

## **The Effectiveness Of The Use Of Certain Olympic Bar Lifting Exercises In The Development Of Under-Lifting Skill Performance Power For Wrestlers**

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### **Introduction & Research Problem:**

Issam Abdul Khaliq (1992) & El Sayed Abdel Maksoud (1994) see that training must include elements of the same type of activity being practiced and also exercises during which a single muscle or muscle group works in the same way or in a way similar to the way in which it works during the performance of competition movements in terms of motion direction, strength and time of performance.

(14:19)(10:57)

Ian Taylor & David Vear (1998) suggest that the aim of the training process is to reach for the best ways that work on improving a player's achievement level as the achievement is the focus of attention in the training process.(12: 114)

Mousa Fahmy & Adel Ali (1994) confirm that the sports training shall include exercises for each part or each

phase of skill in addition to trainings to more than one part or a complete skill.(22: 98)

El Sayed Abdel Macsoud (1997) suggests that exercises being used must match, in terms of the power curve and the time in whole or in part, with dynamic tracks used in the activity skills, where such exercises are directed to the muscle groups performing the main work.(9: 224)

Mohammed Ashmawy (2003) suggests that skills of lifting and curvature are considered of the best skills and the most effective of them in a land conflict setting in the Romanian wrestling as it is one of the technical movements from which one can get the highest technical points. We can say that the player who masters those skills can overcome the defenses of any competitor regardless of the level of his physical & skill preparation.(16)

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Magdy Eleyweh (1998), Ali Raihan (1998), Mossad Mahmoud et al. (1995) see that lift-up skills shall mean lifting the challenger up away from the surface of the rug in order to make him lose his centering base, balance and his ability to defend and counter-attack.(15)(6)( 21:43)

Salah Mohammed Asran (1996) suggests that lifting movements in the Romanian wrestling, performed from the under wrestling setting, are considered of the most important movements playing a major role in compiling the most points and finishing the game for the favor of the wrestler who is fluent in such kind of movements as the implementation of these movements make the competitor lose his contact with the ground and then lose control, balance and the ability to defend. When lifting the competitor, he shall be as close as possible to the line of the wrestler body center during lifting to reduce the external moments; in addition, a wrestler must be well captured and gripbed to the trunk so as to be close to the center of gravity.(27)

Ali El Saeed Raihan (1994), after Saeed Nada & Mohammed Al Kelani, emphasizes that a wrestler shall work on building his strength to a degree greater than the normal requirements for the game so that he can easily perform lifting skills during the conflict. He also says, after Hara, that a wrestler seriously needs to different kinds of muscle power as the conflict needs to exert high levels of power to overcome the violent and persistent resistance during the conflict.(7)

Mohammed Ashmawy (2003), after Je Jesse, suggests that a wrestler is characterized by a high level of power and he needs to special types of power to focus on specific areas of the body.(16)

Salah Asran (1996) refers that the muscle power is one of the most important requirements of wrestling due to the nature of performance and multiple resistances faced by a wrestler, defined as a wrestler's ability to grip, lift, push, drag and throw during performing offensive, defensive and counter-attack movements.(27)

El Sayed Abdel  
Macsoud (1997) &

Mohammed Allawy (1994) see that special-power exercises are similar in their dynamic composition, in terms of power curve, time and dynamic track, to movements performed during the competition based on the same muscle groups.(9: 224)(18: 103)

With the evolution of wrestling, its requirements of special power related to and similar to the skill performance has increased, where they require special exercises associated with skill performance of wrestling, and which are highly needed by a wrestler to be able to perform skills in general and lifting skills in particular.

T. Geff Chandler (1998) sees that to regularly transfer power to the various parts of the body, both from top to bottom and vice versa, it needs an amount of dynamic power, which in turn works to improve the level of skill performance.(28: 7)

Salah Mohammed Asran (1996) suggests that muscle power plays an important role in the success of the movements' group of up-lifting from the under wrestling setting, where the wrestler who has an appropriate amount of

special muscle power can win early in the game without a drop in the level, which makes specific muscle power one of the most important requirements of up-lifting movements' group.(27)

Musa Fahmy & Adel Ali (1994) refer that the purpose of the set exercises is the preparation of certain muscle groups to match the skills of activity type i.e. they work on developing muscles performing the skill with attention to the technical aspects as well, and often these exercises are difficult and complex.(22: 93)

Mohammed Ashmawy (2003) & Alaa Kenawy (1996) refer that in order for a wrestler to perform skills effectively in games, it would require special preparation including the physical aspect and associated with the skill aspect.(16)(5)

El Sayed Abdel Macsoud (1997) explains that one must use simulation exercises, which are similar to training technique, including only skill parts like those including the main functional stages.(9: 324)

Ali El Saeed Raihan (1994) refers that training using weights is considered as an objective means for the

development of various types of muscle power which are seriously needed by a wrestler and play a key role in raising the skill performance effectiveness of the wrestler in general and strengthening lifting movements in particular. He also says, after German & Hanley, that the wrestler needs to high levels of muscle power so that he can perform lifting skills in an appropriate and efficient manner.(7)

Westcott (1995) sees that the program of training using weights differs from traditional programs using only body weight as there is a potential to increase resistance while training using weights, which effectively affects the development of muscle power.(29: 3)(30)

Mossad Ali Mahmoud et al. (1995) emphasize that training using weights is an objective way for the development of different types of muscle power seriously needed by a wrestler and plays a key and fundamental role in increasing skill performance effectiveness of the wrestler in general and strengthening lifting movements in particular.(21: 77)

The research problem crystallizes in that through the exercising of wrestling by the researcher, he found deficiencies in skill performance of under-lifting skills being not performed in its appropriate technical manner in terms of the inability to lift the competitor, which leads to skill failure and the loss of an opportunity available for the player to win; also a lack of performance in a perfect way provides an opportunity for the player to get the full due points because of deficiencies in training techniques and methods being used not taking into account muscles performing skills as well as correct optimal dynamic technical track of the skill. Mohammad Reda Al Roby (2005) emphasizes that up-lifting skill group is an important and basic skill group for all wrestlers. This group is characterized by the loss of competitor to his contact with carpet and then the loss of his control as well as skill control and thus loses his ability to defend so it would be easy for the striker to perform selected skills.(20:52)

This is why the researcher is designing a

program using some of the Olympic bar lifting exercises, which are similar in their performance technique to the performance of lifting skills from the bottom to the top in terms of three points influencing lifting – the under lifting till losing contact to the ground, pay the pelvis forward and dragging by both arms to raise and swing up and also the ease and freedom of movement while using the Olympic bar and controlling the amount of weights placed on both sides of it in addition to the approximate symmetry between bar length and the length of the defender in the under wrestling setting.

**Research Objectives:**

This research aims to design a training program using some Olympic bar lifting exercises and to know its impact on

"The power of under lifting skill performance of wrestlers".

**Research Hypotheses:**

1. There are statistically indicating differences between both measures (pre and post) for both groups (experimental and control) in physical variables under discussion in the direction of the post-measurement.

2. There are statistically indicating differences between both post-measurements of both groups (experimental and control) in physical variables under discussion for the experimental group.

**Search Terms:**

**Olympic bar lifting exercises:** a collection of exercises only using Olympic bar in performance; it is a one of the modern fitness schools (Barbell Olympic lift) (operational definition).

**Power of up-lifting skills:**

the power produced by the working muscles for achieving lifting and throwing in harmony, time and direction which are commensurate with the nature of the up-lifting skill performance in the sport of wrestling.(27)

**Under-lifting Skills:**

movements performed by embracing the waist from side or behind from the attacking under-wrestling setting and lifting up then back-curving for performing back or side throwing. It consists of three movements which are (high waist turnover – back cast movement – reverse body lift).(27)

**Research Procedures:**

**1. Methodology:**

The researcher used the experimental methodology due to its suitability to the nature of this research, using experimental design with pre and post-measurement on two groups (experimental & control).

**2. Research Sample:**

Research sample is purposively selected from players of Menofeya elected team (Phase III) under 20 years old season (2014/2015) registered in the Egyptian

Federation of Wrestling, where the research community reached (25) wrestlers, (7) wrestlers were selected to conduct exploratory studies on them, thus the basic study has been applied to (18) wrestlers divided into two equal groups, one of them is experimental and the other is control, each having (9) wrestlers. Table (1) shows the homogeneity of the sample in the variables (growth- physical variables).

**Table (1)  
The homogeneity of research sample in the variables  
(growth- physical variables) (n = 25)**

Variables		Unit	Mean	Median	St.Div	Skewness
Growth variables	Age	Year	19.6	20	0.707	-1.537
	Length	Cm	175.88	178	6.603	-0.523
	Weight	Kg	7.92	8	1.037	0.901
	Training age	Year	79.08	76	11.456	1.508
Fast power	Time of 3 high waist turnover by pillar	Second	7.01	7.12	0.461	-0.539
	Time of 3 back cast movement by pillar	Second	5.895	5.96	0.351	-0.283
	Time of 3 revrse body lift by pillar	Second	6.184	6.21	0.437	0.043
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	Second	12.696	12.68	0.165	-0.047
	Time of 8 lifts by back cast movement grip using under-lifting weight set	Second	10.59	10.64	0.263	-0.37

**Follow Table (1)  
The homogeneity of research sample in the variables**

**(growth- physical variables) (n = 25)**

Variables		Unit	Mean	Median	St.Div	Skewness
Extreme power	Time of 8 lifts by reverse body lift grip using under-lifting weight set	Second	11.415	11.42	0.182	0.224
	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	Kg	151	150	7.637	-0.595
	Ultimate dynamic power of back cast movement grip using under-lifting weight set	Kg	160.6	160	6.344	-0.376
	Ultimate dynamic power of reverse waist grip using under-lifting weight set	Kg	154.8	155	6.034	-0.227
	Lifting static ultimate power for curving high waist turnover	Kg	141.8	145	5.93	-0.451
	Lifting static ultimate power for curving back cast movement	Kg	161.4	160	6.849	0.186
	Lifting static ultimate power for reverse reverse body lift	Kg	151.2	150	7.538	0.428
	Measuring right fist power using manometer	lb.	114.84	115	7.553	-0.017
	Measuring left fist power using manometer	lb.	114.12	115	11.587	-0.073
	Measuring back muscles power using dynamometer	Kg	140.72	138	20.036	0.64
	Measuring leg muscles power using dynamometer	Kg	225.96	225	26.844	0.041
	FI	Horizontal Flexibility	Cm	42.2	42	11.161
Vertical Flexibility		Cm	45.84	46	3.023	-0.65

It is evident from Table (1) that the skewness coefficient in growth and physical variables is confined

between (-3, +3), which indicates the homogeneity of sample individuals in these variables.

**Equivalence Of Both Research Groups**

**Table (2)**

**mean & Standard Deviation, value of “T” and its indications  
related to physical variables for both groups (Experimental /  
Control).(N1 = N2 = 9)**

Variables		Experimental Group (n=9)		Control Group (n=9)		T
		Mean	St.Div	Mean	St.Div	
Growth variables	Age	19.333	0.866	19.888	0.333	1.796
	Length	176.11	6.808	175.22	7.067	0.272
	Weight	8.222	1.301	7.444	0.527	1.661
	Training age	78.555	13.001	77.888	8.038	0.131
Fast power	Time of 3 high waist turnover by pillar	6.968	0.675	7.08	0.273	0.457
	Time of 3 back cast movement by pillar	5.818	0.399	5.906	0.316	0.517
	Time of 3 reverse body lift by pillar	6.081	0.358	6.224	0.517	0.683
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	12.766	0.142	12.693	0.143	1.088
	Time of 8 lifts by back cast movement grip using under-lifting weight set	10.506	0.289	10.65	0.278	1.071
	Time of 8 lifts by reverse body lift grip using under-lifting weight set	11.418	0.177	11.393	0.229	0.265
Extreme power	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	151.67	7.905	150	7.95	0.447
	Ultimate dynamic power of back cast movement grip using under-lifting weight set	160.56	5.833	161.11	6.972	0.185
	Ultimate dynamic power of reverse waist grip using under-lifting weight set	155.56	5.833	154.44	6.821	0.371
	Lifting static ultimate power for curving high waist turnover	140	6.123	141.11	6.009	0.389

**Follow Table (2)**



**mean & Standard Deviation, value of “T” and its indications related to physical variables for both groups (Experimental / Control).(N1 = N2 = 9)**

Variables	Experimental Group (n=9)		Control Group (n=9)		T	
	Mean	St.Div	Mean	St.Div		
Lifting static ultimate power for curving back cast movement	162.22	7.12	160	6.614	0.686	
Lifting static ultimate power for reverse reverse body lift	150	7.905	151.67	7.071	0.471	
Measuring right fist power using manometer	114.44	8.632	115.78	7.87	0.342	
Measuring left fist power using manometer	113.11	15.136	115.89	10.775	0.449	
Measuring back muscles power using dynamometer	146.44	19.391	145.78	23.45	0.066	
Measuring leg muscles power using dynamometer	219	21.656	228.22	33.918	0.688	
H	Horizontal Flexibility	40.44	16.606	46.777	7.224	1.049
	Vertical Flexibility	47	1.658	44.444	4.126	1.724

Table value of “T” at level (0.05) = (2.120)

Table (2) shows that there have been statically insignificant differences between both groups (Experimental/Control) in growth and physical variables being studied. This indicates that both groups are equivalent in these variables, where calculated value of “T” is less than its table value.

**Tools and equipment used in data collection:**

**1. Reference Survey:**

The researcher has conducted a survey of studies and scientific references addressing under-

lifting skills and ways of development, and also references dealing with training using weights within the limits available to the researcher in order to identify methods, techniques, physical content of training programs used and to make use of them in program development and the formation of loads, besides utilizing their results in discussing the results of the current study.

**2. Questionnaire Attachment (2):**

The researcher has designed a questionnaire to solicit expert opinions (attachment 1) in the field of study variables through contact and personal interviews to express an opinion regarding the program and the set exercises, and to determine elements of physical fitness and specify its appropriate measurement tests, in the period from 01/02/2014 AD to 28/2/2014 AD, so that additions and deletions were taken into account to fit with expert opinion.

3. Tests used in the research – Attachment (4):

- Fast power (time of 3 high waist turnover grip using pillar - time of 3 back cast movement grip using pillar - time of 3 reverse body lift by pillar - time of 8 lifts by reverse body lift using under-lifting weight set - time of 8 lifts by back cast movement using under-lifting weight set - time of 8 lifts by reverse body lift grip using under-lifting weight set).

- Ultimate dynamic power (high waist turnover grip using under-lifting weight set- back cast movement grip using under-lifting weight set - reverse body lift grip using under-lifting weight set).

- Ultimate static power (high waist turnover grip using dynamometer - back cast movement grip using dynamometer - reverse body lift grip using dynamometer) , (measuring left & right fist power using manometer - measuring back & leg muscles power using dynamometer).

- Flexibility (Horizontal – Vertical).

4. Sets and equipment used in the research:

Electronic scale to measure weight to the nearest Kilogram – Restameter to measure lengths to the nearest Centimeter – Graded ruler to measure elasticity – Stopwatch to measure the time estimated per second to the nearest 0.01 second - Manometer to measure fist power – Dynamometer for measuring static power – Wrestling mat – Multi-weight wrestling pillars – Under-lifting weight set consisting of (cable crossover) calibrated device and a cylindrical pillow – training gym containing (Olympic weightlifting bars– multi-weight tires).

5. Data recording form– Attachment (3):

Training Program– Attachment (5):

The training program has been prepared by following these steps:

- The researcher has performed a reference scan of Arab and foreign books in the limits of researcher knowledge.

- A survey was conducted on researches and studies associated with variables of research in the field of wrestling training as well as in the field of weight-lifting trainings.

- Interviewing and contacting experts in the field of wrestling.

The main goal of program:

The program aims to raise the level of physical abilities affecting under-lifting skills.

Principles of program development:

a) Building the program in accordance with scientific principles.

b) The training program shall commensurate with the set goals.

c) The program and its content of trainings shall be suitable for ages of the selected sample.

d) Program flexibility and modification ability.

e) Making use of previous studies that have designed

similar and related training programs.

f) The continuity and regularity in exercising the training program to achieve the desired benefit.

g) Taking into account basics and principles of training when developing a training program for training units (warming-up – main part – end).

h) Considering the individual differences when developing the program.

i) Taking into account principles of weightlifting exercises including: proper warm-up before the start of training then proper protraction & flexibility exercises after the end of weightlifting training – using the correct way of breathing – determine the weight to be used according to the required intensity through the test of the maximum weight that can be lifted once.(31)(32)

Training program limitations:

Program implementation period:

The proposed training program shall be implemented in the period of special preparation and before competitions. Program

application period has been determined to be (10 weeks) by (3 training units) per week so that training shall be performed using weights inside the weightlifting hall, knowing that the experimental and control groups shall have (6 training units) per week by three units on the mat with the same

training program at the same time, and the three remaining units remaining shall be inside the training hall using weights, however the experimental group shall follow the proposed training program while the control group shall follow the traditional program using weights as follows:

**Table (3)**  
**Weekly training distribution for both experimental and control groups**

Day	Experimental group	Control group
Saturday	Program of training on the mat: 6 : 8 PM	
Sunday	Proposed training program: inside weightlifting hall 5 : 7 PM	Traditional training program: inside weightlifting hall 7 : 9 PM
Monday	Program of training on the mat: 6 : 8 PM	
Tuesday	Proposed training program: inside weightlifting hall 7 : 9 PM	Traditional training program: inside weightlifting hall 5 : 7 PM
Wednesday	Program of training on the mat: 6 : 8 PM	
Thursday	Proposed training program: inside weightlifting hall 5 : 7 PM	Traditional training program: inside weightlifting hall 7 : 9 PM
Friday	Weekly break	

Where the proposed training program has been divided into three stages:

- Establishment stage: (3) weeks.
- Preparation stage: (4) weeks.
- Pre-competitive stage: (3) weeks.

- The number of units of the proposed training program using weights is 30 units.
- Time of training unit using weights is 120 minutes.

The total time of the program is 3600 minutes, i.e. (60 hours).

Training methods used: (Low-intensity periodic training –

high-intensity periodic training – repeated training).

Formation of the training load - Attachment (5):

The researcher used the wavy way in the formation of the load during the program periods, where he used:

✓ Formation (1-2), (1-1).

Determination of intensity of training loads:

The intensities of training loads used in the program have been determined, where the maximum intensity reached (95-100%), intensity

less than the maximum (85-94%), high intensity (75-84%), medium intensity (65-74%) and low intensity (50-64%).

Rationing intensity of training loads within the suggested training program:

Intensities of training loads within suggested training program have been rationed through the test of the maximum weight that can be lift once per selected training ((1 RM) One repetition maximum) (1: 193).

**Table (4)**  
**Determination of repetitions according to one repetition maximum**

Load Degree	Intensity	Repetition	Sets	Rest between sets
Maximum	100%	1	1	1.5 : 3 min
	95%	2	1-3	
Lower than Maximum	93%	3	1-3	3 : 4 min
	90%	4	1-3	
	87%	5	3-4	
	85%	6	3-4	
High	83%	7	3-4	3 : 5 min
	80%	8	3-4	
	77%	9	3-5	
	75%	10	3-5	
Moderate	67%	12	3-5	1.5 : 3 min
	65%	15	3-5	
Low	60%	18	3-4	1 : 4 min
	55%	20	3-4	
	50%	52	3-4	

(8:121)

### **Training program with weights of the control group:**

Training shall be performed in the traditional way which is the training on muscles of the body generally so that training shall be performed on a big muscle as well as a small muscle per day, in addition to training on all muscles in a circular manner, using all the weightlifting equipment (bars, dumbbells and fixed sets) without paying much attention to dynamic tracks of skills used.

### **Surveys:**

The researcher has selected a random sample from research community, consisting of (7) players from the outside of the main sample, then he conducted the tests on them with the help of assistants in the period ranging between 07/03/2014 AD and 31/03/2014 AD.

Aim of this study:

- To make sure of the safety of implementation and application of measurements and tests, the validity of instruments and tools in addition to related procedures in accordance with the conditions set for them and the suitability of the place.

- To identify the time required for the measurement process and how long it takes for each player in each test when performing measurement.

- To identify errors that one could fall in during the implementation of the tests and measurements, and arranging its course and its suitability for the age.

- Ensure appropriate training unit time to achieve its goal through the application of an experimental unit and the trying its contents.

- Measurement of the maximum weight that can be lifted at once for members of the research sample for each weightlifting exercise used in the program in the period ranging between 26.03.2014 AD and 03/31/2014 AD - Attachment (6).

- To explain how to perform weightlifting exercises in practice and the method of proper breathing during performance, as well as how to read and implement the content of the card of training weights used, which is distributed to each player during the unit of weightlifting exercise - Attachment (7), and how to move between exercises.

It has been ensured of tests' suitability to research sample as well as tools and place of measurements, in addition to ensuring of familiarity of assistants with how to conduct tests in order to avoid measurement errors.

Scientific Coefficients For Used Tests

1. Test validity:

Researcher has calculated distinction validity between two groups, one of them is indistinctive, from the outside of original research sample, and the other is distinctive (the exploratory) from 7 to 12 / 3 / 2014. Each group has contained (7) wrestlers.

**Table (5)**

**Indications of differences between both groups (distinctive and indistinctive), within physical tests being researched (N1 = N2 = 7).**

Variables		Distinctive group (n=7)		In distinctive group (n=7)		T
		Mean	St.Div	Mean	St.Div	
Fast power	Time of 3 high waist turnover by pillar	6.974	0.363	8.515	0.536	6.292 *
	Time of 3 back cast movement by pillar	5.98	0.359	6.791	0.153	5.486 *
	Time of 3 reverse body lift by pillar	6.265	0.458	7.501	0.48	4.92 *
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	12.608	0.196	14.317	0.647	6.684 *
	Time of 8 lifts by back cast movement grip using under-lifting weight set	10.622	0.213	12.324	0.558	7.533 *
	Time of 8 lifts by reverse body lift grip using under-lifting weight set	11.44	0.141	13.004	0.424	9.25 *
Extreme power	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	151.43	8.017	128.57	6.9	5.717 *
	Ultimate dynamic power of back cast movement grip using under-lifting weight set	160	7.071	137.14	6.986	6.084 *

**Follow Table (5)**  
**Indications of differences between both groups (distinctive and indistinctive), within physical tests being researched (N1 = N2 = 7).**

Variables	Distinctive group (n=7)		In distinctive group (n=7)		T
	Mean	St.Div	Mean	St.Div	
Ultimate dynamic power of reverse waist grip using under-lifting weight set	154.29	6.074	130	4.082	8.779 *
Lifting static ultimate power for curving high waist turnover	145	5	122.86	4.879	8.386 *
Lifting static ultimate power for curving back cast movement	162.14	7.559	142.14	6.362	5.356 *
Lifting static ultimate power for reverse reverse body lift	152.14	8.591	128.57	6.9	5.659 *
Measuring right fist power using manometer	114.14	6.644	98.428	6.078	4.617 *
Measuring left fist power using manometer	113.14	8.335	100.86	3.848	3.541 *
Measuring back muscles power using dynamometer	126.86	7.712	112.43	7.828	3.474 *
Measuring leg muscles power using dynamometer	232	24.501	201	10.066	3.096 *
Horizontal Flexibility	38.571	3.101	43.428	1.812	3.577 *
Vertical Flexibility	46.142	2.267	40.571	1.133	5.814 *

Table value of "T" at level (0.05) = (2.179)

Table (5) shows that there have been statically insignificant differences for distinctive group. This indicates test validity.

2- Stability of tests:

Researcher has calculated stability of tests by retesting an exploratory sample of 10 wrestlers on 20, 25 / 3 / 2014 AD, after a break of one week between the two applications.



**Table (6)**  
**Mean, standard deviation and coefficient of correlation between**  
**1<sup>st</sup> and 2<sup>nd</sup> applications of physical tests being studied for the**  
**exploratory sample (N = 7).**

Variables		1 <sup>st</sup> application		2 <sup>nd</sup> application		R
		Mean	St.Div	Mean	St.Div	
Fast power	Time of 3 high waist turnover by pillar	6.974	0.363	6.921	0.378	0.996
	Time of 3 back cast movement by pillar	5.98	0.359	5.928	0.372	0.997
	Time of 3 reverse body lift by pillar	6.265	0.458	6.214	0.467	0.998
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	12.608	0.196	12.557	0.190	0.996
	Time of 8 lifts by back cast movement grip using under-lifting weight set	10.622	0.213	10.557	0.214	0.994
	Time of 8 lifts by reverse body lift grip using under-lifting weight set	11.44	0.141	11.385	0.157	0.995
Extreme power	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	151.43	8.017	153.57	7.48	0.943
	Ultimate dynamic power of back cast movement grip using under-lifting weight set	160	7.071	162.14	5.669	0.935
	Ultimate dynamic power of reverse waist grip using under-lifting weight set	154.29	6.074	156.43	5.563	0.898

**Follow Table (6)**  
**Mean, standard deviation and coefficient of correlation between**  
**1<sup>st</sup> and 2<sup>nd</sup> applications of physical tests being studied for the**  
**exploratory sample (N = 7).**

Variables	1 <sup>st</sup> application		2 <sup>nd</sup> application		R
	Mean	St.Div	Mean	St.Div	
Lifting static ultimate power for curving high waist turnover	145	5	147.14	4.879	0.845
Lifting static ultimate power for curving back cast movement	162.14	7.559	164.29	6.074	0.946
Lifting static ultimate power for reverse reverse body lift	152.14	8.591	152.86	7.559	0.981
Measuring right fist power using manometer	114.14	6.644	114.71	6.575	0.997
Measuring left fist power using manometer	113.14	8.335	114.14	7.104	0.999
Measuring back muscles power using dynamometer	126.86	7.712	128.43	7.138	0.988
Measuring leg muscles power using dynamometer	232	24.501	233.29	22.837	0.999
Horizontal Flexibility	38.571	3.101	37.857	2.478	0.988
Vertical Flexibility	46.142	2.267	46.571	1.812	0.99

Table value of "R" at level (0.05) = (0.754)

Table (6) shows that calculated value of "R" is bigger than its table value. This indicates the stability of tests being studied.

3. Measuring the maximum weight that can be lifted at once for members of the research sample in each weightlifting exercise used in

the program in the period ranging between 26/03/2014 AD and 31/03/2014 AD.

– Pre-studies: pre-studies have been conducted on research sample individuals from 4 to 11/04/2014 AD.

– Program implementation: The proposed

program has been applied in the period from 13/04/2014 AD to 19/06/2014 AD

– Post-measurements: post-measurements have been conducted on 21: 28/06/2014 AD in the same conditions and specifications of pre-measurement and in the same place.

### Statistical processing:

Researcher has used the following statistical operations in processing data of this study:

- Arithmetic mean
  - The standard deviation
  - Median
  - Skewness
  - Correlation coefficient
  - ETA<sup>2</sup> coefficient
  - T test
  - The percentage of improvement
- Presentation and discussion of the results:  
First: Presentation of the results:

**Table (7)**  
**Indications of differences between both premeasures and post-measures of experimental group in physical variables being researched. (N = 9)**

Variables	Premeasure		Post-measure		T	
	Mean	St.Div	Mean	St.Div		
Fast power	Time of 3 high waist turnover by pillar	6.968	0.675	5.767	0.57	67521. *
	Time of 3 back cast movement by pillar	5.818	0.399	4.66	0.47	24.246 *
	Time of 3 revrse body lift by pillar	6.081	0.358	4.808	0.416	35.331 *
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	12.766	0.142	11.777	0.147	28.971 *
	Time of 8 lifts by back cast movement grip using under-lifting weight set	10.506	0.289	9.305	0.235	17.441 *
	Time of 8 lifts by revrse body lift grip using under-lifting weight set	11.418	0.177	10.763	0.083	12.03 *
Extreme power	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	151.67	7.905	175.56	6.346	13.115 *

**Follow Table (7)**  
**Indications of differences between both premeasures and post-**  
**measures of experimental group in physical variables being**  
**researched. (N = 9).**

Variables	Premeasure		Post-measure		T	
	Mean	St.Div	Mean	St.Div		
Ultimate dynamic power of back cast movement grip using under-lifting weight set	160.56	5.833	187.22	5.068	32 *	
Ultimate dynamic power of reverse waist grip using under-lifting weight set	155.56	5.833	176.76	6.614	28.725 *	
Lifting static ultimate power for curving high waist turnover	140	6.123	158.89	4.859	25.702 *	
Lifting static ultimate power for curving back cast movement	162.22	7.12	183.89	6.972	26 *	
Lifting static ultimate power for reverse revrse body lift	150	7.905	172.78	7.12	25.931 *	
Measuring right fist power using manometer	114.44	8.632	125.78	8.501	30.411 *	
Measuring left fist power using manometer	113.11	15.136	128.67	11.979	10.177 *	
Measuring back muscles power using dynamometer	146.44	19.391	167.78	19.543	35.501 *	
Measuring leg muscles power using dynamometer	219	21.656	261.33	21.731	41.204 *	
Fi	Horizontal Flexibility	40.44	16.606	35.222	13.763	5.238 *
	Vertical Flexibility	47	1.658	49.111	1.615	19 *

The tabulated value of "T" (1.86) at significance level (0.05)

Shown in Table (7) the presence of statistically significant differences between pre and post measurements for the experimental group in favor of post measurements in

Physical variables being researched where the calculated "T" value is higher than the tabulated value of "T" for all variables.

**Table (8)**  
**Indications of differences between both premeasures and post-**  
**measures of control group in physical variables being researched.**  
**(N = 9).**

Variables	Premeasure		Post-measure		T	
	Mean	St.Div	Mean	St.Div		
Fast power	Time of 3 high waist turnover by pillar	7.08	0.273	6.865	0.308	7.378*
	Time of 3 back cast movement by pillar	5.906	0.316	5.743	0.329	11.168*
	Time of 3 reverse body lift by pillar	6.224	0.517	6.027	0.734	10.081*
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	12.693	0.143	12.578	0.119	3.531*
	Time of 8 lifts by back cast movement grip using under-lifting weight set	10.65	0.278	10.438	0.246	14.681*
	Time of 8 lifts by reverse body lift grip using under-lifting weight set	11.393	0.229	11.241	0.193	7.698*
Extreme power	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	150	7.95	161.11	5.464	6.1*
	Ultimate dynamic power of back cast movement grip using under-lifting weight set	161.11	6.972	172.22	7.546	10*
	Ultimate dynamic power of reverse waist grip using under-lifting weight set	154.44	6.821	162.78	5.651	5.774*

**Follow Table (8)**  
**Indications of differences between both premeasures and post-**  
**measures of control group in physical variables being researched.**  
**(N = 9).**

Variables	Premeasure		Post-measure		T	
	Mean	St.Div	Mean	St.Div		
Lifting static ultimate power for curving high waist turnover	141.11	6.009	150.56	3.908	5.376*	
Lifting static ultimate power for curving back cast movement	160	6.614	171.67	5.59	14*	
Lifting static ultimate power for reverse revrse body lift	151.67	7.071	161.11	8.207	9.43*	
Measuring right fist power using manometer	115.78	7.87	118.89	7.54	11.939*	
Measuring left fist power using manometer	115.89	10.775	118.33	10.307	6.486*	
Measuring back muscles power using dynamometer	145.78	23.45	149.67	22.732	6.897*	
Measuring leg muscles power using dynamometer	228.22	33.918	234.67	34.025	17.103*	
Flexi	Horizontal Flexibility	46.777	7.224	45.111	6.918	10*
	Vertical Flexibility	44.444	4.126	45.444	3.468	3.464*

The tabulated value of "T" (1.86) at significance level (0.05) shown in Table (8) the presence of statistically significant differences between pre and post measurements for the control group in favor of post measurements in Physical variables being researched where the calculated "T" value is higher than the tabulated value of "T" for all variables.

**Table (9)**  
**Indication of the differences between the two post measurements**  
**of the control and experimental group for Physical variables being**  
**researched. N1=N2= (9)**

Variables	Experimental		Control		T	
	Mean	St.Div	Mean	St.Div		
Fast power	Time of 3 high waist turnover by pillar	5.767	0.57	6.865	0.308	5.075*
	Time of 3 back cast movement by pillar	4.66	0.47	5.743	0.329	5.659*
	Time of 3 reverse body lift by pillar	4.808	0.416	6.027	0.734	5.397*
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	11.777	0.147	12.578	0.119	12.635*
	Time of 8 lifts by back cast movement grip using under-lifting weight set	9.305	0.235	10.438	0.246	9.977*
	Time of 8 lifts by reverse body lift grip using under-lifting weight set	10.763	0.083	11.241	0.193	6.803*
Extreme power	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	175.56	6.346	161.11	5.464	5.174*
	Ultimate dynamic power of back cast movement grip using under-lifting weight set	187.22	5.068	172.22	7.546	4.95*
	Ultimate dynamic power of reverse waist grip using under-lifting weight set	176.76	6.614	162.78	5.651	4.789*

**Follow Table (9)**  
**Indication of the differences between the two post measurements**  
**of the control and experimental group for Physical variables being**  
**researched. N1=N2= (9)**

Variables	Experimental		Control		T	
	Mean	St.Div	Mean	St.Div		
Lifting static ultimate power for curving high waist turnover	158.89	4.859	150.56	3.908	4.009*	
Lifting static ultimate power for curving back cast movement	183.89	6.972	171.67	5.59	4.103*	
Lifting static ultimate power for reverse revrse body lift	172.78	7.12	161.11	8.207	3.221*	
Measuring right fist power using manometer	125.78	8.501	118.89	7.54	1.857*	
Measuring left fist power using manometer	128.67	11.979	118.33	10.307	1.962*	
Measuring back muscles power using dynamometer	167.78	19.543	149.67	22.732	1.812*	
Measuring leg muscles power using dynamometer	261.33	21.731	234.67	34.025	1.982*	
Flexi	Horizontal Flexibility	35.222	13.763	45.111	6.918	1.926*
	Vertical Flexibility	49.111	1.615	45.444	3.468	2.875*

The tabulated value of “T” (1.746) at significance level (0.05) Shown in Table (9) the presence of statistically significant differences between the two post measurements of the control and experimental group in favor of experimental group in Physical variables being researched, where the calculated “T” value is higher than the tabulated value of “T”.



**Table (10)**  
**Value of the impact of the program "ETA<sup>2</sup>" and the percentage of improvement between (pre / post) measurements for the experimental group in Physical variables being researched n = (9)**

Variables	Premeasure		Post-measure		ETA <sup>2</sup> coefficient	percentage of improvement	
	Mean	St.Div	Mean	St.Div			
Fast power	Time of 3 high waist turnover by pillar	6.968	0.675	5.767	0.57	0.9	17.2%
	Time of 3 back cast movement by pillar	5.818	0.399	4.66	0.47	0.9	19.9%
	Time of 3 revrse body lift by pillar	6.081	0.358	4.808	0.416	0.9	20.2%
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	12.766	0.142	11.777	0.147	0.9	7.7 %
	Time of 8 lifts by back cast movement grip using under-lifting weight set	10.506	0.289	9.305	0.235	0.9	11.4 %
	Time of 8 lifts by revrse body lift grip using under-lifting weight set	11.418	0.177	10.763	0.083	0.9	5.7 %

**Follow Table (10)**  
**Value of the impact of the program "ETA<sup>2</sup>" and the percentage of improvement between (pre / post) measurements for the experimental group in Physical variables being researched n = (9)**

Variables	Premeasure		Post-measure		ETA <sup>2</sup> coefficient	percentage of improvement	
	Mean	St.Div	Mean	St.Div			
Extreme power	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	151.67	7.905	175.56	6.346	0.9	15.8 %
	Ultimate dynamic power of back cast movement grip using under-lifting weight set	160.56	5.833	187.22	5.068	0.9	16.6 %
	Ultimate dynamic power of reverse waist grip using under-lifting weight set	155.56	5.833	176.76	6.614	0.9	13.6 %
	Lifting static ultimate power for curving high waist turnover	140	6.123	158.89	4.859	0.9	13.5 %
	Lifting static ultimate power for curving back cast movement	162.22	7.12	183.89	6.972	0.9	13.4 %
	Lifting static ultimate power for reverse revrse body lift	150	7.905	172.78	7.12	0.9	15.2 %
	Measuring right fist power using manometer	114.44	8.632	125.78	8.501	0.9	9.9 %

**Follow Table (10)**  
**Value of the impact of the program "ETA<sup>2</sup>" and the percentage of improvement between (pre / post) measurements for the experimental group in Physical variables being researched n = (9)**

Variables	Premeasure		Post-measure		ETA <sup>2</sup> coefficient	percentage of improvement	
	Mean	St.Div	Mean	St.Div			
Measuring left fist power using manometer	113.11	15.136	128.67	11.979	0.9	13.8 %	
Measuring back muscles power using dynamometer	146.44	19.391	167.78	19.543	0.9	14.6 %	
Measuring leg muscles power using dynamometer	219	21.656	261.33	21.731	0.9	19.3 %	
Flexibility	Horizontal Flexibility	40.44	16.606	35.222	13.763	0.7	12.9 %
	Vertical Flexibility	47	1.658	49.111	1.615	0.9	4.5 %

The results of the table (10) indicate that the value of (ETA<sup>2</sup>) ranged between (0.7, 0.9) which shows the strength of the impact of the proposed program to the Physical variables and the level of skill performance of the experimental group and percentage of improvement ranged between (4.5%, 20.2%) for the (pre /post)

measurements for the experimental group in Physical variables being researched in the direction of the post measurement.

Evaluation of (ETA<sup>2</sup>) coefficient

(From zero to less than 0.3 = weak effect), (from 0.3 to less than 0.5 = Medium effect) (From 0.5 to one = strong effect)

**Table (11)**  
**the percentage of improvement between (pre / post)**  
**measurements for the Control group in Physical variables being**  
**researched n = (9)**

Variables	Premeasure		Post-measure		percentage of improvement	
	Mean	St.Div	Mean	St.Div		
Fast power	Time of 3 high waist turnover by pillar	7.08	0.273	6.865	0.308	3 %
	Time of 3 back cast movement by pillar	5.906	0.316	5.743	0.329	2.8 %
	Time of 3 revrse body lift by pillar	6.224	0.517	6.027	0.734	3.2 %
	Time of 8 lifts by high waist turnover grip using under-lifting weight set	12.693	0.143	12.578	0.119	0.9 %
	Time of 8 lifts by back cast movement grip using under-lifting weight set	10.65	0.278	10.438	0.246	1.99 %
	Time of 8 lifts by revrse body lift grip using under-lifting weight set	11.393	0.229	11.241	0.193	1.3 %
Extreme power	Ultimate dynamic power of high waist turnover grip using under-lifting weight set	150	7.95	161.11	5.464	7.4 %
	Ultimate dynamic power of back cast movement grip using under-lifting weight set	161.11	6.972	172.22	7.546	6.9 %
	Ultimate dynamic power of reverse waist grip using under-lifting weight set	154.44	6.821	162.78	5.651	5.4 %
	Lifting static ultimate power for curving high waist turnover	141.11	6.009	150.56	3.908	6.7 %
	Lifting static ultimate power for curving back cast movement	160	6.614	171.67	5.59	7.3 %

**Follow Table (11)**  
**the percentage of improvement between (pre / post)**  
**measurements for the Control group in Physical variables being**  
**researched n = (9)**

Variables	Premeasure		Post-measure		percentage of improvement	
	Mean	St.Div	Mean	St.Div		
Lifting static ultimate power for reverse reverse body lift	151.67	7.071	161.11	8.207	6.2 %	
Measuring right fist power using manometer	115.78	7.87	118.89	7.54	2.7 %	
Measuring left fist power using manometer	115.89	10.775	118.33	10.307	2.1 %	
Measuring back muscles power using dynamometer	145.78	23.45	149.67	22.732	2.7 %	
Measuring leg muscles power using dynamometer	228.22	33.918	234.67	34.025	2.8 %	
F	Horizontal Flexibility	46.777	7.224	45.111	6.918	3.6%
	Vertical Flexibility	44.444	4.126	45.444	3.468	2.3 %

The results of the table (11) indicate that the percentage of improvement ranged between (0.9% , 7.4%) for the (pre / post) measurements for the Control group in Physical variables being researched in the direction of the post measurement.

Second: Discussion of Results:

In light of the previous presentation for the findings of the researcher, and in the framework of research objectives & hypotheses, and guided by the results of previous studies and what

reported in scientific references, the researcher starts to discuss such results as follows:

Table (7) shows statistically indicating differences between both measurements (pre & post) of the experimental group in the tests under discussion, where the calculated value of (t) was as follows: for tests of fast power through the time of three skills-performance by pillar for high waist turnover grip (21.675), back cast movement grip (24.246) and reverse body lift grip (35.331);

and for tests of fast power by the time of 8 lifts using under-lifting weights set for high waist turnover grip (28.971), back cast movement grip (17.441) and reverse body lift grip (12.03); where the calculated value of (t) for the ultimate dynamic power tests using under-lifting weights set for high waist turnover grip (13.115), back cast movement grip (32) and reverse body lift grip (28.725); and for tests of the ultimate static power measured by Dynamometer for high waist turnover grip (25.702), back cast movement grip (26) and reverse body lift grip (25.931); and for tests of ultimate static power of working muscles for both right fist (30.411), left fist (10.177), back (35.501), both legs (41.204), horizontal flexibility (5.238) and vertical flexibility (19). Such values are greater than the table value of (t), which was (1.86) at freedom degree of (8); this indicates that the proposed training program has affected the physical variables in question. Mohammed Ashmawy (2003) (16) & Alaa Kenawy (1996) (5) say that in order for a wrestler to effectively perform skills in games, it would

require special preparation including the physical aspect and associated with the skill aspect.

This is confirmed by Mossad Mahmoud et al. (1995) that training using weights is an objective way for the development of different types of muscle power seriously needed by a wrestler and plays a key and fundamental role in increasing skill performance effectiveness of the wrestler in general and strengthening lifting movements in particular (21: 77).

As can be seen from the Table (10) that the value of "ETA 2", which is the coefficient of program impact strength, ranged between (0.7, 0.9) and was greater than (0.5), which indicates that the proposed training program, using Olympic bar lifting exercises directed to working muscles and the dynamic track of skills, has a large impact strength and that exercises, developed by the researcher, were effective on the development of the physical abilities under discussion, in which the researcher considered the scientific principles, so it contains exercises in which muscular

work is similar to skill performance requirements and in the same dynamic & muscular track, which had a significant impact on the those variables. This is consistent with what has been said by Salah Asran (1996) (27) that the muscle power is one of the most important requirements of wrestling due to the nature of performance and multiple resistances faced by a wrestler, defined as a wrestler's ability to grip, lift, push, drag and throw during performing offensive, defensive and counter-attack movements.

Improvement ratio supports those findings, where findings of Table (10) refer to the ratio of improvement between both measurements (pre & post) of the experimental group in physical variables under consideration in favor of the post-measure where the improvement ratio ranged between (4.5%, 20.2%), which indicates that the proposed training program has led to developing physical variables under discussion; where Musa Fahmy & Adel Ali (1994) refer that the purpose of the set exercises is the preparation of certain muscle groups to match the

skills of activity type i.e. they work on developing muscles performing the skill with attention to the technical aspects as well, and often these exercises are difficult and complex (22: 93).

These findings are consistent with the studies performed by each of Hamdi Abdel-Rahman (1999) (11), Mohammed Ismail El Gammal (2007) (19), Ihab Al Barary, Mossad Hassan (2008) (13), Nabil Shourbagy (2008) (23) and Novikov A. (1999) (24).

Table (8) shows statistically indicating differences between both measurements (pre & post) of the control group in the tests under discussion, where the calculated value of (t) was as follows: for tests of fast power through the time of three skills-performance by pillar for high waist turnover grip (7.379), back cast movement grip (11.169) and reverse body lift grip (10.091); and for tests of fast power by the time of 8 lifts using under-lifting weights set for high waist turnover grip (3.531), back cast movement grip (14.691) and reverse body lift grip (7.619); where the calculated value of (t) for the ultimate dynamic power tests

using under-lifting weights set for high waist turnover grip (6.1), back cast movement grip (10) and reverse body lift grip (5.774); and for tests of the ultimate static power measured by Dynamometer for high waist turnover grip (5.376), back cast movement grip (14) and reverse body lift grip (1.43); and for tests of ultimate static power of working muscles for both right fist (11.131), left fist (6.496), back (6.917), both legs (17.103), horizontal flexibility (10) and vertical flexibility (3.464). Such values are greater than the table value of (t), which was (1.86) at freedom degree of (8); this indicates that the traditional training program has affected the physical variables in question.

The results of the table (11) refer to the ratio of improvement between both measurements (pre & post) of the control group in physical variables under consideration in favor of the post-measure where the improvement ratio ranged between (0.9%, 7.4%).

The researcher says that the reason for these differences and progress is that the traditional training program has led to improvements in

variables in question of the control group; this is because of regularity of players, their commitment to training and repeated exercises, which in turn has led to the upgrading of the variables in question. Adel Abdel Basir (1999) says that the process of adaptation in training can't be continued or developed otherwise through continuous training (2: 72).

Table (9) shows statistically indicating differences between both groups (experimental & control) in the post-measurement of physical variables under discussion, where the calculated value of (t) was larger than its table value at level of significance (0.05), where the value of calculated (t) was as follows: for tests of fast power through the time of three skills-performance by pillar for high waist turnover grip (5.075), back cast movement grip (5.651) and reverse body lift grip (5.317); and for tests of fast power by the time of 8 lifts using under-lifting weights set for high waist turnover grip (12.635), back cast movement grip (1.177) and reverse body lift grip (6.903); where the calculated value of (t) for the



ultimate dynamic power tests using under-lifting weights set for high waist turnover grip (5.174), back cast movement grip (4.15) and reverse body lift grip (4.791); and for tests of the ultimate static power measured by Dynamometer for high waist turnover grip (4.001), back cast movement grip (4.103) and reverse body lift grip (3.221); and for tests of ultimate static power of working muscles for both right fist (1.957), left fist (1.162), back (1.912), both legs (1.192), horizontal flexibility (1.126) and vertical flexibility (2.975). This is largely due to the effectiveness of training using the Olympic bar in the development and improvement of ultimate power and fast power. These results also indirectly confirm the correctness and the formation of the used training program according to the method of muscle work as well as the integrity of used exercise selection and paying attention to the correctness of their performance. Mohammad Hassan Allawy & Abul-Ela Abdel Fattah (2000) emphasize that the development of dynamic skills and perfecting dynamic skills of sports

activity type are closely related to the development of the necessary physical abilities associated with those skills (17: 80).

Improvement ratio supports those findings, where findings of Table (10) & (11) refer to the difference in ratio of improvement between the proposed and traditional program.

The researcher believes that those differences and such improvement in the experimental group go back to the proposed training program consisting of exercises using the Olympic bar, which was applied to the experimental group in the physical variables in question, and which contains special training for the development of physical abilities under discussion, in which muscular performance is similar to working muscles and the requirements of skill performance in the same dynamic track, and relies on technique of lifting skills from bottom to top using different settings and grips. Those results are consistent with what has been said by Ali El Saeed Raihan (1994) (7) in that training using weights is considered as an objective

means for the development of various types of muscle power which are seriously needed by a wrestler and play a key role in raising the skill performance effectiveness of the wrestler in general and strengthening lifting movements in particular. He also says, after German & Hanley, that the wrestler needs to high levels of muscle power so that he can perform lifting skills in an appropriate and efficient manner.

These findings are consistent with the Ali El Saeed Raihan (1994) (7), Salah Mohammed Asran (1996) (27), Sabri Ali Qotob (1997) (26), Hamdi Abdel-Rahman (1999) (11), Osama Hosni El Shourbagy (2001) (25), Ahmed Shaarawy Mohamed Ahmed (2002) (4), Mohamed El-Sayed Ashmawy (2003) (16), Ahmed Omara, Muhammad Al Ashram (2006) (3), Mohammad Ismail Al Gammal (2007) (19), Ihab El Barary, Mossad Hassan (2008) (13), Nabil El Shourbagy (2008) (23) and Lekov Novikov A. (1999) (24). This is consistent with the privacy principle of the training as well as taking into account the individual differences for each player, where Abdel Aziz Al Nemr &

Nariman El Khatib (2005) (11) refer that the performance is improved in a better way if it is of the same type of the practiced activity, including the most important muscles working in such activity and to be executed in the same way as in the competition.

#### CONCLUSIONS:

In the light of the nature and objectives of this study, and within limits of research sample and methodology used, and from the actual data collected by the researcher as well as the results of the statistical analysis, the researcher got to the following conclusions:

- 1) The proposed training program using the Olympic bar training has a positive impact on the development of fast power of the under-lifting skills of the experimental group.
- 2) The proposed training program using the Olympic bar training has a positive impact on the development of the ultimate dynamic power of the under-lifting skills of the experimental group.
- 3) The proposed training program using the Olympic bar training has a positive impact on the development of the

ultimate static power of the under-lifting skills of the experimental group.

4) The proposed training program using the Olympic bar training has a positive impact on the development of flexibility of under-lifting skills of the experimental group.

5) The proposed training program using Olympic bar training is better than the traditional program in developing the power of under-lifting skills of the experimental group.

#### **Recommendations:**

Within limitations of research procedures and findings, the researcher recommends the following:

1) Paying attention to weightlifting training using the Olympic bar during the preparation program of wrestlers so as to raise power levels according to scientific principles and to increase the ability to efficiently conflict in games.

2) Paying attention to directed weightlifting exercises in the direction of dynamic tracks of skills in question as well as various wrestling skills.

3) Paying attention to improving coaches through

holding training courses for them to know modern training methods.

4) The necessity to design similar programs for various ages.

5) Paying attention to using other tools and methods to raise the physical abilities of wrestling skills, which saves time and effort in the training process.

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