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THE IMPACT OF USING FUNCTIONAL STRENGTH EXERCISES TO DEVELOP SOME PHYSICAL CAPABILITIES AND ENHANCE THE PERFORMANCE OF WRESTLING GRIPS

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Abstract:
The study's objectives were to prepare functional strength exercises that would improve the research sample's physical capabilities and wrestling grip performance as well as to ascertain the effects of utilizing these exercises to improve the research sample's physical capabilities and grip performance. The researchers used the appropriate strategy to address the research issue because experimentation was a key component of the procedure. The researchers' selection of the sample was one of the most important stages and processes of the investigation. The researchers undoubtedly considered the research sample as soon as they started deciding on the topic and goals of the study. Consequently, a sample of twenty-two wrestlers from the advanced division who were practicing at the Al-Adhamiya Club's wrestling facility were used for the study. Al-Adhamiya Sports Club wrestlers were purposefully chosen for the competition. This led to an increase in the study sample size to 20 wrestlers, or 90.9% of the total research population. The researchers used anthropometric measures to confirm the sample's homogeneity. The findings demonstrated that functional strength training significantly improved the experimental group's physical capabilities in the wrestlers' physical capabilities tests compared to the control group in the post-test. In the physical capabilities tests among the wrestlers, functional strength exercises also revealed a substantial difference in performance levels between the experimental and control groups in the post-test, favoring the experimental group. Regarding the recommendations, they state that functional strength exercises should be used to improve wrestlers' physical capabilities and that these exercises must replicate the performance of the skill, which includes training the muscles involved in the wrestling grip.

Keywords: Exercises, Functional Strength, Physical Capabilities, Wrestling Grips, Freestyle Wrestling.

1- Research definition:

1-1 Introduction and Significance:

A sport with great power, speed, and excitement is wrestling. It has attracted a lot of attention because of its complexity, which includes psychological, physical, and skillful elements. In order to execute takedowns and conduct grips with strength and precision, wrestling requires specialized training to build arm and leg strength. Exercises for functional strength have become essential for improving these factors. Sports scientists have argued that strength is the ultimate physical ability because it is the basis for developing and improving all other physical abilities. As a result, this basic component is essential to all sporting activities, while its significance varies according on the demands of the motor job. Training methods supported by evaluations of functional and physical tests contribute to future understanding of the reflected effects of these elements on wrestlers' abilities and, consequently, on various physical attributes. It is clear that studying the effects of functional strength exercises on specific physical abilities and technical performance levels in Olympic freestyle wrestling is important since wrestling is a sport that requires the integration of physical talents. A

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novel approach to strength training has surfaced, centering on functional strength training with a variety of apparatuses to enhance strength and fortify the core muscles—which are critical for initiating movements.

1-2 Problem Statement:

The research problem lies in emphasizing the significance of functional strength exercises in developing some physical capabilities and technical performance levels for freestyle wrestlers, given the dearth of studies and research that have examined the study of functional strength exercises in the sport of wrestling and the belief in the effectiveness of these exercises and their impact on developing some physical capabilities and technical performance levels in wrestling, which contribute to enhancing the wrestler's efficiency to achieve better achievements. This seeks to support coaches in implementing the most effective workouts customized for our Iraqi teams and appropriate for the country's climate to provide the greatest athletic results and promote our beloved sport.

1-3 Research Objectives:

1. To construct functional strength exercises to improve the performance of wrestling grips appropriate for the research sample and to build some physical capabilities.
2. To ascertain how employing functional strength training will improve the research sample's performance in wrestling grips and help them build certain physical skills.

1-4 Research Hypotheses:

1. Among freestyle wrestlers, there are statistically significant changes between the pre- and post-tests in favor of the post-tests when it comes to the use of functional strength exercises in various physical capacities and wrestling grip performance.
2. There are statistically significant variations in several physical abilities and freestyle wrestlers' performance of wrestling grips between the pre- and post-test findings.

1-5 Research Scope:

1-5-1 Human Scope: Advanced category wrestlers from Al-Adhamiya Sports Club.

1-5-2 Temporal Scope: From September 22, 2022, to January 12, 2023.

1-5-3 Spatial Scope: Wrestling Hall at Al-Adhamiya Sports Club.

3- Research Methodology and Field Procedures:

3-1 Research Methodology:

In this study, the researchers employed a suitable methodology to address the research problem, which is experimental. The essence of the experimental methodology is an attempt to control all fundamental factors except for one variable deliberately changed by the researchers, which must be measurable.

3-2 Research Population and Sample:

3-2-1 Research Population:

The researchers deliberately selected the research population from wrestlers in Baghdad province. The selection of the research sample is closely related to the objectives set by the researchers for their research, and the procedures they use will determine the nature of the population they choose.

3-3-2 Research Sample:

One of the crucial phases and procedures in the research process is the sample selection made by the researchers. Without a doubt, the researchers take the research sample into account as soon as they start to define the study problem and its goals. Consequently, a sample of wrestlers from the advanced category—a total of twenty-two wrestlers—who were receiving training in an Al-Adhamiya Club wrestling hall were used for the research. It was deliberate to choose the wrestlers from Al-Adhamiya Sports Club. As a result, the number of people in the experimental sample increased to (20) wrestlers, or 90.9% of the research population. The researchers used anthropometric measures to confirm the sample's homogeneity.

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Table (1) shows the homogeneity of the sample in anthropometric measurements.

Variables	Unit of Measurement	Mean	Median	Standard Deviation	Skewness Coefficient
Chronological Age	Years	21.80	21.5	3.57	1.56
Height	cm	178.3	179.5	2.46	1.37
Mass	kg	76	66.5	7.31	1.36
Training Age	Years	8.43	8.5	2.43	1.26

All results were found to be within (±3), indicating homogeneity of the sample in the mentioned variables. Then, the researchers divided the sample into two groups, control and experimental, by randomly selecting names with simple random sampling, considering weight, with (10) wrestlers in each group and with varying legal weights.

3-2-1-1 Sample Equivalence:

Table (2) demonstrates the sample equivalence in the pre-tests for both the experimental and control groups.

Tests	Unit of Measurement	Control		Experimental		Median differences	T-Value	Sig. Level	Difference Significance
		M	± SD	M	±SD				
10 Squats on One Leg Right	cm	19.3	1.30	19.9	2.30	0.06-	0.64	0.21	Insignificant
10 Squats on One Leg Left	cm	19.5	1.22	19.6	1.35	-0.01	0.73	0.27	Insignificant
Running at Maximum Speed (50m) from Stand	seconds	7.10	1.45	7.40	1.78	0.06	0.52	0.19	Insignificant
Back Squat Test (30 seconds)	Repetitions	40.6	2.03	40.7	2.68	0.01	0.43	0.26	Insignificant
First Grip	Degrees	6.83	0.57	6.66	0.77	0.16	0.59	0.55	Insignificant
Second Grip	Degrees	6.75	0.73	6.09	0.70	0.0.53	0.47	0.27	Insignificant
Third Grip	Degrees	6.08	0.66	6.91	0.51	0.73	0.68	0.50	Insignificant

With degrees of freedom (n-2=18) and a significance level of (0.05).

3-4 Identifying Physical Abilities:

A questionnaire was sent to several academics, experts, and specialists in the field of wrestling to get their perspectives on what the most crucial physical skills are. The physical talents that the experts and specialists

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agreed upon and rated according to their selection are displayed in Table (3), which indicates how the questionnaire was designed to determine the significance of these abilities.
Table (3) illustrates the physical abilities relied upon based on the opinions of specialists and experts.

Variable	Number Accepted	Agreement Percentage	Accepted	Not Accepted
Speed	9	90%	✓	
Endurance	9	81%	✓	
Speed-Strength	9	81%	✓	

Based on the above, it is evident that the questionnaire included the following physical abilities in its final form:
- Speed
- Endurance
- Speed-Strength

3-5 Nomination of Physical Abilities Assessment Tests:
Table (4) illustrates the nomination of tests relied upon based on the opinions of specialists and experts.

Test Name	Unit of Measurement	Number Accepted	Acceptance Percentage	Agreement Percentage
10 Squats on One Leg (Right and Left)	Meters	10	90%	√
Sprinting from Flying Position (50 meters)	Seconds	10	90%	√
Back Squat Test for 30 seconds at 50% intensity	Repetitions	10	90%	√

3-6 Used Tests:
1. First Test: Sprinting from Flying Position (50 meters)[1].
2. Second Test: Back Squat Test for 30 seconds at 50% intensity.
3. Third Test: 10 Squats on One Leg (Right and Left)[2].

Scientific Parameters of the Physical Abilities Test Under Study:
First: Test Stability:
On Saturday, October 1, 2022, the first test was run. Six days later, on Friday, October 7, 2022, it was repeated, making sure that every condition from the first round of testing was maintained. Two wrestlers were chosen as a sample for the exams. The stability coefficient was extracted by the researchers using Pearson's correlation coefficient, and it varied between (0.82-0.91). As a result, the examined tests show a high degree of stability. Table (5) gives an illustration of this.
Table (5) illustrates the stability coefficient.

[1] Thamer Mohsen Ismail (et al.): "Testing and Analysis in Football", (Baghdad, University of Mosul Press, 1991), pp. 141-142.
[2] Robert Medford. Training for Speed, power & Strength, National Sports publisher, Malaysia, 2008, p. 46.

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Test Number	Test Name	Stability
1	10 Squats on One Leg (Right and Left)	0.82
2	Sprinting from Flying Position (50 meters)	0.88
3	Back Squat Test for 30 seconds	0.91

Secondly: Test Validity:
The self-validity of the test was determined by extracting the square root of the stability coefficient, indicating the validity of the test. The test is considered valid if the validity coefficient is (0.70) or higher, as shown in Table (6).
Table (6) illustrates the validity coefficient.

Test No.	Test	Validity
1	10 Single-leg Hops (Right and Left)	0.90
2	Sprinting 50m from a Flying Start	0.93
3	Back Squat for 30 Seconds	0.95

Third: Test Objectivity:
(The objectivity of the tests was determined by extracting the objectivity coefficient using the Pearson correlation coefficient between the results of international referees, reaching (0.93-100%). Thus, the test enjoys high objectivity in evaluation, as shown in Table (7).

Test Number	Test Name	Objectivity
1	10 Single-Leg Hops (Right and Left)	100%
2	Maximum Speed Running (50 m from Flying Start)	0.93
3	Back Squat for 30 Seconds	100%

3-7 Selecting Grips and Presenting Them to Experts: Identifying the most important grips and what they include from basic grips.
Table (8) shows the validity of compound grips considering the opinions of specialists and experts.

Test Number	Test Name	Acceptance Rate	Agreement Rate	Number Accepted
1	Balance Grip	11	100%	√
2	Pinch Grip	11	100%	√
3	Arm Lock and Head Encirclement Grip	11	100%	√

3-8 Evaluation of Technical Performance of Grips Under Study:
On the research sample, the researchers performed technical tests that involved doing the three grips (that are the subject of the study) without resistance and with a partner who was of a comparable weight. Using a technical performance evaluation form, Annex (8), the researchers assigned marks to each grip component. The form was presented through video presentations and numerous replays for technical performance to

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international referees and subject matter experts. After collecting the forms and extracting their data, the experts, Annex (3), agreed on an acceptable percentage of (100%). The film was then transferred to a CD at normal and slow speeds, and the CDs were given to the assessors to evaluate the technical performance of the pre-tests through evaluation forms for the performance stages, where each stage was rated out of (10) points, with a total score of (10) points. The division of scores for grip sections.

3-7 Pre-Tests:

Compatibility tests and technical performance tests were administered to every member of the research sample at the scheduled times in consultation with the team coach on Sunday, October 9, 2022, at 4:00 PM in the Al-Adhamiya Club Hall. This was done after fulfilling all scientific and fundamental requirements for conducting tests.

3-8 Training Units:

- The exercises used in the training units should be derived from the sport of wrestling.
- Understanding the principle of appropriate timing for training exercises.
- Availability of tools, equipment, and facilities specific to learning wrestling in various environments.
- Considering the principle of practical training for exercises.

Post-Tests:

On Wednesday, February 10, 2021, the training units for the control and experimental groups were fully implemented, and then the post-test for the dependent variables was carried out. Next, on Thursday, February 11, 2021, the skills post-test was administered. To get accurate results, the researchers made sure that the place, time, and assessors were all the same as in the pre-tests, following the timetable that was set in the pre-tests.

Statistical Methods:

The researchers utilized the Statistical Package for the Social Sciences (SPSS)[3] to process the data.

4-1 Presentation and Analysis of Results for the Research Groups in the Pre and Post-Tests:

4-1-1 Presentation and Analysis of Physical Fitness Results for the Control Group in the Pre and Post-Tests:

To determine the significance of differences between the pre and post-tests in physical fitness assessments for the control group, the researchers employed a paired samples t-test. The results are outlined in Table (9).

Variables	Unit	Pre		Post		M Dif.	SD Dif	t Value	p Value	Significance
		M	SD	M	SD					
10 repetitions on one leg (right side)	CM	19.3	1.30	20.9	1.54	1.22-	0.24	5.16	0.003	sig
10 repetitions on one leg (left side)	CM	19.5	1.22	20.6	1.18	1.15-	0.04	-6.25	0.002	sig
Running at maximum	S	7.10	1.45	6.70	1.27	0.40	0.18	7.42	0.001	sig

[3] Wadee Yassin Mohammed Al-Tikriti, Hassan Mohammed Abdul-Abadi: Statistical Applications and Computer Uses in Research in Physical Education, 2nd ed.: (Mosul, Dar Al-Kitab for Printing and Publishing, 1999), pp. 102, 155, 179, 214, 290, 310.

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speed (50m)										
Back squat test during (30 seconds)	Rep.	40.6	2.03	41.8	2.96	1.20	0.93-	6.73	0.001	sig

At a degree of freedom (n-1=9) and a significance level of (0.05).

4-1-5 Presentation and analysis of the performance level results for the control group in the pretest and posttest:

To determine the significance of the differences between the pretest and posttest in the performance level for the control group, the researchers used a paired samples t-test. As shown in Table (10).

Table (10) shows the mean, standard deviation, and calculated (T) value for the performance level of the control group.

Variable	Measurement Unit	Before	After	Mean Difference	Std. Dev. Difference	t-Value
Balance Grip	Degrees	6.83	7.52	0.69	1.64	4.58
Pinch Grip	Degrees	6.75	7.47	0.72	1.25	3.43
Arm Grip and Head Encirclement	Degrees	6.08	7.37	1.29	0.89	6.29

At a degree of freedom (n-1=9) and a significance level of (0.05).

4-1-7 Presentation and analysis of the results of the physical abilities for the experimental group in the pre-test and post-test:

For determining the significance of the differences between the pre-test and post-test in the physical abilities for the experimental group, the researchers used a paired samples t-test, as shown in Table (11).

Table (11) displays the mean, standard deviation, and calculated t-value for the compatibility abilities of the experimental group.

Varaibles	Unit	Pre		Post		M Di	SD Dif	T- valu	P – valu	Sig
		M	SD	M	SD					
10 Right-Leg Squats	CM	19.8	2.80	23.2	1.49	3.33	0.24	8.16	0.003	Sig
10 Left-Leg Squats	CM	19.7	1.35	22.4	1.18	2.70	0.04	-6.25	0.001	Sig
Sprinting 50m from Standing Position	S	7.10	1.78	5.90	1.27	2.29	0.18	6.42	0.001	Sig
30-Second Back Squat Test (Repetitions)	Rep.	40.6	2.03	45.8	2.96	5.41	0.93-	10.45	0.00	Sig

4-1-8 Discussion of the Pre- and Post-Fitness Test Results for the Experimental Group:

Functional strength training and the methodical regulation of training loads using a scientific approach adapted to the skills of the research sample, which consists of wrestlers, are credited by the researchers for the

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improvement they have seen. They also acknowledge that a key element of functional strength training, which aims to increase muscle strength, is the application of training techniques. The researchers trained various muscular groups, particularly the arms, legs, and core, to ensure gradual loading throughout the program. They carefully chose functional strength exercises and concentrated on the muscle areas that are employed in fighting to produce the improved physical skills that are being studied. This aligns with what Deaf Schertz affirmed, emphasizing the importance of core training in functional strength workouts as strong core muscles link the lower and upper extremities. Additionally, functional strength training involves multi-directional movements[4].

4-1-11 Presentation and Analysis of Performance Level Results for the Experimental Group in the Pre and Post-Tests:

To determine the significance of the differences between the pre and post-tests in performance level for the experimental group, the researchers employed a paired samples t-test. The results are illustrated in Table (12). Table (12) illustrates the mean, standard deviation, and calculated T-value for the performance level of the experimental group.

Variables	Measurement Unit	Before	After	Mean Difference ($\bar{x}$)	Standard Deviation (σ)	t-value	Significance
Balance Grip	Degree	6.66	9.5	2.84	0.77	0.99	0.00
Pinch Grip	Degree	6.09	9.75	3.69	0.70	0.96	0.00
Arm Grasp and Head Enclosure	Degree	6.08	9.33	3.25	0.66	1.15	0.00

At a degree of freedom (df = 9) and a significance level of (0.05).

4-1-4 - Discussion of Pre- and Post-Training Performance Levels of Grips for the Experimental Group:

It is visible how training works and how the control group improved in the wrestling grips performance assessments. The experimental group's functional strength training is credited by the researchers for this advancement. The core muscles of the wrestler's body, which link the lower and upper limbs, were the emphasis of this training. Additionally, the emphasis on multidirectional motions during training helped the wrestlers' physical talents to grow. Jamal further supported this, saying that the features of functional strength training help to strengthen the muscles, which improves the efficiency of muscular contractions and results in improved athletic performance.

4-2 - Presentation of Physical Fitness Test Results and Comparison between the Control and Experimental Groups in Post-Training Tests[5].

4-2-1 - Presentation of Physical Fitness Test Results between the Control and Experimental Groups in Post-Training Tests.

Table (13) displays the mean, standard deviation, and calculated t-value for physical fitness abilities.

Tests	Unit	Control		Experimental		T – value	Sig difference	Sig
		M	± SD	M	±SD			
Right Squats	cm	20.9	1.54	23.2	1.49	7.41	0.00	sig*

[4] Deaf Schertz (2010): Functional Training Pyramids, New Truth High School, Kinetic Wellness Department, USA

[5] Jamal Sabri Faraj, Physical Preparation for Basketball Players, 2nd Edition, Dar Dijlah, Amman, 2007, p. 139.

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Left Squats	cm	20.6	1.18	22.4	1.18	6.43	0.00	sig*
Sprinting at Maximum Speed (50 m)	seconds	6.70	1.27	5.90	1.27	6.87	0.00	sig*
Squat Test (30 seconds)	repetitions	41.8	2.96	45.8	2.96	8.14	0.00	sig*

At a degree of freedom (n-2=18) and a significance level of (0.05).

4-2-2 Discussion of the Results of Physical Fitness Tests Between the Control and Experimental Groups in the Post-tests.

The functional strength workouts that the experimental group undertook are credited by the researchers with improving the function of sensory receptors in muscles, tendons, and joints. The sensory nerve signals that convey information about muscle lengthening, shortening, tension, relaxation, strength and speed of contraction, body posture, overall body positions, changes in these positions, and precise movement in surrounding space and time are enhanced by these exercises. Because the nervous system uses this information to control and primary acquire motions during performance, instruction, and sports training, wrestlers are better able to analyze the motor performance of grips. Ali Fouad's claim that choosing the right exercises is crucial because they are the main ways to improve or grow one's physical, motor, and skill capacities lends credence to this.[6].

4-3 Presentation of the Results of Performance Levels Between the Control and Experimental Groups in the Post-tests.

Table (17) illustrates the mean, standard deviation, and computed T-value of the compatibility abilities.

Test	Unit	Control		Experimental		Calculated T Value	Significance Level	Difference Significance
		M	± SD	M	±SD			
Balance Grip	Degree	7.52	1.27	9.5	0.99	10.23	0.00	sig*
pinch Grip	Degree	7.47	0.79	9.75	0.96	11.38	0.00	sig*
Arm Grip and Head Circumference	Degree	7.37	1.32	9.33	1.15	10.47	0.00	sig*

At a degree of freedom (n-2=18) and a significance level of (0.05).

4-2-6 Discussion of the results of the test level of wrestling grips between the control and experimental groups in the post-tests.

The experimental group performed better on the wrestling grips test than the other research groups, with statistically significant differences seen. The researchers believe that the necessity of diversity in adopting

[6] Ali Fuad Faiq, "Special Exercises for Developing Explosive Strength in the Performance of the Snatch Grip for Advanced Greco-Roman Wrestlers," Research Journal of Psychology, College of Basic Education, Al-Mustansiriya University, Volume 12, 2018, p. 152.

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several types and styles of training, including functional strength training, explains these variations in wrestling grip performance levels. Whether practicing motor skills in forward, backward, or stabbing motions, this kind of instruction is seen to be essential. These motor abilities demand speed and strength to be performed without generating imbalance because the body's center of gravity constantly shifts while executing these variations.

The success of performance operations and skill development is based on functional capacities. One of the most important aspects of executing and learning the wrestling grips under study is developing the functional capacity. Moreover, it has demonstrated efficacy in diminishing the duration needed to execute breaststroke swimming techniques. According to Grosser M., functional capacities accelerate and improve the acquisition of complicated and compound coordination skills.[7]

Researchers explain that precise and successful wrestling grip practice necessitates a high degree of synchronization in the timing of muscle contractions and the order of motions during training. This was accomplished by targeting a common muscle in functional strength training activities that served the motor goal by contracting or relaxing at the right time. This supports the claim made by Ahmed Abdul Amir that "the athlete's ability to successfully complete the motor task by providing regular and precise commands (signals) from the brain to the muscles to perform the movement accurately and smoothly" describes coordination control."[8]

Furthermore, Qasim et al. have confirmed that functional strength fosters competition and a fun atmosphere, which in turn cultivates drive and excellence. They said, "To reduce the physical and psychological strain that comes with training for wrestlers and to increase their motivation to compete, it is crucial to foster an environment that is exciting and thrilling to participate in the sport. Excitation and thrill are vital ways to boost motivation in wrestling instruction or training, and they become even more important while practicing motions and athletic skills."[9]

5- Conclusions, Recommendations, and Proposals:

5-1 Conclusions:

1. In the physical ability tests conducted among wrestlers, functional strength training showed a significant difference in the physical capabilities between the experimental and control groups in the post-test, favoring the experimental group.
2. The experimental group performed better in the physical ability tests among wrestlers than the control group in the post-test, indicating a significant difference in performance levels between the two groups following functional strength training.
3. Functional strength training showed the acceptance of the research sample for the exercises used in it.

5-2 Recommendations:

1. When developing wrestlers' unique physical skills, use functional strength training.
2. Functional strength training, which includes strengthening the muscles involved in wrestling grips, must resemble skill performance.
3. Functional strength training should consist of three training units per training week.

[7] Grosser M., Starischka S., Zimmermann E.: Das Neue konditionstraining. BLV Buchverlag, MunchenKp71. 2008.
[8] Ahmed Abdul Amir Hamza. "The Effect of a Proposed Training Field on Developing Motor Control of Some Basic Skills in Football for Players Aged (14) Years." Doctoral Thesis, College of Physical Education, University of Babylon, 2006, p. 28.
[9] Qasim, Lu'ay, Sabr (et al.): Previously cited source, 2005, p. 39.

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References:

1. Ahmed Abdul Amir Hamza. "The Effect of a Proposed Training Field on Developing Motor Control for Some Basic Football Skills for Players Aged 14 Years," Doctoral Thesis, Faculty of Physical Education, University of Babylon, 2006.
2. Jamal Sabri Faraj. "Physical Preparation for Basketball Players," 2nd Edition, Dar Djil, Amman, 2007.
3. Ali Fuad Faiq. "Special Exercises for Developing Rapid Strength in Performing the Snatch Grip for Advanced Roman Wrestlers," Journal of Research and Psychology, Faculty of Basic Education, Al-Mustansiriya University, Volume 12, 2018.
4. Wadia Yassin Mohammed Al-Tikriti, Hassan Mohammed Abdul-Abadi. "Statistical Applications and Computer Uses in Sports Education Research," 2nd Edition: (Mosul, Dar Al-Kitab for Printing and Publishing, 1999).
5. Deaf Schertz (2010): Functional Training Pyramids, New Truth High School, Kinetic Wellness Department, USA.
6. Grosser M., Starischka S., Zimmermann E.: The New Conditioning Training. BLV Buchverlag, Munich, 2008.