drink some water to dislodge the body	S
					Hit him hard on the back, between the shoulder blades	S
					Lift the head up	r
fit	100%	15th	0	15th	After the epileptic seizure ends, the paramedic	10
					Roll him on his side, recovery position	S
					Do not let the patient sleep	S
					Feet should be raised	S
					The patient should be given a small amount of water or milk	r

validity	percentage	Ca2	Donot fit	i t	Items	T
fit	93.6%	11.267	1	14	It is one of the most important ways to help a person with an epileptic seizure	Q11
					Curbing the patient's convulsions during the seizure or	a

					restricting his movements.	
					The method of artificial respiration with him, if his face is blue.	NS
					Put something between the teeth of the victim during the seizure	NS
					Protecting him from harming himself during an epileptic seizure	Dr
it	f %	86.6	8.667	3	In any of these cases, the paramedic cannot raise the victim's head higher than the level of the heart	Q12
					Shock	NS
					nosebleed	NS
					fainting	NS
					all the above	Dr
it	f %	86.6	8.667	3	When there is pain, swelling, internal bleeding and infiltration of blood plasma fluid at the site of the injury	Q13
					the wound	NS
					bruise	NS
					khul	NS
					bruise	Dr
it	f %	100	5th	5th	It is the method of first aid for a person who has swallowed the tongue	Q14
					Transfer the patient to the hospital	NS
					artificial respiration cpr	NS
					Chest massage	NS

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					Lift the victim's head back and press his lower jaw,	Dr
it	f	86.6%	.667	3	Symptoms and signs of shock	Q15
					Pale skin and cold extremities	NS
					Rapid breathing and decreased pressure	NS
					Fast and weak pulse	NS
					all the above	Dr

Shows the coefficient of difficulty and ease of the cognitive achievement test

indication	Ease coefficient	Difficulty factor	paragraph number
moral	0.508	0.492	1
moral	0.542	0.458	2
moral	0.542	0.458	3
moral	0.558	0.442	4
moral	0.460	0.540	5
moral	0.558	0.442	6
moral	0.543	0.457	7
moral	0.460	0.540	8
moral	0.360	0.640	9
moral	0.360	0.640	10
moral	0.558	0.442	11
moral	0.339	0.661	12
moral	0.508	0.492	13
moral	0.558	0.442	14
moral	0.339	0.661	15th

#### 4- Results Analyzed and Discussed

This chapter deals with the presentation, analysis and discussion of the results of the research, after the researcher completed the collection of data resulting from the used tests that were placed in tables, because of the ease in extracting scientific evidence ;And because it is an explanatory tool suitable for research, it enables the achievement of the research hypotheses and objectives in the light of the field procedures carried out by the researcher.

4.1. Presenting, analyzing and discussing the results of the cognitive test values:

4.1.1. Presenting the results of the test values between the control and experimental groups in the post-test of a variable of the cognitive test for (System (DRAB Analyze and discuss. Table

**Table (3) differences between the post-tests of the control and experimental groups in the values of the cognitive test**

Indication Level	Values T Calculated	Experimental Group		Control Group		Measuring Unit	Variable
		P	S	P	S		
0.000	27.938	0.756	14.00	0.594	7.07	Degree	Cognitive Test

In light of the data extracted for the members of the research sample, Table (3) shows the differences in the values of the cognitive test for the members of the control and experimental groups in the post test, and as shown in the above table, the nature of the sample members showed differences between the control and experimental groups .Using the t-test of the interconnected samples to extract the differences, it showed significant differences, as its calculated value reached(27.938)at the significance level (0.000) and the degree of freedom (13), between the control and experimental groups and in favor of the experimental group in the post test.

In light of the results reached by the researcher in Table (3) and the graph, and in light of the differences between the results of the tribal and remote tests of the research sample in the skill tests of first aid skills for sports injuries, the impact of the educational curriculum for common injuries and teaching (the system of DRAB (of the paramedic's skill, prepared by the researcher and its application by teachers

Wajeih Mahjoub 2002) assumed that the importance for individuals to be motivated to learn motor skills for the purpose of obtaining maximum learning.And if the motivation is very low, learning may not occur at all ) Wajeih Mahjoub: 2002: 14 ,(as well as the effect of the curriculum prepared by the researcher on the development of the teachers' technical performance, which confirms that the curriculum is built on correct and purposeful scientific foundations under research and the actual time of the sessions for the curriculum ((Since the successful teacher is the one who

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knows the goals that can be achieved by giving each type of exercise, as he knows exactly the time that the exercise is given in the daily educational unit and the time that it takes)) ) Sami Al-Saffar: 1987: 161 ,( as the final result obtained As a result of such an approach and its use in educational units and in the early stages of teaching and its correct implementation, is the development of the level of technical performance of teachers' skills for first aid injuries and training on (the system of DRAB (for paramedics, since (when the curricula are implemented effectively, the general performance develops a lot, and then they can gain an additional benefit, which is the development and development of new learning about how to learn skills) (Mohammed Mahmoud Al-Hila: 1999: 64 .(As the main objective of learning skills is to acquire a set of skill capabilities that can be used with high accuracy and in different circumstances and through which the level of accurate skill performance is achieved, which means that the development in the level and performance of skills was not a result of chance, but rather it came as a result of the use of a special method that was aimed at To all this through the prepared educational curriculum, as it refers to

(Khalil Ibrahim Al-Hadithi 2003) indicates that the development that occurs in the performance of basic skills does not come by chance or randomly unless there is a regular and effective implementation of the educational curricula.