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A Comparative Study for Reengineering Administrative Processes According to Educational Achievement in the Public Directorate of Sport Education, Ministry of Education – Iraq

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Abstract

Educational institutions need to be reconsidered using a systematic method based on a certain engineering working to organize and master knowledge. This, in turn, needs efficient individuals with high educational achievement helping them implement modern methods for reengineering administrative processes. Hence, the problem of the study lies in studying the level of applying administrative reengineering and showing the effect of educational achievement on the extent o their application to enhance the performance of the Public Directorate of Sport Education, Ministry of Education. The researcher used the descriptive survey with the comparative method to solve the problem of the study.

Population of the study consists of workers in directorates connected with the Public Directorate of Sport Education, Ministry of Education (20 directorates in all Iraqi governorates except Kurdistan Region). The sample of the study was selected purposively to represent: (managers, assistants, public officials, male and female technical supervisors) working directorates connected with the Public Directorate of Sport Education, Ministry of Education (456 individuals). Two governorates were selected for: (northern, middle, southern, central Euphrates and 2 from Baghdad) in Iraq.

Moreover, the reengineering administrative processes scale was used. The scale includes 32 paragraphs distributed to five fields: (administrative processes understanding & realization: 4 paragraphs, being proactive: 4 paragraphs, planning: 4 paragraphs, programs preparation: 4 paragraphs, change: 8 paragraphs, application: 4 paragraphs and evaluation: 4 paragraphs) and Likert Scale with five gradations with psychometric bases. A questionnaire form was distributed with assertion on the necessity to select one respondent for a single alternative by ticking (√) sign at the option that he finds suitable and expressing his own point of view. The researcher also asked members of the sample to read instructions and paragraphs carefully, answer patiently and not to be hasty in selecting alternatives. After completing answers, questionnaires were collected and audited. The researcher added marks gained by each member of the sample regarding each paragraph of the scale in order to extract the total mark gained for each one in the sample to be put in special forms.

After reviewing statistical data using the Statistical Packages in Social Sciences program (SPSS), the researcher found that there is a contrast between workers in the education directorate at the reengineering administrative processes scale according to educational achievement as Bachelor & PhD degree holders are better in reengineering administrative processes and some fields than Diploma & the Master's degree.

Keywords: reengineering, administrative processes, educational achievement, Ministry of Education, reengineering administrative processes.

1. INTRODUCTION

Management reengineering is one of the educational principles for administrative development with its real untraditional ideas thoroughly in work procedures and in redesigning these ideas in a way that clarifies performance and efficiency and reduces cost in work achievement and service offering. This method aims to reach radical improvements at the field of the necessary time to offer services, reduce costs and enhance type of service. This method starts development using basic questions about feasibility of the necessity of finding each unit of the system with its requirements. This requires reconsidering jobs, organizational structure, technology and the adopted policies. This may be at the quantitative level or at the level of certain units as "it focuses on developing processes through which the institution's goals can be achieved, enhancing its performance and following-up improvements on product or service quality" (Mohamed Yaghi: 2002, 48).

The researcher thinks that by applying this modern administrative method, workers in educational institutions can be motivated to be creative in their performance, get rid of all repetitive uniform restrictions, and take a systematic look at the matters surrounding their business to help them reveal their intrinsic creative powers of each individual. This is because educational organizations are the basis in society as they provide their related secondary and supplementary organizations with human resources which are able to work efficiently and take immediate and creative actions with any problems that may arise inside or outside the organization.

Consideration of enhancing and developing outputs of the educational process comes through facing challenges facing the performance improvement of the Public Directorate of Sport Education, Ministry of Education by applying the latest administrative methods.

Reengineering administrative processes is one of these models using rethinking primarily and current redesign of the main processes of organizations to achieve ambitious improvement results at the modern performance measures in service, quality, cost and administrative quick achievement followed lately which were the main concern for the administrators, researchers and educators (Naser El Din: 1995, 126).

Therefore, the significance of the study is clear in studying a new administrative concept in education that hopes this study can provide administrative development officials with new and accurate information in the Public Directorate of Sport Education, Ministry of Education. These will help in decision making concerning enhancing the directorate's performance and setting suitable educational plans through defining strength and weakness points in administrative processes and services offered by the Public Directorate and its related departments. Accordingly, it will help determine the role of reengineering administrative processes according to educational achievement for workers in this field.

Educational institutions need to be reconsidered using a systematic method based on a certain engineering working to organize and master knowledge. This, in turn, needs efficient individuals with high educational achievement helping them implement modern methods for reengineering administrative processes. Hence, the problem of the study lies in studying the level of applying administrative reengineering and showing the effect of educational achievement on the extent o their application to enhance the performance of the Public Directorate of Sport Education, Ministry of Education

2. METHODOLOGY

The researcher used the descriptive survey with the comparative method to solve the problem of the study during the period from 20-01-2015 to 15-04-2015.

Population & Sample of the Study

Population of the study consists of workers in directorates connected with the Public Directorate of Sport Education, Ministry of Education (20 directorates in all Iraqi governorates except Kurdistan Region). The sample of the study was selected purposively to represent: (managers, assistants, public officials, male and female technical supervisors) working directorates connected with the Public Directorate of Sport Education, Ministry of Education (456 individuals). Two governorates were selected for: (northern, middle, southern, central Euphrates and 2 from Baghdad) in Iraq including table (1) about the directorates related Directorate of Sport Education, Section of sport and scouting in Iraq's governorates except Kurdistan region.

Table (1) the directorates related Directorate of Sport Education, Section of sport and scouting in Iraq's governorates except Kurdistan region.

Serial	Governorate	Directorates
1	Waset	Public directorate of education, Waset
2	Babel	Public directorate of education, Babel
3	Al Anbar	Public directorate of education, Al Anbar
4	Karbala	Public directorate of education, Karbala
5	Al Najaf	Public directorate of education, Al Najaf
6	Al Basra	Public directorate of education, Al Basra
7	Al Muthana	Public directorate of education, Al Muthana
8	Mesan	Public directorate of education, Mesan
9	Al Kadesia	Public directorate of education, Al Kadesia
10	Dhi Qar	Public directorate of education, Dhi Qar

11	Nainawa	Public directorate of education, Nainawa
12	Salah Eldin	Public directorate of education, Salah Eldin
13	Karkouk	Public directorate of education, Karkouk
14	Diala	Public directorate of education, Diala
15	Baghdad	Public directorate of education, Rasafa I
16	Baghdad	Public directorate of education, Rasafa II
17	Baghdad	Public directorate of education, Rasafa III
18	Baghdad	Public directorate of education, Al Karkh I
19	Baghdad	Public directorate of education, Al Karkh II
20	Baghdad	Public directorate of education, Al Karkh III

Table (2) shows numbers of workers at related directorates as there were 20 managers, 20 assistants, 75 public officials and 341 technical supervisors.

Number of directorates to the Public Directorate	Managers	Assistants	Public officials	Technical supervisors	Total
20	20	20	75	341	456

Table (2) numbers of workers at related directorates to the Public Directorate

The reengineering administrative processes scale

The scale includes 32 paragraphs distributed to five fields: (administrative processes understanding & realization: 4 paragraphs, being proactive: 4 paragraphs, planning: 4 paragraphs, programs preparation: 4 paragraphs, change: 8 paragraphs, application: 4 paragraphs and evaluation: 4 paragraphs) and Likert Scale with five gradations with psychometric and scientific bases performed on similar samples in the Iraqi environment (Wedad: 2015, 179) as in Annex (1).

The Main Trial

The main trial of the study sample (456 individual workers in directorates) was performed for the period from 12/02/2015 to 28/03/2015 with the help of the work team.

A questionnaire in its final form was distributed to the sample with assertion on the necessity to select one respondent for a single alternative by ticking (√) sign at the option that he finds suitable and expressing his own point of view. The researcher also asked members of the sample to read instructions and paragraphs carefully, answer patiently and not to be hasty in selecting alternatives. After completing answers, questionnaires were collected and audited. The researcher added marks gained by each member of the sample regarding each paragraph of the scale in order to extract the total mark gained for each one in the sample to be put in special forms in order to treat them statistically using suitable statistical methods.

3. DISCUSSION AND ANALYSIS OF RESULTS

Table (3): description of reengineering administrative processes scale and its fields to define values of the study sample in general:

Reengineering administrative processes scale & its fields	Paragraphs	Mean	Standard Deviation	Hypothetical Mean	Skewness Coefficient	T Counted Value for single sample	Error level	Result
Reengineering administrative	32 paragraphs	102.1	29.76	96	-0.28	45.8	0.000	Significant

processes								
Understanding & realizing administrative processes	4 paragraphs	12	3.26	12	0.09	49.16	0.000	Significant
Being proactive	4 paragraphs	13.3	2.53	12	-0.36	70.2	0.000	Significant
Planning	4 paragraphs	13.6	2.15	12	0.27	84.54	0.000	Significant
Program preparation	4 paragraphs	12.1	1.46	12	-0.46	110.19	0.000	Significant
Change	8 paragraphs	26	5.86	24	-0.17	59.33	0.000	Significant
Application	4 paragraphs	13.1	2.24	12	0.15	78.11	0.000	Significant
Evaluation	4 paragraphs	12	1.49	12	-0.48	107.36	0.000	Significant

Table (3) generally showed that the sample of the study is characterized with reengineering administrative processes. The researcher attributed this to creativity in work, getting rid of repetition restrictions, rigidity and holistic views helping to explode creative powers inside individuals. Belal refers that through rethinking basically and radical redesigning of main processes in organizations we can achieve good results and enhance quality with the least cost and quick achievement (Belal: 2009, 147).

Table (4) Arithmetic Means & Standard Deviations for members of the sample in reengineering administrative processes scale and its fields according to educational achievement variable:

Reengineering administrative processes scale & fields according to educational achievement	Diploma / 28		Bachelor / 127		Master / 9		PhD / 5	
	Mean	S.D+	Mean	S.D+	Mean	S.D+	Mean	S.D+
Administrative processes engineering scale	77.1	25.27	139.2	1.92	56.66	3.16	102.7	29.46
Administrative processes understanding & realizing	11.96	3.52	12.8	3.11	11.44	3.32	12	3.242
Being proactive	11.85	2.83	15	1.58	16.44	0.527	13.35	2.3
Planning	13.71	2.24	13.8	2.48	12.88	1.9	13.58	2.157
Program preparation	12.25	1.53	13.4	.89	11.66	1	12.05	1.45
Change	22.0	5.77	21.8	6.94	30.11	3.51	26.52	5.813
Application	12.03	2.755	13.8	2.48	10.88	2.1	13.15	2.127
Evaluation	11.78	1.59	13.4	0.89	11.55	0.72	11.94	1.52

Table (4) showed that the sample of workers of Diploma & Master degree holders do not have reengineering administrative processes unlike Bachelor and PhD holders. Diploma holders did not achieve reengineering administrative processes in the following fields: (understanding & realizing administrative processes, being proactive, change, evaluation), the Master's degree

holders did not achieve reengineering administrative processes in (understanding & realizing administrative processes, planning, application and evaluation), while the PhD holders did not achieve in the field of evaluation.

The researcher found that the Diploma & Master degree holders were not characterized with comprehensive process redesigning in order to gain technological facilities and products and new markets understanding new needs and expectations of consumers according to modern bases and continually. Accordingly, this affected understanding & realizing administrative processes including planning, application and evaluation. Russell & Taylor refer that reconsidering the followed method is shown in dividing work into simple tasks and then reintegrating main tasks in solid processes. This is by making the organization start working from zero in redesigning processes based on information technology to change the basic course and achieve essential development in performance with the least cost, quickest achievement and work quality (Russell & Taylor: 2009, 43).

The PhD holders are always on top of job pyramid. It is their duty to seek reengineering administrative processes, achieving radical enhancements in work means and methods in organizations suitable with the rhythm and requirements of this age of technological revolution and achieving quality, quickness and enhancing workers' performance to achieve right and beneficial business correctly serving goals of the institution. Khalil Ata asserts that one of the most important bases of reengineering administrative processes is enhancing quality of services and products to be consistent with the needs and desires of clients through cancelling unnecessary processes and focusing on ones with added value. This is done by depending on human resources that are distinguished from others in concepts and models of enhancement, development and evaluation (Khalil Ata: 2008, 101).

Table (5): variables in the field of educational achievement in reengineering administrative processes scale:

Reengineering administrative processes scale & its fields	Contrast source	Total squares	Freedom degree	Average squares	T counted value	Error level	Significance
Administrative processes engineering scale	Inter-group	39048.831	3	13016.27	16.819	0.000	Significant
	Intra-group	135434.208	175	773.910			
	Total	174483.039	178				
Administrative processes understanding & realizing	Inter-group	6.043	3	2.014	0.186	0.906	Insignificant
	Intra-group	1891.957	175	10.811			
	Total	1898.000	178				
Being proactive	Inter-group	162.016	3	54.005	9.919	0.000	Significant
	Intra-group	952.833	175	5.445			
	Total	1114.849	178				
Planning	Inter-group	5.044	3	1.681	0.358	0.784	Insignificant
	Intra-group	822.688	175	4.701			
	Total	827.732	178				
Program preparation	Inter-group	11.098	3	3.699	1.735	0.162	Insignificant
	Intra-group	373.092	175	2.132			
	Total	384.190	178				
Change	Inter-group	707.589	3	235.863	7.132	0.000	Significant
	Intra-group	5787.707	175	33.073			
	Total	6495.296	178				
Application	Inter-group	70.102	3	23.367	4.634	0.004	Significant
	Intra-group	882.434	175	5.042			
	Total	952.536	178				

Evaluation	Inter-group	12.662	3	4.221	1.881	0.135	Insignificant
	Intra-group	392.779	175	2.244			
	Total	405.441	178				
Significant at level ≤ 0.05							

Table (6): the least significant difference among members of the study sample in reengineering administrative processes scale and its fields showing significant difference only according to educational achievement variable:

Arithmetic mean of Reengineering administrative processes scale & its fields			Means difference	Error level	Difference significance
Reengineering administrative processes scale	77.1-139.2	Diploma – Bachelor	25.59359-*	0.000	Significant
	77.1 -56.66	Diploma – Master	20.44048	0.057	Insignificant
	77.1-102.7	Diploma – PhD	62.09286-*	0.000	Significant
	56.66- 139.2	Bachelor – Master	46.03406*	0.000	Significant
	102.7- 139.2	Bachelor – PhD	36.49927-*	0.004	Significant
	102.7-56.66	Master – PhD	82.53333-*	0.000	Significant
Being proactive	15-11.85	Diploma – Bachelor	1.49322-*	0.002	Significant
	16.44-11.85	Diploma – Master	4.58730-*	0.000	Significant
	13.35-11.85	Diploma – PhD	3.14286-*	0.006	Significant
	16.44-15	Bachelor – Master	3.09408-*	0.000	Significant
	13.35-15	Bachelor – PhD	1.64964-	0.122	Insignificant
	13.35-16.44	Master – PhD	1.44444	0.269	Insignificant
Change	21.8-22	Diploma – Bachelor	4.45412-*	0.000	Significant
	30.11-22	Diploma – Master	8.03968-*	0.000	Significant
	26.52-22	Diploma – PhD	0.27143	0.923	Insignificant
	30.11-21.8	Bachelor – Master	3.58556-	0.072	Insignificant
	26.52-21.8	Bachelor – PhD	4.72555	0.073	Insignificant
	26.52-30.11	Master – PhD	8.31111*	0.010	Significant
Application	13.8-12.03	Diploma – Bachelor	1.11757-*	0.017	Significant
	10.88-12.03	Diploma – Master	1.14683	0.184	Insignificant
	13.15-12.03	Diploma – PhD	1.76429-	0.107	Insignificant
	10.88-13.8	Bachelor – Master	2.26440*	0.004	Significant
	13.15-13.8	Bachelor – PhD	0.64672-	0.528	Insignificant
	13.15-10.88	Master – PhD	2.91111-*	0.021	Significant
Significant at level ≤ 0.05					

Tables 5 & 6 showed that there are differences among workers at education directorates in reengineering administrative processes scale according to educational achievement. We can find that the Master & Bachelor degree holders are better in reengineering administrative processes and some fields than Diploma and Master degree holders. The researcher found that this difference is

attributed to age, experience and courses studied by holders of these certificates which promoted the distinction of reengineering or weaker. Moayad: 2009 found that the stronger the performance of an organization is, the less its need to radical changes in strategy will be. In addition, poor performance is an alert signal referring to poor strategy, poor implementation of this strategy or both (Moayad: 2009, 248). The researcher found that the most important characteristic in the organization's work distinguishing it from other organizations id its workers clear and distinct performance which represents its ability to utilize its sources efficiently and achieve the desired results through good application of the set strategies that ensure being in competition environment and facing work challenges. Rafeda: 2011 found that the needed goal of reengineering processes should be basic with meaning and value and not a superficial change representing improvement and development of what is already present from its roots and rebuild it according to current requirements and goals of the organizations. (Rafeda: 2011, 132). Reengineering administrative processes depends on investing workers' efficiency in information technology and using this technology efficiently. It should be employed for radical change that creates a creative style in work application means and methods and not as a machine aiming to save time (Mahmoud: 2010, 253). Therefore, this stage includes setting outlines of enhancing future performance, developing plans group for change, design a reengineering model with assigned individuals for this task, setting reengineering time with a long-term plan to determine the trend of the directorate while dealing with environment variables with stress on including this plan a factual evaluations for both goals of organizational change and the needed resources to do so (Wilson: 1995, 241).

4. CONCLUSION

The researcher found that there is a contrast between workers in the education directorate at the reengineering administrative processes scale according to educational achievement as Bachelor & PhD degree holders are better in reengineering administrative processes and some fields than Diploma & the Master's degree.

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THE EFFECT OF COMPARATIVE COMPETITION METHOD DUE TO SOME KINEMATIC VARIABLES ON CORRECTING SOME MOTOR PERFORMANCE ERRORS IN SHOOTING FROM OVERHEAD FOR THE 3RD STAGE STUDENTS

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Abstract

The idea of the study lies in determining the effect of comparative competition method due to some kinematic variables on correcting and learning the skill again in a better way through correction of some performance errors in shooting from overhead by handball players. The researchers used the competition method as it is proper to the nature of solving problem of the study. The sample of the study was selected purposively (20 female students at the 3rd stage at Faculty of Sport Education, Diala University as they learned this skill in previous stages. 10 students were eliminated (6 for the exploratory trial and 4 not conforming with it). The researchers used this method which included the number of educational units by preparing the skill of shooting from overhead for the sample of the study. Results showed that this method has a positive effect on correcting errors of the skill due to mechanical variables determined by the researchers serving to solve the problem o the study and based on scientific research and biomechanical academies. The study also found improvement in skill learning and development in handball through extraction of statistical results by applying the Statistical Package of Social Sciences (SPSS) program.

Keywords: comparative competitive method, motor performance, handball, kinematics, shooting

1. INTRODUCTION

Each of the used learning methods represents applied contents among the multiple and variable motor learning theories, so they are also considered main psychological theories. The comparative competitive method depends on continuous repetition of the skill with consideration of individual differences in learning. Adoption of learning means and methods in an organized way makes learners engaged and highlights their roles to implement requirements of the game as learning a skill and the ability to perform it is one of the basic conditions of mastering it.

Comparative competition is an educational philosophy which asserts that under suitable learning conditions, all students can learn what is beneficial for them completely. It is supposed that within suitable conditions and atmosphere that most students manage to invest their utmost abilities in learning process (9:2) if there is a right feedback about their motor performance and on time in addition to sufficient time to master what they learn. Finally, if there are clear criteria of mastering components, this ensures reaching the players' highest stages of motor development.

According to the development which handball witnessed and its extending supporting base at most countries around the world, the researchers continue researching to solve problems related to skillful performance and achievement to analyze them and set suitable solutions. A lot of researches, field and experimental studies were conducted related to handball through multiple educational courses working to develop all basic and important skills related to shooting in handball without consideration of biomechanical aspects related to special performance requirements of shooting skill. In order to make learning comprehensive, there should not be any deficiency in any of these characteristics. A loss of any of these characteristics leads to incorrect building of motor performance that depends on good utilization of biomechanical and skill characteristics due to correct mechanical conditions related to skill performance.

Not utilizing bio-kinematic characteristics related to performance in a good manner leads to mistakes in stages of overhead shooting at the center position, failure in shooting in terms of accuracy and quickness in scoring and not diagnosing these mistakes in motor bio-kinematic paths of the player's body and the ball with objective treatment through setting correct and suitable solutions.

2. PROBLEM OF THE STUDY

The researchers noticed that assessment of performance value by specialists depends on self-observation according to what they see without aid from modern technology that records and analyzes motor skills in order for accurate and effective diagnosis of weakness and strength points. In addition, lack of knowledge about mechanical basics affects movement and its minute parts to determine the most significant performance errors based on objective and scientific criteria. The researchers conducted this study to set correct scientific solutions for the previous problem through training process according to correct mechanical conditions. This is on order to correct these errors in motor paths of the skill due to some indicators such as velocity, angles and heights related to performance requirements related to shooting skill in handball.

Objective of the Study

The study aims to determine the effect of comparative competition method in correcting some motor performance errors in shooting from overhead due to kinematic variables by handball players.

3. METHODOLOGY

The researchers used the empirical method as it is proper to the nature of solving problem of the study. This method is the most suitable one foe solving the problem of the study as empirical research aims to make a purposive and accurate change of factors determining a certain event with observation and explanation of factual changes in this event. Thus, it is closer and more valid to solve many scientific problems practically and theoretically.

Sample of the Study

The sample of the study is very important as on which many aspects such as measurements and results depend. Research sample selection is a very important step that should be considered. The researchers selected the sample purposively from students of Faculty of Physical Education & Sport Science for the academic year 2014 / 2015 in the 3rd Stage. As for the sample, (20 students at were selected randomly in Section (A). 10 (6 were eliminated for the exploratory trial and 4 were eliminated for being absent). The researchers used the single sample method with pre- and post-tests. Table (1) shows homogeneity among members of the sample through some tests such as age, length and weight. Members of the study sample are distributed normally as skewness coefficient is between +1 and 456-6.

Table (1) arithmetic mean, standard deviation, median and skewness coefficient value among members of the sample to achieve homogeneity:

Statistical Methods / Variables	Mean -	S.D +	Median	Skewness Coefficient
Age (year)	20.48	1.3	21	0.28
Length (cm)	160.9	2.1	161.5	0.4
Weight (kg)	59.8	5.6	59.5	0.05

Field Study Procedures

The researchers determined kinematic variables of motor performance of shooting from overhead due to prior literature in Iraq and all over the world as it is shown in the following table:

Table (2) variables of motor performance of shooting from overhead

Mechanical Variables
Ball initiation angle
Ball initiation speed
Angular speed of the throwing arm (from preparation towards the goal)
Peripheral speed of the throwing arm (from preparation towards the goal)

Radius of the throwing arm (from preparation towards the goal)
Removing object (thigh point) (from preparation towards the goal)
Ball handing (from preparation towards the goal)

For the purpose of determining work accuracy related to the study, the researchers conducted an exploratory trial "it is a primary empirical study performed by researchers with a small sample before the main trial to choose tools and methods of the study" (79, 4. This was on 01/03/2015 by conducting an exploratory trial on 6 students from outside the study sample in order to determine the most significant obstacles that arise before conducting the main trial. The purpose of the trial is to:

- Know the validity of devices and tools used in tests.
- Define tasks of the assistant team and to clarify the instructions related to tests.
- Ensure the validity of the tests and devices places and suitability for test.

In order to determine kinematic variables that affect motor performance evaluation level, the researchers conducted pre-test on the main sample of the study on 05/03/2015 at 10 am in the indoor hall of the Faculty of Physical Education & Sport Science. In order to extract a scientific formula to study these variables, the researchers used video recording as it is considered one of the important means to detect errors and adjust how close or far away motor performance levels of athletes by drawing paths body points, describing movement and analyzing it based on determined variables. In addition, through the use of a scale, geometric path of the body can be determined as well as determining time path through change in photos in a single second (3. 328). To achieve the previous measurements, the sample of the study was video recorded using two video cameras model (3500 TM PANASQNNC) with frequency speed: (24 photos / sec) with a video cassette (VHD-RD). Both cameras were fixed on a big triple stand and the height was 1.20 m from middle lens on the ground.

Based on the previous, the researchers managed to extract data related to kinematic variables to study and analyze them in order to reach goals of the study. After that, the researchers started implementing the comparative competition method in order to correct and develop some performance errors in shooting from overhead prepared by researchers for the empirical group. This comparative competition method included:

1. Reeducation of skills in sessions of the course and they were similar in some procedures such as warming-up, physical training, educational activity and final section, but the applied activity differs as the empirical group only uses the comparative competition method.
2. The empirical group used the comparative competition method in reeducation of overhead shooting skill in a period of two months (16 units each one is 60 minutes) and the units were distributed as follows:

- Preparation part (15 minutes).
- Main part (40 minutes: 10 minutes education and 30).
- Final part (10 minutes).

After completing the application of the comparative competition method on the empirical group of the study, the researchers performed post-tests of video recording to select shooting accuracy from the center on 06/05/2014 depending on the same procedures in pre-tests at the same spatial and temporal conditions of the first test with the same assistant team.

4. DISCUSSION OF RESULTS

The analysis of these results in light of the statistical rules used in the research and appropriate to this data in light of confirmed scientific references for this use in order for us to test hypotheses and research objectives based on field and applied procedures carried out by researchers who come to these findings and then discussed in the light of their reviewing framework.

Mechanical Variables	Pre-test		Post-test		Counted T Value	Tabulated T value (*)	Significance
	Mean	S.D	Mean	S.D			
Ball initiation angle	0.69	0.26	0.50	0.29	3.10		Significant
Ball initiation speed	42.12	1.60	29.10	0.69	6.55		Significant
Angular speed of the throwing arm (from preparation towards the goal)	839.50	28.60	790.58	25.10	10.52		Significant

Peripheral speed of the throwing arm (from preparation towards the goal)	10.11	0.18	8.80	0.27	10.65	2.09	Significant
Radius of the throwing arm (from preparation towards the goal)	60.40	1.77	55.25	1.11	4.55		Significant
Removing object (thigh point) (from preparation towards the goal)	20.10	0.66	24.70	0.69	7.80		Significant
Ball handing (from preparation towards the goal)	12.90	0.71	9.10	0.75	8.87		Significant

Freedom degree (19=2-20) at error level ≤ 0.05

5. Discussion of Results of the Study Variables for Pre- and Post-tests

Table (3) shows that there are significant differences between results of research in pre- and post-tests in the variables as the counted T value was less than the tabulated T value at all variables which shows that there is a clear effect of the comparative competition method in developing the study sample which means that directing the ball by the sample became based on more accurate mechanical variables than pre-test. The researchers attributed this to the sample that managed to use suitable amount of strength in arm with suitable speed. This was the focus of the method as this method led to take actual performance of the selected skill. Osama Kamel Rateb asserted on this as he said that: "when the nature of training method and the used training are the same as the nature of skill performance, this performance is improved to the maximum degree" (78:1). Moreover, the increase in speed variable means an increase in peripheral speed (wrist with the ball). This increase came as a logical result of the positive change in the forearm's radius, arm angles and joints. This is because these positive variables are closely related to peripheral speed. This speed can be measured through the total multiplying of angular speed of throwing arm by the length of the same arm's radius (6:28) and these factors developed significantly in post-tests.

Researchers also refer to the mechanical change of the player's body position in the last step which plays a great role in preparing the biggest basis for positioning in order to move the trunks with maximum possible rate from the bask towards the front. This is because maintaining body balance during quick movement requires a big positioning basis in order to make torques of strength affect the body. The strength of body rush forwards affects torque which equals the amount of this strength multiplied by its vertical length (67:5) away from falling edge towards the position of foreleg. Accordingly, this flows into the determined variables. Researchers also assert the development happened in the variable of radius angle of the throwing arm through big turning around radius related to this arm during the stage of preparation for throwing. In addition to the increase in the throwing arm's angle in post-test of the same stage achieves mechanical advantages in multiple throwing events including handball shooting through preparing a bigger motor range or field to increase acceleration. Nevertheless, at throwing position from upwards, extending joint of the throwing arm increases radius with measurement with thigh axe, spine and sternum joint (286:4). This also increases peripheral speed of the throwing arm in addition to developing explosive strength and speed strength of arms which is reflected positively on having a technical position at this level due to application of mechanical and technical conditions of the right performance. All of this results from using the comparative competitive method by members of the sample. Thus, the speed of a player's weight center (thigh point or body buffer) comes through benefits of the levers law which says that movement range can be increased through increasing resistance arm.

Researchers found that the presence of significant differences at most variables of the study was because of focusing on developing mechanical variables due to performance stages. At the throwing stage, the researchers focused on preparation which is one of the difficult and important stages that should be considered at the field of motor analysis especially when it comes to joint movements and the effect of motor range of these joints in performance. This stage is directly related to the main goal of the skill which is to provide the maximum possible benefit from preparation for the main stage. If an athlete exerts a certain muscular torque, this torque's value will increase through his big arm (7:57). If the angle is bigger in all variables, this means that there is a maximum range for resisting body flow at the throwing moment which requires players to resist movement through exerting a muscular strength through which foot can be fixed. As a reaction to this strength, the body turns around the center point (center foot). With muscular torque of the upper part, a reaction is created in the lower part and a motor response emerges to achieve the hoped goal to be achieved which is shooting with a speed and a high level of accuracy. Achieving the goal of the skill and how it is related to other prior stages appears at this final stage and tasks through which we can determine requirements of the skill in terms of utilizing physical, skilled and mechanical abilities which all need to be applied. It is also noticed that there is a significant relation between body weight center at the highest point and initiation angle at the highest point which is the most important factor

affecting initiation speed, so there is a direct relation (98:6) as the bigger the turning around radius, the bigger the peripheral speed will be and this can be explained based on the following mechanical relation:

Peripheral speed = angular speed x radius

This clearly shows that there is a direct relation between angle's length and speed suitable to the throwing arm and thus we can reach the highest position suitable for the skill.

6. CONCLUSIONS:

The comparative competitive method used on the sample of the study showed indications of enhancing kinematic variables selected for the sample through stages of technical performance shooting from overhead at center. It also led to correct the skill by members of the sample better than before.

- The use of comparative competitive method is important in learning and acquiring basic skills in sport games and activity due to its effective role in learning by students for its numerous advantages.

7. RECOMMENDATIONS

- Statistics reached by the researchers through kinematic variables in the field work should be considered.
- Similar studies should be conducted using other variable methods for other kinematic variables and skills using modern devices in photography and analysis to detect errors.
- Adoption of good and unfamiliar learning methods by the specialists lead to learn skills better and faster

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THE EFFECT OF MENTAL TRAINING WHICH ACCOMPANIES A PROPOSED TRAINING COURSE ON MENTAL TOUGHNESS OF VOLLEYBALL PLAYERS – SITTING

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Abstract
Since mental skills and preparation are important in developing sport level, one of the significant problems facing athletes is their need for a mental preparation. Skill or physical abilities only are not enough in order to achieve sport success and achievement. Rather, the need for mental strength, ability to concentrate and how to face psychological pressures during training situation and sport competitions are more important. Achieving ideal skill performance requires that a player possesses comprehensive skill, physical and psychological abilities to achieve the best possible skill performance. Therefore, the researcher found that using mental training course accompanying a proposed training course on mental toughness for sitting volleyball players helps raise their self-confidence and increase their concentration despite psychological pressures they experience. Thus, the study aimed to prepare a mental and physical training course that corresponds with the sample of the study and determine its effect on mental toughness of the sample of the study. Both researchers used some means to achieve goals of the study. They concluded that mental training helps enhance mental toughness for sitting volleyball players. The study also concluded that the best way to represent mental training to sitting volleyball players is at the beginning and at the end of the main section of the training unit with consideration of the percentage of time attributed from the unit time.
Keywords: mental training, mental toughness, volleyball – sitting.

1. INTRODUCTION

Mental training represents the main part in player's preparation to acquire skills and motor situations in competitions. Mental training includes movement perception, consecutive skills, situations, goals and all aspects of competition including the court, referees, devices and tools. Moreover, the use of mental training is not limited to participation in competitions only. Rather, it is also used in the field of movement in general and at stages of acquiring motor skills in particular besides playing an important role in learning process. Mental training also contributes to the feeling of more confidence, focusing on positive aspects that work on better expectation for good performance and prevent negative perception that harms performance through negative feelings that cause more anxiety and failure expectations which reduce opportunities of right performance.
The concept of mental toughness and the benefit accompanying this toughness which develops it is one of the important characteristics which a player should have. It comes from inside a player's oneself and its motivations and also subjective. Directing this mental toughness is also subjective as a player does not need an external motivation as a motivation is subjective or inside the player. When a player manages to completely control himself, being consistent and factual in achieving his goals makes him calm and relaxed even in difficult situations or pressures. He should also be concentrated, confident careful and responsible in his acts and behaviors besides being able to or willing to move full of energy (Mohanad Taleb Eid Ibrahim El Saadi: 2012, 22)
Sport distinction is determined by the extent to which players can benefit from their psychological abilities in a way that is not less than the benefit from their physical abilities too. Psychological abilities help individuals mobilize their physical energy to achieve the best sport performance. It can also be developed through special training and programs for this purpose. Hence, it is clear that the study is significant in defining the extent of the effect of a mental training course accompanying a proposed training course on mental toughness for sitting volleyball players

Problem of the Study
Mental training process is one of the factors that help and facilitate physical and skill training. These factors depend on physical and mental correspondence and variability in using its various methods. It is necessary that a player's preparation should be comprehensive in all physical, psychological, health and mental aspects to be prepared for the match and perform well away from mistakes for many reasons such as insufficient psychological readiness. Due to the importance of mental skills and preparation on developing the standard of athletes, one of the significant problems facing players is their need for mental preparation. Skill or physical abilities alone are not enough in order to reach sport distinction and achievement. Rather, it is the need for mental strength, ability to concentrate and face psychological pressures during training situation and sport competitions are more important. Achieving ideal skill performance requires that a player possesses comprehensive skill, physical and psychological abilities to achieve the best possible skill performance. Therefore, the researcher found that using mental training course

accompanying a proposed training course on mental toughness for sitting volleyball players helps raise their self-confidence and increase their concentration despite psychological pressures they experience.

Objectives of the study:

1- Prepare a mental and physical training course that corresponds with the sample of the study.
2- Determine the effect of the mental training course accompanying a proposed training course on mental toughness of the sample of the study.

2. METHODOLOGY

Both researchers used the empirical method with the design of (three empirical groups) with pre- and post-tests during steps of their work as it is the most suitable method for this study.

Population & Sample of the Study

One of the things that should be taken into consideration by a researcher is having a sample that is actually representing the original population. A sample is defined as: "the part that represents the population and it is the model on which the researcher's total work depends" (Dhafer Hashem Al Kadhemi: 2012, 84). Population of the study is represented in volleyball players – sitting (144 players) as in table No. (1). As for the sample, it was selected purposively from volleyball players – sitting at Diyala Governorate (17 – 23 years old). About 9 players (6.25%) were selected of the original population of the study representing single disabilities above the knee (4 players), below the knee (2 players) and the distorted (3 players). Players were distributed randomly by poll into three groups as shown in table (1).

Table (1) Sample of the Study

Groups	Number	Percentage
1st Empirical Group	3	6.25 %
2nd Empirical Group	3	
3rd Empirical Group	3	

Sample Homogeneity

Sample homogeneity was counted for the sample using skewness coefficient for the following variables (age, weight, trunks length and arm length) as shown in table (2).

Table (2): sample homogeneity at some anthropometric variables:

Variables	Measure Unit	Number	Mean	Median	S.D	Skewness Coefficient
Age	Year	9	20,56	20	2,242	0,804
Weight (mass)	Kg	9	59,11	58	6,936	0,121
Trunks length	Cm	9	50,33	51	3,742	1,164-
Hitting hand length	Cm	9	73,89	74	4,226	0,361-

Table (2) shows that all skewness coefficient values in the table were between ±3 which refers to homogeneity of variables within it and these values lie within normal distribution.

Groups Equalization

For the purpose of identifying equalization among the three groups due to empirical design requirements of this study, the researcher adopted the (F) Test in contrast analysis for pre-test results as it is shown in table (3):

Table (3): results of contrast analysis for pre-tests among the three study groups due to variables of the study:

Scale & Tests	Number	Contrast Source	Total Squares	Freedom Degrees	Average Squares	Counted (T) Values	(Sig) Degree	Significance
Mental	9	Intergroup	20.222	2	10.111	0.271	0.772	Insignificant

Toughness		Intra-group	224	6	37.333			

Table (3) shows that the counted (F) values for the three groups of the study at the results of pre-test of tests in the table were all insignificant compared with the (Sig) value (0.05) as they were more at significance level (0.05) and freedom degrees (6 – 2) which shows that they are equal to all pre-tests and the same at the line.

Selection of Tests used in the Study

A researcher often needs to select or set multiple tests to measure some variables that are related the studied phenomena (Nouri Al Shouk & Rafea Saleh Fathy: 2004, 89).

Mental Toughness Test

The researcher used mental toughness test after extracting reliability, validity and objectivity to be suitable factors for the sample of the study represented in sitting volleyball players. This scale was designed previously by (Mohanad Taleb Ibrahim Al Saady). Players were healthy. The researcher distributed the form on a number of professors to determine how they correspond with the sample. This test is a set of paragraphs that need to be answered.

Main Trial Procedures:

Pre-tests: pre-tests were conducted on members of the sample (9 players) on Thursday and Saturday 26 and 28 March, 2015 at 2:30 pm at the closed sport arena at the building of Al Katoun Youth Club at Diyala Governorate as follows:

- At first day: physical tests were conducted and mental toughness forms were distributed.
- At second day: skill tests were conducted.

In addition, the researcher decided to perform homogeneity on the variable of mental toughness and as shown in table (5):

Table (5): Homogeneity of the study sample in results of testing variables of the study

Variables	Measure Unit	Number	Mean	Median	S.D	Skewness Coefficient
Mental Toughness	Degree	9	73.56	72	5.525	0.056

Training Course

The researcher used a course including mental training accompanying physical training for the three empirical groups based on references and scientific literature due to available tolls and devices. Course elements were applied on the sample. Mental training of the first empirical group was used twice in the single training unit at the beginning of the program (before introduction and after finishing the main part). Mental training of the second empirical group was used once in the single training unit at the beginning of the program (before introduction). Mental training of the third empirical group was used once in the single training unit after finishing the main part. The work method is to put the three empirical groups at the same time inside the sport hall. First and second groups were taken together towards the inside of a calm and isolated room besides the sports hall to perform mental training and within the time set for it. After finishing, the two empirical groups join the third one continuing items of the training unit. After ending the main part, the first empirical group was taken once again but with the third empirical group only to the room at first to apply items of mental training at first. This can be in the form of watching a movie or a model according to what was determined for the training unit seen also by first and second empirical groups. After the third group ends watching, the first group enters to complete items of mental training including relaxing, imagination, etc. The way of applying the method was high and low intensity interval training. In extracting intensities, the researcher used beat measuring method through the following equation:

(beat rate needed at certain intensity = $\frac{\text{max beat rate} * \text{the needed intensity}}{100}$)

The researcher used the following equation to get maximum beats:

Max beat = 220 - age

The researcher also used the following table to keep intensity degrees (Mohamed Reda Ibrahim Ismail El Madamegheh: 2008, 94):

Intensity No.	Percentage of max achievement	Intensity degree
1	%50 – 30	Low
2	%70 – 50	Moderate
3	%80 – 70	Average

4	%90 – 80	Under maximum
5	%100 – 90	Maximum
6	%105 – 100	Over maximum

In distributing training size, the researcher used intensity used in training in terms of repetition number and group numbers as follows:

Table (6): intensity levels and repetitions

Intensity percentage	Repetitions	Number of Groups
%100 – 90	1 – 5 times	2 – 1
%90 – 80	6 – 10 times	3 – 2
%80 – 70	10 – 15 times	4 – 3
%70 – 50	10 – 20 times	6 – 3
%50 – 30	20 – 30 times	8 – 4

Rest periods can be determined through intensity type as shown in table (7)

Intensity percentage	Rest between repetitions	Rest between groups
%100 – 90	1 : 6 or 1 : 10	4 – 5 minutes
%90 – 80	1 : 3 or 1 : 5	2 – 4 minutes
%80 – 70	1 : 1 or 1 : 3	1 – 3 minutes
%70 – 50	1 : 1 or 1 : 0.5	45 sec – 1 minutes
%50 – 30	1 : 0.5 or none	30 – 45 sec or none

Tasks started to be applied on Tuesday 31/03/2015 till 09/06/2015 as follows:

1- Course period (10 weeks)
2- Number of total training units (30 training units)
3- Number of training units a week (3 training units)
4- Weekly training days (Saturday, Tuesday and Thursday)
5- Time period of training unit (90 minutes)
6- Timing of training unit at 2.30 pm.

Post-tests

After ending application of the course, the researcher conducted post-tests to the sample of the study on Thursday and Saturday 11 & 13 /06/2015 at 3.30 pm.

3. DISCUSSING AND ANALYZING RESULTS

Analysis of pre-test results of mental toughness scale for the three empirical groups:

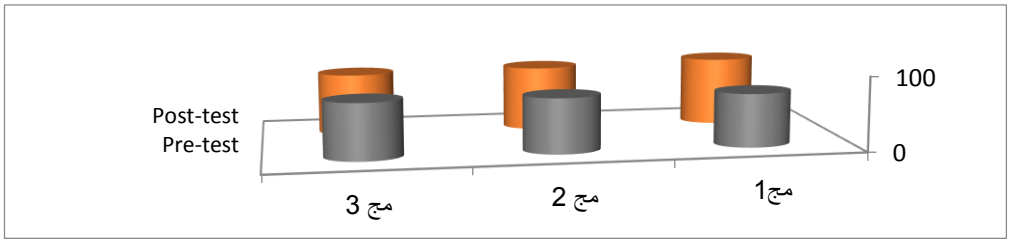
The researcher presents results of using mental toughness scale for the three empirical groups as in figure (2) and table (8)

Table (8): arithmetic means, standard deviations S.D, differences average, differences deviation, counted (T) value and significance of the results of using mental toughness scale for the three empirical groups:

Measure Unit / Scale	Group	Pre-test		Post-test		Differences average	Differences deviation	Counted (T)	(Sig) Degree	Significance
		Mea	S.D±	Mean	S.D±					

		n						Value		
Mental Toughness Scale	Group 1	71,67	7,638	91	1	19,333	7,024	4,768	0,041	Significant
	Group 2	73,67	6,429	85,33	2,517	11,667	4,041	5	0,038	Significant
	Group 3	75,55	3,512	82,33	2,517	7	1	12,124	0,007	Significant

N = 3 in each group, freedom degree N – 1, Significance level (0.05), total scale degree (145) and hypothesized mean is (77)



Figur (1): arithmetic means for the results of using mental toughness scale for the three empirical groups

Analysis of post-test results of mental toughness scale for the three empirical groups:

Table (9) results of contrast analysis of post-tests using mental toughness scale for the three empirical groups:

Scale	Total N	N for each group	Contrast source	Total squares	Freedom degrees	Average squares	Counted (F) Value	(Sig) Degree	Significance
Mental toughness scale	9	3	Inter-group	116.222	2	58.111	12.756	0.007	Significant
			Intra-group	27.333	6	4.556			

Significance level (0.05)

Table (10) results of (LSD) test among post-test results of mental toughness scale for the three groups of the study

Scale & Group		Means difference results	(Sig) Degree	Significance
Mental Toughness Scale	(G.1) – (G. 2)	5,667*	0,017	Significant for the sake of 1st Empirical Group
	(G.1) – (G. 3)	8,667*	0,003	Significant for the sake of 1st Empirical Group
	(G.2) – (G. 3)	3	0,136	insignificant

- **Difference is significant at level (0.05), measuring unit is (degree), N = (3) for each group.**
-

4. DISCUSSING RESULTS

Discussing results of using mental toughness scale for the three groups of the study

From reviewing table (8), it is clear that there are significant differences in results of pre- and post- mental toughness scale for the three groups of the study. Table (9) shows significant differences in post-results among the three groups of the study. In table (10), we found that significant differences for the sake of the 1st Empirical group whose players performed mental training at the beginning and the end of the main section of the training unit, while there were no differences between 2nd and 3rd empirical

groups despite the clear difference significance in post-tests. The researcher attributes this to the time factor. Mental training twice in a single training unit was for the best players. In addition, effectiveness of the mental training program is a basic and important part in the sport training program for volleyball players – sitting as it contains mental training with continuous assertion of using it during training helps players control their thoughts. This is done through dealing with cases of fear, anxiety, high excitability, limiting the effect of negative emotions during training, learning how to concentrate on motor duties, performance and avoiding attention distraction. This leads to promote mental toughness that plays an important role in realizing pressuring events and facing them as they affect player's realization and evaluation of the pressing event. They also influence the player's effective psychological sources in facing pressures he faces during competitions by controlling his psychological condition such as attention focus, emotions control, less tension, self-confidence and mental perception. Optimal performance of a player can be achieved through developing his various mental skills in order to face problems he faces during sport competition and then reaching practical goals represented in better performance and achieving the hoped results (Mohanad Taleb Eid Ibrahim El Saadi: 2012, 21).

Furthermore, the importance of mental training lies in that after reaching a degree of mastering, it helps increase the ability to predict and gives opportunity to perform in future events. This means that not only mental perception, but also any situation that can be expected in the coming competitions. This contributes to readiness to respond situations in future. The importance of mental training using mental skills also helps players reach the mental condition that enables them to prevent negative thoughts and attention distraction which overlaps with physical performance. Care with beginners is among the special importance of mental training as regular training should not wait till a player reaches international level and then mental training starts. But interest increases by focusing on juniors in this field of training in order to avoid this idea which was expressed by some players which is training through attempts and errors (Mohamed El Arabi Shamoun: 1998, 35).

Therefore, mental abilities play an effective role in the process of thoughts interaction for players in terms of preparation, physical and mental preparedness before performing a certain event or skill because the most connected matters to mental abilities are factors that lead to success of the designed plan for players in matches or competitions. The better the perception ability of a player is, the better performance level will be. Concentration on ball path, aspects related to ball hitting or focusing on total movements of players during preparation will help invest their mental abilities and employing them in the right direction.

5. CONCLUSIONS

1- Mental training helps enhance mental toughness for sitting volleyball players at the beginning and the end of the main section of the training unit with consideration of the percentage of the time dedicated for the unit.
2- The best way to represent mental training to sitting volleyball players is at the beginning and at the end of the main section of the training unit with consideration of the percentage of time attributed from the unit time.

6. RECOMMENDATIONS

1- Approving mental training at the beginning and at the end of the training unit during training some special physical and skill abilities of volleyball players – sitting at the special preparation stage.
2- During training using mental training, players have to take an idea of it to adapt with it.
3- It is necessary to consider scientific principles and methods in training plan during using mental training besides introducing its nature to trainers and assistants.
4- Asserting the legalization of using mental training especially in training camps.

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THE EFFECT OF QUICK PERFORMANCE TRAINING USING ASSISTANT MEANS ON DEVELOPING SOME SPECIAL PHYSICAL ABILITIES & ACHIEVEMENT IN THE 200 M DASH

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Abstract
Despite high sport achievements that happen year after a year in high level sports, various sports in general and athletics in particular, one of the reasons for poor achievements in dash races, especially 200 m dash, for the youth in Iraq's clubs and institutions, including Iraqi universities, is: lack of using quick performance training due using assistant means, combining related physical abilities during training and balance among them within training work. Therefore, the researcher decided to set special training for quick performance using assistant means with the aim of developing some special physical abilities and how they reflect on the achievement in the 200 m dash race.
Keywords: quick performance training, assistant means, physical abilities, 200 m dash achievement.

1. INTRODUCTION

Despite high sport achievements that happen year after a year in high level sports, various sports in general and athletics in particular, various factors (practical, physiological or other) combined. Studies, researches and efforts are being exerted to reach facts that help in the training process in selecting means, methods and ways of training. These factors are of a great importance in 200 m dash events training. The training process does not only mean raising physical level, it also includes the development of physical abilities, the way of utilizing, developing and combining them. Hence, the significance of the study is clear in showing the effect of quick performance training using assistant means on developing some physical abilities and achievement in the 200 m dash race.

Problem of the Study
There are various training means and methods that affect on the athletes' needs, especially runners, for a physical preparation that suits their potentials and abilities according to the event and its requirements.

Through the researcher's field experience being one of the former Iraqi and Arab champions in short distance races as well as his participation in many training camps, being a former a trainer and a current international referee, he noticed that one of the reasons of poor achievements in dash events, especially the 200 m dash race for the youth in Iraq's clubs and institutions including Iraqi universities, is: the lack of using quick performance training with using assistant means, combining related physical abilities during training and balance among them within training work. Therefore, the researcher decided to set special training for quick performance using assistant means with the aim of developing some special physical abilities and how they reflect on the achievement in the 200 m dash race.

Objectives of the Study
1- Preparing quick performance training through the use of assistant means for members of the study sample.
2- Determining the effect of this training on developing some physical abilities and on the achievement in the 200 m dash race.

2. METHODOLOGY

The researcher adopted the empirical method for the purpose of achieving goals o the study.

Sample of the Study
The sample of the study included young runners from Diyala Governorate who represent the governorate for the year 2015 (12 runners). They were tested purposively and divided into control and empirical groups randomly through a poll (6 runners for each group). Next, the researcher conducted homogeneity and equalization of the sample for the variable of the study representing 100% of original population.

Table (1) arithmetic means, standard deviations S.Ds, median and skewness coefficient value for members of the study sample

Serial	Variables / measuring units	Statistical Methods			
		Mean	S.D	Median	Skewness Coefficient
1	Length: cm	1.71.33	4.121	670.100	0.004
2	Weight: kg	67.685	3423	68.00	0.166
2	Age: year	19.002	1586	19.010	0.131

Table (2) arithmetic means, standard deviations S.Ds, counted and tabulated T value between pre- and post-tests for both control and empirical groups for the purpose of equalization

Tests	Measure unit	Empirical Group		Control Group		T counted Value	T tabulated Value	Significance
		Mean	S.D	Mean	S.D			
Maximum speed 30 m	Time	4,88	4,152	4,76	5,621	1,061	1.81	Insignificant
Explosive Strength of legs (jumping on a hole to the farthest distance)	Distance	2,351	3,770	2,360	2,105	1,210		Insignificant
Speed strength, hopping by right & left feet 10 steps hole to the farthest distance	m/cm right	24,62	0,320	24,55	0,491	0,069		Insignificant
	Left	23,90	0,708	23,75	0,620	0,945		Insignificant
Speed endurance, 150 m	Second	20,981	0,901	20,471	0,589	0,396		Insignificant
200 m Dash achievement	Second	24,240	0,461	24,191	0,679	0,983		Insignificant

Tabulated T value at freedom degree 12 – 2 = 10 with error percentage of (0.05) = 1.81

Pre-tests:
Pre-tests were conducted on both groups for their importance to the athlete's case before implementing the training program as follows:

First: Speed Test (Mohamed Sobhy Hassanein: 2001, 290)
- 30 m dash test starting from flying (time: seconds) with the aim of measuring maximum speed.

Second: Strength Test (Ibrahim Abderboh Khalifa: 1993, 143)
- Explosive strength test (jumping from stationary for legs: m – cm)
- Speed strength (right – left hop: 10 steps for both legs to the farthest distance: m – cm).

Third: Endurance Tests (Mohamed Sobhy Hassanin: 2001, 292)
- Speed endurance test (150 m dash) less than achievement distance (time: sec).

Fourth: Achievement 2000 m Dash (time: sec)
The sample was recalled and tests were performed from 29/08/2015 till 31/08/2015 on Diyala Club playground.

Training Course
The researcher applied quick performance training applied on assistant means to determine their effect on some special physical abilities depending on his field training experience with the aid of opinions of experts, specialists in sport field and references adding an educational protection to be applied on an age category.
- The course was started to be applied from 07/09/2015 till 28/10/2015.
- The course was applied for 2 months (two training units a week).

(Monday – Wednesday)

- Using assistant means while applying training.
- Intensity was between (maximum and semi-maximum intensity). As for the rest period among frequencies, it was according to beat rate meaning to return back to (120 beat/min) and rest among groups to return the beat to (90 beat/min).
- The researcher used the principle of grading and waving in performance intensity of training load along the raining course period (load degree should be gradual to raise body organs and systems to achieve more requirements and the ability to increase individual ability as it was before (Mohamed Hassan Allawy: 1976, 96).

Post-tests

After applying the course with the use quick performance training using assistant means and among the dedicated time period, the researcher conducted post-tests on 31/10/2015 till 02/11/2015 using the same conditions on which pre-tests were performed.

3. DISCUSSION & ANALYSIS OF RESULTS

Table (3): arithmetic mean, standard deviation S.D, counted and tabulated T values in pre- and post-tests for the empirical group:

Tests	Measure unit	Pre-test		Post-test		T counted Value	T tabulated Value	Significance
		Mean	S.D	Mean	S.D			
Maximum speed 30 m	Time	4,88	4,142	4,39	0,901	5,862	2.75	Significant
Explosive Strength of legs	Distance	2,351	3,770	2،510	3,480	4,486		Significant
Speed strength, hopping by right & left feet 10 steps hole to the farthest distance	m/cm right leg	24,62	0,320	26,325	1,534	3,675		Significant
	Left leg	23,90	0,708	25,015	1,632	4,910		Significant
Speed endurance, 150 m	Second	20,681	0,901	19,241	0,988	5,267		Significant
200 m Dash achievement	Second	24,240	0,461	23,810	1,935	4,391		Significant

Tabulated T value at freedom degree 6 – 1 = 5 with error percentage of (0.05) = 2.75

Table (4): arithmetic mean, standard deviation S.D, counted and tabulated T values in pre- and post-tests for the control group:

Tests	Measure unit	Pre-test		Post-test		T counted Value	T tabulated Value	Significance
		Mean	S.D	Mean	S.D			
Maximum speed 30 m	Time	4,76	5,621	4,611	1,301	2,531	2.75	Insignificant
Explosive Strength of legs	Distance	2,360	2,105	2,401	3,210	2,910		Insignificant
Speed strength, hopping by right & left feet 10 steps hole to the farthest distance	m/cm right leg	24,55	0,419	24,80	0,430	2,101		Insignificant
	Left leg	23,75	0,620	23,80	1,321	2,629		Insignificant
Speed endurance, 150 m	Second	20,471	0,589	20,21	0,985	2,998		Insignificant
200 m Dash achievement	Second	24,191	0,679	24,111	0,838	1,311		Insignificant

Tabulated T value at freedom degree 12 – 2 = 10 with error percentage of (0.05) = 1.81

Table (5): arithmetic mean, standard deviation S.D, counted and tabulated T values in pre- and post-tests for the empirical and control groups:

Tests	Measure unit	Pre-test		Post-test		T counted Value	T tabulated Value	Significance
		Mean	S.D	Mean	S.D			
Maximum speed 30 m	Time	4,39	0,901	4,611	1,301	2,103	1.81	Significant
Explosive Strength of legs	Distance	2,510	3,480	2,401	3,210	2,822		Significant
Speed strength, hopping by right & left feet 10 steps hole to the farthest distance	m/cm right leg	26,325	1,534	24,10	0,430	1,991		Significant
	Left leg	25,015	1,632	23,815	1,321	1,898		Significant
Speed endurance, 150 m	Second	19,241	0,988	20,21	0,985	2,001		Significant
200 m Dash achievement	Second	23,810	1,935	24,111	0,838	2,111		Significant

Tabulated T value at freedom degree 6 – 1 = 5 with error percentage of (0.05) = 1.81

Table (6): development percentage between pre- and post-tests for the empirical & control group

Tests	Measure unit	Members of the sample	Post-mean	Pre-mean	Development
Maximum speed 30 m	Second	Empirical group	4,39	4,88	11,16
		Control group	4,611	4,76	3,25
Explosive Strength of legs	Distance	Empirical group	2,510	2,351	6,37
		Control group	2,401	2,360	1,66
Speed strength, hopping by right & left feet 10 steps hole to the farthest distance	Right leg	Empirical group	26,325	24,62	6,45
		Control group	24,80	24,55	1,00
	Left leg	Empirical group	25,015	23,90	4,43
		Control group	23,85	23,75	0,41
Speed endurance, 150 m	Left leg	Empirical group	19,241	20,681	7,48
		Control group	20,21	20,471	1,28
200 m Dash achievement	Second	Empirical group	23,810	24,240	1,80
		Control group	24,111	24,191	0,33

4. DISCUSSING RESULTS

Table (3) shows that there are significant differences at all tests for the empirical group. The researcher attributes these differences to the effect of the used tests within the training course and the time period including quick performance as well as type of intensity (maximum and semi-maximum) of performance, its repetitions, number of training groups applied on members of the sample and break periods. The researcher also found that quick performance training performed using assistant means played a

positive role in enhancing quick movement path for quick running athletes. This helped them to be economic in effort and agitated muscular tissues as a result of quick performance of muscular contractions which was positively reflected on developing special physical abilities and, in turn, developing 200 m dash achievement. Performance with maximum speed should be done at training on speed ability (Amer Fakher Shaghaty: 2011, 251). It is known that training on physical abilities is one of the effective factors that enhance performance level in sport activities (Singer, Robert N: 1999, 221). Amer Fakher Shaghaty & Mahdi Kadhem Ali refer that performing moves of correct quick motor performance ensure reaching the highest maximum speed level possible and helps increase dashing speed (Amer Fakher Shaghaty & Mahdi Kadhem Ali: 2012, 27).

If we look at table (4) about the control group, we notice that there is a development of some variables that were significant. The researcher found that this development is attributed to the confirmation of training. As for variables that showed insignificance, the researcher found that they are not necessary need to be enhanced, but there are noticeable results through arithmetic means. If we look at the development percentage among them we will find that there is a clear effect on members of the control group, but positive effect is for the sake of the empirical group.

5. CONCLUSIONS

1- Using quick performance training due using assistant means has a positive effect on some special physical abilities and 200 m dash achievement.
2- The time period of applying the training course, training intensity and rest affected the development of variables of the study.
3- The working method of quick performance training due using assistant means can be used as means of training or as additional to training process.

6. RECOMMENDATIONS

1- It is necessary to use quick performance training due using assistant means during training special physical abilities.
2- It is necessary to use load components of quick performance training during training special physical abilities.
3- Conducting physical descriptive studies on other age categories and sport activities for both males and females.

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THE EFFECT OF STRENGTH CHARACTERIZED BY SPEED IN AIR RESISTANCE ON MAXIMUM SPEED & SOME BIOCHEMICAL VARIABLES OF CYCLISTS

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Abstract

The world witnessed a great progress at all aspects and fields of life including sports field with rapid pace. This is clear through incredible results and records in these sport games and events. Cycling events (Race against Time) are the concern in this study in terms of applying a training course according to the nonoxygenic energy system needed for such events and the effect of this training course on developing some functional, skill and physical variables. This training is performed at the special preparation stage of cycling national team players. The application of these exercises is made on young players, and this age category gives accurate expression of any course to be applied on. In addition, energy economy during physical effort reflects positive sides in the adaptation processes of cardiac and circulatory systems, especially at the level of the heart in terms of heart muscle recovery, fast restoration and continuity of blood pumping with the same efficiency and spent energy.

Keywords: Strength characterized by speed, air resistance, maximum speed, bicycles

1. INTRODUCTION

The world witnessed a great progress at all aspects and fields of life including sports field with wide strides. This is clear through incredible results and records in these sport games and events includingcycling events (Race against Time). Through training science, exercises are treated and chosen accurately as previous training courses and methods became unable to develop the game at present because plans and exercises need specialization and work by worker's energy which make it necessary for workers in this field in general and specialists in particular to work hard according to modern training means. Maximum speed necessitated that players have to perform the set exercises due to the nonoxygenic energy system in spending energy. This requires high speed and fitness. In other words, preparation of players should be at a level which qualifies them to compete in a race against time using bicycles and high fitness as players need continuous movement. With speed exercises, result of the study shows the development in both circulatory and respiratory systems in multiple variables. This is done by following-up training events since the beginning of the course according to training level and age category due to adaptation of circulatory and respiratory systems with types and characteristics of the game as well as enhancing performance intensity to cope with training according to the nonoxygenic energy system that shows the capacity of heart muscle to extend and contract. From a psychological point of view, AmerAllah, 1998 refers to training as: "a group of directed physical exercises or efforts which lead to make a functional adaptation or change in internal body systems and organs to achieve a high level of sport achievement" (Amerallah Ahmed Albosati, 1998, 2). In addition, energy economy during physical efforts reflects positive aspects in the adaptation process at both cardiac and circulatory system, especially the level of the heart in terms of heart muscle recovery, instant restoration, continuous blood pumping with the same efficiency and spent energy. Thus, the significance of the study came in applying a training course due to the nonoxygenic energy system needed by the event and the effect of this training course in developing some functional, skill and physical variables. This training is in the preparation stage related to cycling national team players as the application of these exercises is made on young players, and this age category gives accurate expression of any course to be applied on.

2. PROBLEM OF THE STUDY

The fall in achievement in the cycling race (race against time) in Iraq is due to insufficient general and private physical characteristics. These are among the main obstacles in the development of sport achievement. Muscular strength in general and strength characterized by speed in particular represent a main element that is a part and parcel in reaching achievement, especially events related to speed. This was discussed in many studies that proved a significant relation between strength characterized by speed and achievement. The use of effective means in raising capacities with accompanying biochemical changes require adaptation according to the effort exerted by athletes to achieve good level. The trainers who use classical means and do not use anything new and innovative due to the conditions witnessed by Iraq is still present in developing some physical variables of cyclists. This led the researcher to create a training method that helps to develop the strength characterized by speed which is

training with air resistance using an (umbrella) in order to solve one of the problems of our trainers which is the lack of assisting training means attempting to give good results.

Objectives of the Study

1. Define the effect of training with air resistance using an (umbrella) on developing strength characterized by speed for short distance runners.
2. Define the effect of training with air resistance using an (umbrella) on maximum strength and some biochemical variables of cyclists of (race against time).

Hypotheses of the Study

1. There are significant differences of strength characterized by speed and maximum speed for the experimental sample of the study between pre and post tests for the sake of post test.
2. There are significant differences of biochemical variables of the experimental sample of the study between pre and post tests for the sake of post test.

3. METHODOLOGY

The researcher used the experimental method by designing a single group as it is proper for the nature o the study.

Population & Sample of the Study

One of the important aspects for the researcher is to determine the sample and subjects of the study. Thus, the population of the study was selected purposively represented in cycling national team junior players (6 players) representing 100% of the population.

Sample Homogeneity

In order to determine homogeneity of the study sample in some variables that affect its results, the researcher extracted skewness coefficient for (weight, length and training age), arithmetic mean, Standard Deviation SD, standard error for (weight, length and training age) related to the study. The table shows that values of skewness coefficient between (-3 and +3), so the study sample became homogeneous in the mentioned variables.

Table (1) showing statistical, measuring units, coefficients in standard, standard error, standard deviation and skewness coefficient:

Statistical description / Variables	Arithmetic Mean	S.D	Median	Standard Error	Skewness Coefficient	Type
Age	17.22	2.05	17	0.45	0.25	Random
Weight	72.11	6.70	72	4.20	0.45	Random
Full Length	176.46	3.56	175	2.47	0.46	Random

Field Procedures of the Study

The researcher performed pre-tests for the sample of the study, and then he applied the course which is about exercises by umbrella after 60 days (3 training units a week). Next, post-tests for the sample of the study were performed to determine the development of functional and physical variables.

Exercises (Annex 1):

A- Preparing physical training in order to develop muscular strength (explosive strength and strength characterized by speed)
B- Preparing training in the main part of the course prepared by the researcher
C- Training intensity between 75% and 95% for the group

The researcher used heart rates as indicators for rest within repetitions and groups. the number of heart beats within repetitions was (130 – 140 beats / min) that equals (3 – 4 minutes).

D- Rest within groups (between 110 and 120 beats / min) that equal: (4 – 5 minutes).

E- Performing exercises in a consecutive way with legs provided training conditions and characteristics with different percentages of intensities, sizes and rests to be consistent.

Discussion and Analysis of Results of Pre and Post Tests of Empirical Group

Table (2): arithmetic means, standard deviations, counted and tabulated T-values in pre and post tests for functional variables, physical capacities and achievement of the empirical group.

Statistical treatments / Variables	Measure Unit	Pre-tests		Post-tests		Counted T Value	Significance
		Mean -	S.D	Mean -	S.D		
Heart Rate	beat/min	177.45	4.457	165.156	1.345	7.769	Significant
VOX mas		38.45	1.45	46.65	0.435	13.187	Significant
Maximum Strength	Kg	85.75	5.58	96.30	1.87	3.78	Significant
Explosive Strength	Min	2.78	0.15	2.85	0.17	8.56	Significant
Max Speed (achievement in race against time)	Time	43,53	1.65	39.34	0.60	10.56	Significant

Table (2) shows that there is a development in functional variables (heart rate, VO_2 MAX) for cyclists (race against time) and there are significant differences between pre and post tests for the sake of post-test. The researcher found that this is because during performing the training for long periods with deep breath double respiratory muscular strength and lungs size on one hand. On the other hand, gradual intensity in training units has also a positive effect. This positive effect was shown in developing heart rate through heart and blood circulation adaptation towards raising functional capacity of this system. This leads to a positive effect on the level of sport achievement and its extendibility as a result of the big heart size for athletes reflected on functional apparatus including the increase of heart rates in the singe minute and times of respiration due to accumulations and effects through continuous training in the training unit. This was asserted by Mathews and E. Fox (proper training leads to heart rate reduction) (Mathews and E. Fox, 1977) and they also said: (continuous and regular training by athletes lead to heart rate reduction during rests). This was also asserted by (Kamal Darwish and Mohamed Sobhy Hassanein, 1984, 101) who said that the heart rate reduction for athletes is a proof o development which results in continuous application of training loads which, in turn, lead to enhance heart operation and increase heart defense and operation with more economical manner). Reduction of heart rate in the test after course using the increase in VO2max shows the respond to the oxygen need ad reduce the amount of oxygen debt in the pre-test prior to the course. In addition (Allawi and Aboelela, 1984) add that sport training leads to changes in ling sizes. These changes, in turn, lead to similar changes in vital capacity which gives great importance to the capacity of athletes to breathe amounts of air and in a little and deep number of respiration times in a single time unit.

All of this returns for the benefit achieved by the followed course. In addition, the rapid beat of respiration in the work field is due to changeable conditions. Here, we mean that during training and shifting work due to a certain energy system to another or to matches. This leads to difference in types of movement rhythms in a way that serves economical movement (Kasem Hassan Hussein, 1990, 126). This was asserted by (G. A. J. Crane, 1986) as he referred that strength of respiratory muscles increases during contraction during practicing sport activity regularly. This leads to extension of chest and makes more air enter inside, so the size of extension air increases, respiration depth increases, gas exchange between vesicles and blood improves and respiration times in a minute are reduced. All of this reflected on results of post-test as it was noticed that there was a reasonable development in means of this test. it was also noticed that the rate was developed and became efficient after the use of training course.

As for physical variables, “maximum strength, explosive strength, maximum speed (race against time)”, differences were significant between pre and post tests. The researcher found that the reason of this escalation in achievement level is due to the effect of the proposed training course on members of the study sample. This shows that the exercises achieved their goal. It is known that strength and its different types do not develop automatically and randomly, but they develop through regulated and planned training due to scientific formula, suitable and correct selection of the used exercises to develop this characteristic. This is especially found (extra load exercises) whether using weighs or body weight as they have direct effect on strength characterized by speed. This fact was referred to by many specialists and experts in this field including Mohamed Hassan Allawi and Mohamed

Nasreldin Radwan who said that regular training of extra loads and weighs may contribute to improve strength characterized by speed. Yet, the development of strength characterized by speed whether by arms or legs requires regular repetition of training as the increase in repetition should be regular and gradual. Since the researcher used the correct training method in developing this characteristic depending on regular repetition increase especially when the attacker's attempt to penetrate with or without the ball, so he repeats the training once again. All of this led to the development of this physical characteristic as asserted by Kasem Hassan Hussein and Mansour Gamil Al Anbaki (Kasem Hassan Hussein and Mansour Gamil Al Anbaki, 1988, 115).

The development of strength characterized by speed requires repetition of training for multiple times in a single series. It should be asserted that this is applied on muscles that operate in sport events. It is known that each sport event depends on certain muscular groups that differ from a game to another according to the specialist sport. Basket ball is one of the games whose players are characterized by greatly strong arm and leg muscles. Therefore, it was necessary to consider these groups through regular repetition of training and gradual increase in repetitions as results from the used training method (man-to-man defense) proved that it ws successful in developing strength characterized by speed through training repetition within the single training unit for many times which led to develop this physical character. The nature of this method requires performance of training on the sample of the study in maximum possible strength and the shortest possible time which means working to link strength with speed together as strength characterized by speed develops through training on linking strength with speed. Accordingly, this leads to increase consistent capacity between both of them. This characterizes cyclists, so the researcher considered giving gradual exercises to keep the level of physical capacities development using average intensity training which led to the development of achievement level through results of the study. Osama Riad, 1998, 65 agrees with this study as training on average distances fixed at a minute and a half above average intensity and load training helps develop and enhance physical capacities and increase in achievement level through reduction of the distance, so the hypothesis of the study is achieved saying that the proposed training course has an effect on physical capacities.

4. CONCLUSION

- Strength exercise which characterized by speed in air resistance affected in development of max speed of cyclists race.
- Strength exercise which characterized by speed in air resistance in maxima's velocity affected in development of some chemical variables of cyclists.

A Model of a Weekly Training Course

Day	Total Time	Repetition	Intensity	Rest	Within	Circulation	Formation	Notes
			Repetition	Group				The use of umbrella in circulation during repetitions: (M: minute), (RE: Recovery), (Z: double formation) and (T: consecutive formation)
Saturday	60M	*2(3*1M)	6m	M3	10M	110-130	Z, T	
	30M		RE					
Monday	60M		1 m			80 – 100	Z	
Wednesday	M90	3*(3*3)	5 – 6 m	3M	10M	110 – 130	Z.T	

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THE AFFECTION OF USING THE HYPERMEDIA IN THE NOVABLE ACOMPLISHMNT FOR SNATCHING LIFT

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Abstract

The thesis problem in clued discovering the differences in the pre and post exams for the experiment and setting two groups in the movable accomplishments for the snatching lift to the students in the physical education collage in Duhok University. The differences between the two groups of the research in the post test in the movable a accomplishment (The laurel of performance and achievement) for the snatching lift for the students in the physical Education college – Duhok University.

The two searchers presume that there are statics differences between the pre and post exam for the two groups of the research for the experimental approach because it fits the problem of the research. The groups of the research, students from the fourth stage in Duhok University for the academic year 013 – 014, the number of students is (79) in (3) section {B-C-D} For the sample of the research,(53) students from section {B- D} and they were chased randomly by lottery, then the searchers seaside the students whom fait and postponed, the final number of the sample became (30) students they were divided into (2) groups (15) students for each group, the searchers rued the quotations divers or and they are thematic mean, also the (t) test for their sampler and the (t) test for the non – tree sampler, also the person tag of missing in addition methods for collecting data, the searches concluded that experimental group and the setting group excelled in the pre and post tests in the movable accomplishment (the level of performance and achievement) for the post tests also the experimental group excelled on the seething group in the post test in the movable accomplishment (the lobule of performance and achievement) for the experimental group.

The searchers recommended the using the septillion computer program (Hypermedia) in learning the snatching lift.

Keywords: **Hypermedia – Knowledge Conlsiow – Snatcxhiglift.**

1. INTRODUCTION

Now a days the world witness a rapid change in all the fields of the life economical, social or cultural, that create the need for the education al institutions to carry out the modern teaching methods teaching methods to achieve their goals, It is not a new thing for our educational spatial system to face there challenger of the technological revolution and to make those whom work in the spatial tiled to walk side by side with these changes, that push hardly to engage the services of these changer, and to do so it is important to solve many teaching problems. The [Hypermedia] is one of these searchable directions and modern methods.

The main components of the Hypermedia is the complete super text and the moving picture and other means all there make the Hypermedia complete, the Hypermedia can't be classified as a film or video show, because it is differ than the test because it is not motionless.

The weight lifting sport is considered one of the sports which cover a very wide and big space as any other sports and gamer in the world, recently this sport witnessed huge development in the level of performance and achievement. This sport is one of the important course studied in the college of physical education in Iraq, here we see the importune of the searching the usage of [HYPERMEDIA] in the movable accomplishment for snatching lift.

Problem of the Research.

During the work of the searches in teaching the weight lifting subject in the college of physical education, they noticed that the traditional way [The explanation and the sample] is the used method in learn in the moving skills for different moving activate in general. And for weight lifting in laces, in which the lectures never pay attention to the individual differences between the students, also the searchers show the mistake of some lectures during the teaching operation that present the knowledge shortage for some lecturers, then it affects the level of students in weight lifting. The searchers believe in using technological inventories in this operation and to are all the modern technologies in the field of sportily activities and the moving skills, so the problem of this research is the using the Hypermedia for scratching lift for the students of college of education in Duhok university.

Aim of the Research:

The research aim to:-

- Discovering the differences in the pre and post tests for the setting group and the experimental group in the movable accomplishment (The level of performance and the level at achievement) for snatching left to the students of physical education in Duhok University.
- Discovering the differences between the grocers of the research in the post test for the movable accomplish (The level of performance and the level of achievement) for stitching lift to the students of the physical education college in Duhok university.

2. HYPOTHESIS OF THE RESEARCH.

- There are differences of statistical significations between the pre test and the post test in groups of the research in the movable accomplishment (The level of performance and the level of achievement) for the snatching lift and for the post test.
- There are differences of statistical signification between the per test and the post test in the movable accomplishment (The level of the performance and the level of achievement) for snatching lift and for the experimental group.

research procedure

The two searchers used the experimental course the due to its fellness for the research problem. The research group a group of students in the fourth stage in the physical education college in Duhok University. For the academic year 3013-2014, the number of students (79) students in three sections [B-C-D], while the research sample formed from [53] students in sections [B-D] and they were chased randomly and by lottery , the final number of the sample was [30] students divided for two groups [15] students for each group using the Hypermedia in their teaching units, and the setting group used the explanation by the lecture Table 1] show that.

Table (1) showing the number of the sample and the used method in teaching.

Section	Group	Total Number	Settled aside	Research Sample
B	Experimental	27	12	15
	Setting	26	11	15
D	Total	53	23	30

Experimental designee.

The searchers used the experimental designee named [The designee of the Run dam Setting group for the pre and posttest [Abo Aalam 223-11]

This designee can be shown as following

Table (2) the experimental designee

The Group		The used style	
Experimental Group	Pre – test		Post test
Setting Group		Traditional Style sample	Post lest

The means of data collecting

1- Sources and References

2- Tests and measurements

3- Scientific Noticing

Fitting the elements of body Fitness and the suitable tests.

The two searchers used the analysis style for the scientific sources, and chased a group of the body fitness elements affected on the Movable accomplishment for snatching lift The two searches arranged an information form and they show it to Many specialists in

the field of training, both of them, the searchers found the gist of the most important elements for the body fitness and the most suitable tests for it, the specialists found [Bloom and others 1983], that the searcher must reach the percentage 75% or more from refers.

The equalization and the similarity of the groups of the research.

The two searchers carry the operation of the similarity between the two groups of the research on 25-26/3/204 to find the following variations:-First find the age (tears) , Second find the height (centimeters) , Third find the weight (Kilogram) , Fourth find the elements of the body fitness , Fifth find the level of performance , Sixth find the level of achievement

The Movable accomplishment

The two searchers measured the level of the movable accomplishment for the snatching lift of the sampan of the research [The experimental and the setting] on 30.3.2014 in the hall of the weight lifting in physical education college – Duhok university. The searchers photo the snatching lift for the sample of the research, each student given there attempts to the lift.

Table (3) This table shows the equalization of the groups, the experimental and testing in the body significant [age – Height – weight] in the movable accomplish and the elements of the body fitness.

The statistical / The variations	The experimental Group		Setting group		Counted (t)	Percentage of Mistake	Signe
	M	s d	M	s d			
Age	22.3	0.77	22.6	1.31	1.08	0.08	Not significant
Height	168	3.02	169	4.01	2.01	1.02	Not significant
Cluster	69.5	4.01	7.2	3.21	1.24	0.24	Not significant
The explosive power of legs	2.23	0.70	2.08	0.84	1.51	0.26	Not significant
The explosive Power of arms	5.01	0.64	4.93	0.77	1.07	0.82	Not significant
The flexibility of arms and shoulders	52.23	1.72	50.68	1.02	2.08	1.40	Not significant
The level of skill performance	3.50	1.14	3.27	0.87	2.02	1.65	Not significant
Level of achievement	5.36	2.24	5.51	3.04	1.74	1.31	Not significant

Table (3) show the results of the differentiations between the two groups, the experimental and the setting in the above mentioned variations, the results shows the value of (t) and all these values are normal, that's show and prove the similarity of the two groups.

The Timing plan for the Teaching program.

The teaching program include [6] teaching units for the two groups the experimental and the setting group, in one teaching unit per week, and each unit in (90) min. for both groups.

The Formation of the Teaching Program.

The two searcher prepared all the methods, Witten texts, Pictures, sounds filer , drawings and films, the searchers used the program of [Auto ploy Media Studio], that due to the good experience of the two searchers in using the teaching program , the design of teaching program include many parts [The in fro during Screen, the basic elements of the teaching unit the data of the teaching unit, the final secure]

The Maim Experiment.

The maim experiment was done in the period between 6-4-2014 to 11-5-2014.

The Post – tests.

On 13-5-2014 the post tests were done and filmed to the stud eats in the same circumstances of the pre test.

The statistical Methods.

The two searchers used the following statistical methods.

1- The arithmetical mean.

2- The quantitative diversion.

3- The (t) test for the free samples.

5- The (t) test for the non –free samples.

The searchers used the statistical package for spss system.

Showing and discussing the results.

showing the results of the movable accomplishment (the level of performance and achievement for the snatching lift.

showing the results of the level of performance for the snatching lift for both groups, the experimental and testing group in both exams the pre and post.

Table (4)This table shows the statistical significant and the value of counted (t) also the percentage of mistake between the experimental group and the setting group in the pre and post test for the level performance in snatching lift.

The Statistical / The two Groups Significant	Measuring unit	Pre-test		Post-test		The Counted (t)	Percentage Of Mistake	Signe
		m	s d	m	s d			
Experimental group	Mark	3.50	1.14	6.13	1.01	3.41	0.02	Normal
Setting group	Mark	3.37	0.87	5.72	1.23	2.63	0.04	Normal

showing the results of the level performance test for the snatching lift for the experimental group and the setting group in the post tests.

Table (5) This tables shows the statistical features and (t) value in addition to the mistake percentage for the post test in the level of performance for the two groups.

The statistical Features / Test	Measuring unit	Experimental group		Setting group		The Counted (t)	Percentage Of Mistake	Signe
		m	s d	m	s d			
Level performance	Degree	6.13	1.01	5.72	1.23	2.28	0.02	Normal

3. DISCUSSING THE RESULTS OF THE LEVEL OF PERFORMANCE

Table (5) shows that there are differences in the results of the performance level for snatching lift in the pre and post test and for the post test for the experimental group, that proved that the teaching programming has a positive affection on the level of performance for snatching lift.

The searchers declared the progress of the experimental group due to the using of the Hypermedia which create a good teaching atmosphere by using all the senses of the learns and tempting his toward learning and helping him to think in the organized scientific way, in addition to follow the teaching operation according his desire, that push the learns to feel his role in the teaching operation, and making him realize the facts and the knowledge which concerned with the right level.

[Ibraheem 2009] said that the result of the teaching programming created a good teaching atmosphere through the participation of all the senses of the students and through pushing them toward the knowledge and going in the teaching operation according to their desires and their abilities [Ibraheem 105-2009].

Also the two searchers find the reason of the development of the post test in the experimental group may due to the programming specific by the complete and good scientific level, also this development may due to the way of using the Hypermedia may be considered scientific and mentally for the learner, that helps and encourage the criticism and the analysis also the comparison for the learners, here [Muhamad Ridha AL-Baghdadi] emphasized that the Hypermedia develop the related data to the learner, in order to use them secretly according the mental atmosphere in the best way for the system chose by the learner according his abilities and needs, so the Hypermedia direct and guide the learner and help him. To check the data and information by him self [AL-Baghdadi 365-1998] Al-Saed Said [AL-Saed -2011] that the well prepared programming with the Hypermedia specified by dividing the skills and talents to small parts in logical sequence and in organized way and combined them by the information in a way of pictures, drawings and video recordings and others that help the learner in concentrating on attention and to understand each small part easily [Al-Saed 74.2011]

showing the results of the performance level test for snatching lift for the two groups the experimental and setting in the two tests pre and post.

Table (6) This shows the statistical significant and the value of (t) and the mistake percentage, also the percentage between the experimental and setting groups in the pre and post tests in the level of performance of snatching lift.

statistical features / The two groups	Measuring unit	The Pre-test		The Post-test		The Counted (t)	Percentage of Mistake	Significant
		M	s d	m	s d			
Experimental group	Degree	5.36	2.24	8.1	2.33	4.13	0.03	Normal
Setting group	Degree	5.51	3.04	7.45	3.40	3.36	0.04	Normal

The statistical significant and the value of (t) and the percentage of the mistake in the post test for the level of performance to the two groups the experimental and setting groups.

Table (7) the Performance result

statistical features / variation	Measuring unit	Experimental group		Se4tting group		Counted (t)	Percentage of Mistake	Significant
		M	s d	M	s d			
Performance	Degree	8.01	2.33	7.45	3.40	3.53	0.01	Normal

3-3-1 Discussing the results of achievement

For the differences in the level of achievement which appeared in table (6), showed that the experimental group exiled on the setting group.

The two searchers reasoned that to the advanced level in the technique of the experimental group in higher degree than the setting group which comes from using the teaching programming [Hypermedia] that assist the students in increasing the level of

achievement for this group. [Halawah -2005] insist, that the using of program of multi means and the Hypermedia within the teaching units caused the clearance of the needed teaching duties during the implementing of the activities of the one unit, that cause the clear understanding for the movements, then the learner can do the moving duty accurately, then that reflected on the level of achievement more perfectly [Halawah -13-2005]

The two searchers haw another point of view for this result, that it is the nature of Hypermedia and its procedure are considered as a cause of increasing the achievement. Here each student must learn two to apply the skills in an excited way and more deeply without any boring, that giver the learner freedom in dealing with the learned skills that create the receded development in the field of applications of body tasks.

[Abo salim, 2007] insist on that the learns can perfectly learn the teaching subject according his special personal abilities, and according for his own capabilities, and them he never feel that the lectures goes fast and as a result he loses his connection with following up the teaching subject, so he will lose his dosing in following up the program [Abo salim 139-2007]

4. CONCLUSIONS.

1- The experimental group and the setting group exiled in the pre and post tests in the movable accomplishment [the level of performance and achievement] and for the post test.

2- The experimental group exiled on the setting group in the post test in the movable accomplish meant (the level of performance and achievement) and for the experiment al group.

5. RECOMMENDATIONS.

1- It is very important the using of teaching computer program [Hypermedia] in teaching the snatching lift.

2- Making more researches and studies about using the program of Hypermedia in the activities of other sports.

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THE AFFECTION OF USING THE INTERACTVE VEDIO IN LEARNING SONE NO VABLF SKILLS IN WRESTLING

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Abstract

The researchers aim to find the differences in the results of the post- test between the two groups the experimental and setting group in learning some or the Movable skills lie wrestling. The searchers used the experimental course because it fits the nature of the research and its problem. The group of the research was from the students of the second stage in the collage of physical education - Duhok university, the academic year {2014 - 2015}, while the sample of the research was formed from (24) students divided in two sections [B , D] in two groups experimental and setting, there the searchers made the equalization operator for the two groups of the research. The searchers depended on the personal interview and question ring also the tests and measuring at a used methods for, gathering the data, the searcher used the arithmetic mean, and the quantities deviation also the percentage and (t) for the non - concerned samples at methods for getting the data. The searchers concluded that the experimental group achieved more better learning better than the setting group in the skills of [The Inside same (turk ride) catch, near leg pick - up and inside leg block catch, and Throw over the hips with an arm and waist hold catch and Takedown by head drag catch], also the two groups never achier way differences in the skill of the [Throw over the hips with an arm and waist hold catch] in wrestling, the searcher's recommended in using the interactive video in learning some wrestling skills, while teaching the subject of wrestling for the students of the physical education college.

Keyword: interactive, video, learning, skills, wrestling.

1. INTRODUCTION

The teaching world witness a technological resolution in using the teaching technologies to face the challenges and problems in the teaching operation, also to catch and follow to mount the development and progress in the field of teaching and to Make use of all available technological effects to push the educational operation all over the world specially the outgrowth countries. [AL.Hella] insist that the Scientific challenges which the world face now a days and the rapid change which cower all the fields of the world and knowledge and technological explosion, make it very necessary to all educational and teaching institution to use all the means which chose the best

for a chive meant of the goals of the teaching operation, also facing these challenges [AL-Hella 15-2002].

Here comes the rare role of the technological education in developing the abilities of the learner, to learn with using the technology in the Life, that covers by make it available in the school and everywhere, with making the assortment of Experian and the piratical parching the goal for teaching and learning. The technological education care with how make the learner made for facingthe technological changes by using the knowledge and Experiences, also by learning the related activities, which the learner may learn and get in the class or outside. [AL-hella And Maree 27- 2008] . The interactive video is considered one of the updated modern technological direction because it is one of the teaching tools for it gathered between the specification of the video computer, and it depend on the basic interactive specification for the computer, in the time of all the programs of the video and the programs of the computer control and directed by the learner weather in operating or getting the source of teaching also choosing the texts or drawings or anything else-[Salem-19s-2008].

Here the wrestling activity is considered one of the activities and games which need high accurateness in executing its skills during exercising or during the competition. The wrestling lesson is one of the lessons which given to the students of the physical education college in Duhok university, so here we can summarize the importance of the research through the usage of technology of the interactive video in the operation of learning the moving operation for some basic skills in wrestling.

2. PROBLEM OF THE RESEARCH

The style of modern teaching now are many and help to achieve the goals of the teaching operation for reaching the learning the different skills with caring for squeezing the time and efforts, this variation in the style make lecturers revise the teaching style in the physical education, the teaching methods has a great role in squeezing the time and efforts in the teaching operation, here the interactive video is considered as one of these methods, and it has the same results in developing and progressing the teaching operation, but this teaching method never checked in achieving the needed goals specially in learning the basic skills in wrestling.

Here the problem of the research comes through this question, How to make use the interactive video and to what extent in learning some basic skills in wrestling for the student of the physical education college in Duhok university.

Aim of the Research

Finding the affection of using the interaction video interactive video in learning some of the basic skills in wrestling.

Hypothesis of the Research

There are important difference in the post test between the two groups the experimental and setting group.

Procedures of the research

2-1 The research course

The searchers used the experimental course that due to its fitness for the research and its problem.

2-2 The community and the sample of the research.

The community of the research is the students of the second stage in the college of physical education-Duhokuniversity for the academic year (014-015 the number of the students (119 students divided on (4 sections. The sample of the research is of two section (B-D they were closed randomly and by lottery, after keeping away the females, their number (61 , also the searcher keep away some of the persons of the sample of the research, because they did not harmonize with the sample and they are..(The Repeatersstudents. The postponed students. The players ofwrestling and the other teams of games. The injured students.

The ample of the research became (24 students (12 students for each section. The sample represent %20.16 from the community of the research, and able (1) show that

Table 1This table show the number of the research sample members and the used style for each of them.

Studying sections	The Group	The used style	Total number before the Exclusion	The Excluded	Number of sample
B	Experimental	Interactive video	31	19	12
D	Setting	The used style	30	18	12
	Total		61	37	24

experimental designed

The searchers used the experimental designed which is named (the equalivant groups designed chased randomly with fixed away notices (Alawy and Rawan 230-1994).

1 the equalivaion of the two groups of the research

2 the equalivation in the variations (Bulk-Age-hight)

Table 2This table shows the arithmetical means and the quantitive deviations for the variations (Bulk – age-Hight) for the sample of the research.

The Statistical Features / The Variations	Measuring unit	The Experimental group		The setting group		Counted (t)	(t) table	Result
		X	Y	X	Y			
Bulk	KGB	62.52	4.12	63.83	6.38	1.75	2.07	Not significant
Age	Year	19.23	1.37	20	2.01	0.44	2.07	Not significant
Hight	CM	170	3.58	168.52	6.52	1.51	2.07	Not significant

Equalization in some elements of moving and body fitness

The searchers used the analytical style for the data of the different scientific sources in this field, and he found a group of the elements of moving and the body fitness from some sources, then the put these elements in equations rate from and show it to the specialists in the field of fetching and the evolution and measuring in wrestling in order to determine the most important elements of the affective moving and body fitness in learning some skills in wrestling game.

After gathering all the questions rates the searcher found the most important elements of the moving and body fitness from the point of the specialists, and these elements are the repeated elements.

Determining of the suitable tests for the elements of body fitness and moving in learning some basic skills in wrestling.A group of tests were shown for the chased elements of the body fitness and moving, these shown to a group of the specialists in the field of (evaluation and measuring in tests wrestling to determine the suitable to measure these elements, (81% of the specialists a great on the following tests.

* the explosive power of the upper arms.

The test of throwing a medical ball of (3 kg weight from sitting position on chair in stable situation for the possible for distant (Othman 136-1990

* The explosive power of the down legs.

The vertical jumping from the stable situation (Hasanaiu 369-1995)

* the flexibility of the back bone,

Bending the back in back side, then started to curve to the back here the flexibility measured from the wall to the chin. (Hasanain 333-1997)

* The flexibility of the shoulders

This measured from the position of prostration and the hands catching a ruler in an equivalent area equal to the width of the shoulders, then rising the arms back to the maximum possible distance without bending in the arm and, with touching the chin to the ground (Al-Hakeem 134-2004)

* The fitness

This measured by choosing the running (9-3-6-3-9

(Hasanain and Abdul Munem 143-144-1997

Table 3

The Statistical Features The Variations	Measuring unit	The Experimental group		The setting group		Counted (t)	(t) table	Result
		X	Y	X	Y			
The explosive power of the upper arms	Metter	4.15	0.34	3.91	0.54	1.76	2.07	Not significant
The explosive power of the down legs	Metter	2.16	0.63	2.01	0.81	1.02	2.07	Not significant
The flexibility of the back bone	CM	62.01	2.90	60.50	3.80	1.89	2.07	Not significant
The flexibility of the shoulder	CM	48.93	1.18	50.11	2.02	0.77	2.07	Not significant
The fitness	Second	9.60	0.38	9.26	0.65	1.24	2.07	Not significant

Arranging the teaching program for the interactive video.

The searchers arranged the teaching program for the interactive video, that is by taking a film for one of the hero in wrestling in Iraq at a sample, which prevents the wresting matter, chaining and pulling the legs[The Inside sarma (turk ride) catch, near leg pick - up and inside leg block catch, and Throw over the hips with an arm and waist hold catch and Takedown by head drag catch], all these studied in the first art in the academic year for the second stage, after showing the above mention skills to the expertise and specialists in the sportily training and wrestling, then the film montage and making the cuttings for the movements cite parts according the parts of the skill (the preliminary mass, field, also the interactive video included one stage or mixing more than one stage according the arranged program, each unit is formed from the written texts, fixed pictures video films.

scouting experiment.

The scouting experiment done on(16.10.2014) by the searchers and the lectures of the subject and eight students from the community of research out the sample.

experimental Group (using the interactive video

This group study by using the interactive video for the skills, here the student sit using his computer and the program arranged for this reason (the student will see (written text or a group of pictures and parts of video films]. The students here can mod the stager of the skill parts according the teaching unit, with seeing a series of fixed pictures for the movement, then seeing the skill in different speeds [30% - 40% - 50% - 100%] before making the skill, that according to the desire of the student and his abilities in showing and repenting the explanations under his direct control. For the practical section each student do the arranged skill for the teaching remit on the wrestling mat according the unit. In this section, the role of the lecturer curses in showing skill mistakes of the student during doing that part, the lecturer give his direct advices for the student by using the computer and the seeing the video film or the picture, them the student state to apply the skill until learning it and the student continuo his learning to finish the applicable part.

setting group (The traditional teaching program

This style is considered as one of the main and common in the lesson of physical educations, the group here studied the course which is arranged by the lecturer and according the program, without using the technology of the interactive video here the lecturer explain the subject for all the stags of the skill, the apply it in all its stages, during the performance of the skills by the students for that teaching unit, the lecturer give the feedback and advices with correcting the mistakes, the teaching here continued until learning the skill perfectly.

periodical plan for teaching

The teaching plan included in teaching the wrestling skills on (8 weeks, for one teaching unit per week and according the schedule of lectures in the college.

Main experiment

After finishing the needed arrangements for the experiment in determining the groups of the research, and achieving the equalization between them, also determining the teaching subject, the teaching course implemented between(20.10.2014) to(15.12.2014)

post test

After finishing the main experiment, the post tests applied by the experimental and setting group on(17.12.2014) this formed from skill test for the moving skills then the students were evaluated by the lectures according the operable seen for the moving skill, after dividing the arts of the one moving skill to (pulmonary - main –final and each art include a certain degree according to the point of view of the specialists. The total of the arts of the one moving skill is (10 degrees) .

statistical means

- Te arithmetical men
- The quantities deviation
- The parentage
- (t test for the free samples (Al-Tekreety& Al-Obaidy 310-101-1999)

The searcher used the (spss program in treating the results

showing and analyzing and descanting the results

Showing the results of the post test between the experimental and setting group in the moving skills of the study.

Table 4 This table shows the arithmetical means and the quntative deviation and (t value for the post test between the two groups, the experimental and setting group.

The Statistical Features The Variations	Measuring unit	The Experimental group		The setting group		Counted (t)	(t) table	Result
		X	Y	X	Y			
The Inside sarma (turk ride) chaimgrap	degree	7.22	0.43	6.38	0.66	2.89	2.07	Not significant
near leg pick - up and inside leg block chaimgrap	Degree	7.09	0.05	5.77	0.24	3.17	2.07	Not significant
Throw over the hips with an arm and waist hold chaimgrap	Degree	5.89	1.51	5.56	2.04	1.86	2.07	significant
Takedown by head drag chaimgrap	Degree	6.77	0.10	5.73	1.18	3.21	2.07	Not significant

From table (4 we find the (t counted value [The Inside sarma (turk ride) catch, near leg pick - up and inside leg block catch, and Throw over the hips with an arm and waist hold catch and Takedown by head drag catch] group seqeuencly high as them the value of tabularAnd respectively (2.89, 3.17, 3.21) is greater than the value (t) (t in the post test between the experimental and setting group, that proves there are differences for the experimental group.

Also from table (4 it is clear the value of the counted (t for the post test between the two groups the experimental and setting group for the skill of (Throw over the hips with an arm and waist hold

chain group was (1-86 less than the tabular value of (t that proves on No differences between the two groups the experimental and setting group.

3. DISCUSSING THE RESULTS

From tube (4 we find the experimental group excelled on the setting group in the posttest in the skills of [The Inside sarma (turk ride) catch, near leg pick - up and inside leg block catch, and Throw over the hips with an arm and waist hold catch and Takedown by head drag catch]. This excelling in the results means.

The bitterness of using the technology of interactive video in learning these skills. The searchers detailed the reason because the interactive video make thee operation of understanding and releasing easy, also make the understanding of the detailed parts for the needed skills easy by the gradualist in showing the skill and explaining it. Here (Ali 2000 show and explain the difficultness of some needed skills, for learning them accurately, here the lecturer must use in the teaching operation a helping mean in his work, in the same time the technology of interactive video participating all the senses in the learning operation, that help the erecting of these skills, also creating a good relation between what the player learn and what must he learns (Ali as 2002.

The activity of the teaching program by using the (interactive video which include the steps of doing the chain groups, and these shown on the computer including (texts fixed photos and video films, all these arranged according a scientists bases equal to the student level that reflected positively on performing the chain groups. This proved the good planning for this program and the achievement of the goals, so the successful teaching program is the one which can grow the skills of the activity as a base in the teaching operation. Here (Al qadeem 2005 emphasize that the well-arranged teaching programs of the interactive video show the data and skills in accurate and easy way proves the interactive video more positive and active (Al-qadeem 150-2005.

4. CONCLUSIONS

1- the experimental group excelled on the setting group in the tests of Inside sarma (turk ride) catch, near leg pick - up and inside leg block catch, and and Takedown by head drag catch.

2- There are statistical differences between the two groups the experimental and setting group in the Throw over the hips with an arm and waist hold catch .

5. RECOMMENDATIONS

1- The searcher recommend in using the technology of the interactive video in other skills.

2- Insisting on making a familiar researches on other sportily activities.

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