The effect of flexible resistance training on the lPHC muscle group in improving the level of performance SUPLEX Skill for 2nd Stage Wrestlers (Cadets)

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Abstract:

Identify the impact of flexible resistance training on the lPHC muscle group)) and its impact on improving the level of skill performance of the SUPLEX movements of the Cub Wrestlers Phase II (Cadets).

The researcher used:

The experimental approach to suit the nature of this research using the experimental design of two groups by the method of pre and post measurement. The research community and sample were deliberately selected from wrestling players from the age of (16-17) years from the Muslim Youth Association in Qalyubia Governorate and enrolled for the sports season 2023/2024, which is (30) players. The size of the basic research sample was (20) players when the size of the survey research sample was (10) players selected from within the research community and from outside the basic research sample to conduct scientific tests.

The most important results showed:

1- There are statistically significant differences between the proposed program in the flexible resistance method in the level of performance of Mahari for SUPLEX movements in favor of the post-measurement of the experimental group.
2- The control group showed a positive impact on the variables under consideration in order to be regular in the training.
3- The proposed flexible resistance training program had a positive effect on the lumbar, pelvic and femoral muscle group (lPHC).
4- Resistance training has a great impact on developing the strength and flexibility of the muscles of the wrestlers' suppulatory movements.

The researcher recommends:

1- Applying the proposed training program to wrestling players in the same age stage of the research sample and other stages because of its positive impact on the progress of the skill level of wrestling players.
2- The use of posterior curvature exercises is under study and in accordance with the appropriate age group.
3- Conducting similar studies to create auxiliary tools for other skills in the sport of wrestling.

Research Introduction:

The sport of wrestling has become based on many biomechanics, anatomy, physiology, sports psychology , training and so on related to human motor activity for the purpose of upgrading the sport of

wrestling from different sub-districts. (16 : 6)

The sport of wrestling is one of the sports that contain many currents, whether national or defensive. It is a struggle between two individuals who try to achieve control and win over each other through the use of special handles and throws that aim to achieve touching the shoulders or points within the framework of international rules and laws. (15: 21)

Wrestling is also one of the violent sports that training leads to functional changes to the vital organs of the world , and no sports coach can raise the level of the player unless he is available witha physiological mattress that helpshim in evaluating various functional changes, whether this change is temporary or permanent. The wrestler needs the anaerobic ability when executing the wrestling and the misdirected throws, the moment of defense, the moment of escape from an imminent movement, or when pressing on the competitor. (16: 244)

The sport of wrestling is considered to be the rest of the games and other sports, as it consists ofa set of skills and basic principles that the wrestler must know and train to continue and develop, including the use of modern tools and theories in the field of the game and according to the physiological variables resulting from the difference in individual differences between players. (3: 2)

Issam Helmy (2015) confirms that the performance I see is closely related to the physical and motor capabilities of the individual, as the mastery of the performance depends on the extent to which the individual develops this performance from the physical and motor capabilities of the individual, such as biting strength, flexibility, speed and agility. The level of performance I see is often measured by the extent to which the individual acquires these special physical and motor qualities. (8 : 171)

Alaa Mohammed Kenawy (2005) confirms that the full mastery of motor skill is based on reaching the highest levels of sports for them, reaching the level of physical qualities of the wrestler, which are characteristic of his moral and voluntary characteristics, he will not achieve the results required of him unless this is linked to the full mastery of all technical movements of wrestling. (9 : ٤٣)

MohammedAl-Aishi (1997) explains that the skill preparation for wrestling aims to master the wrestler's basic skills and movements that are commensurate with his physical and functional abilities and aptitudes so that he is able to implement them successfully under the changing circumstances of the game. (17: 46)

Most experts in the field of wrestling, such as Massad Ali Mahmoud (2003), Mohammed Reda Al-Ruby (2008) andAlaa Mohammed Kenawi (2005), and others agree to divide wrestling skills into seven basic skills according to the classification of the American Federation of Wrestling and supported by the Egyptian Federation, which contains:

- Bosition of body
- Gladiator Motion
- Changing the level of the body

- Lifting up
- Back step
- **Backarching**

The seven core skills are used as a general framework for the education and training of wrestling with the aim of improving the player's physical, functional and technical abilities and placing him on the ladder of achievement and championship. (16 : 1) , (12:30),(9:39)

The researcher believes that the wrestler strongly needs the skill of arching backwards, including the skill under discussion, which is Suplex, as a defense for the front center, as it is no less important than the rest of the motor skills, and even increases its importance in the conflict according to the different playing situations, especially during the conflict from above, where its importance is limited to the payment area on the zone (Zone) of the competitor, where its importance is that if it is done correctly and meets the conditions of the correct technical snap Grand technic, which is that the competitor loses contact with the ground , and takes a full course in the air , and falls directly on the shoulders, so the attacking player is entitled to (5) deserved technical points, and it may reach the point until the attacking player finishes the round by winning.

The suplex movement is one of the very common movements in wrestling, where wrestlers begin to face each other face to face, and then the attacker grabs and hangs from the bottom of the opponent's armpit while making a net in front of the opponent's chest and making a back arch, so that the opponent's body is inverted around his vertical axis above the attacker, and the attacker falls back on his back , using his body weight to also hit his opponent on his back strongly in the rug. (25)

The suplex **movement is considered one of** the **most effective offensive skills,** and its importance lies in the method of holding as a kind of deception or evasion because of its various forms of entry into the body of the competitor. It can be a way to hijack the movements of the opponent or enter the middle. It is also an effective offensive means to obtain technical superiority and thus a decisive way to end the round by winning. (2 : 56)

The effective implementation of this skill requires the integration of strength, balance, speed and flexibility. By informing the researcher of the specialized scientific references to determine the basic muscle groups working in the performance of curvature, the researcher extracted the basic muscle group, which is the group of muscles of the center, which is represented in the front and lateral abdominal muscles as well as the back muscles. 117

Sharkey (1990) adds that it is necessary to train the working muscles of the wrestler in a special training according to how to use them in the practicing activity, and stresses the importance of linking the training to the form of the skill to be developed. (23: 35)

Mohammed Al-Ruby (2004) believes that the group of arch movements is an important and essential successor in

the artistic and skillful performance of Roman wrestling, and the wrestler who is good at implementing that group with high skill can surprise competition and achieve early superiority over it. 10

Richardson CA, Jull GA (1995) show that the lumbar, pelvic, and femoral complex (LPHC) is an area of the body that has tremendous influence on the structures above and below it.

The LPHC contains between (29-35)muscles that attach to the lumbar spine or pelvis and the LPHC is directly connected to both the lower limbs and the upper limbs of the body. For this reason, a defect in the lower and upper extremities can lead to a defect in the LPHC and vice versa. Collectively, these structures serve to stabilize muscle fibromuscular (LPHC) tissues such as the biceps femoris, the medial hamstring complex, and the rectus femoris. These bones and joints have a functional effect on LPHC joint mobility There are a number of muscles in the upper and lower extremities whose function may be related and have an effect on LPHC As with all muscles, it is important to restore and maintain the normal range of motion and strength, as well as eliminate any muscle inhibition to ensure that the joints function optimally. (22 : 127)

The American Society for Rheumatology has included in its recommendations regarding resistance training since 1998 that resistance training leads to muscle contraction against external resistors with the expectation of an increase in strength, biting tone and endurance. External resistance may be constant (free weights) or variable resistance (rubber cord) or any body that leads to muscle contraction. (15: 4)

In the construction of training for the use of resistance exercises, the principle of gradual increase is fully adopted. The law of gradualness in the training loads for resistance training and appropriate load – adaptation – challenge for a given load – adaptation – increase of load – higher adaptation – gradual progress through intensification of load. (19: 214)

Donald Chu (1996) believes that flexible resistance training is a training system that is a combination of weight strength training and flexibility training to achieve optimal performance, as it gives the player the maximum results in the shortest possible time. (19: 159)

There is no doubt that the continuous increase in the training loads of the player, which has reached the point of putting him on the brink of danger, prompting researchers to search for the best ways and means to help this player in the face of the continuous increase inherent in the modern training program, and the prevention of sports practice, through the planning of the training program and the balance between pregnancy and health. 15/07

The Problem of the Research:

The sport of wrestling includes offensive, defensive and linear movements. The first step in the completion of the wrestler's construction is to learn the basic technical performance accompanied by various exercises to develop the necessary requirements such as physical, linear and intellectual

qualities to ensure the mastery of those skills. The technical skills in wrestling are considered the main means for each wrestler to obtain technical points or to stabilize the shoulder to weight him to excel and win. Mastering technical skills is the main goal in the education process. Other aspects, such as physical, training, psychological and tactical, serve this goal. [4/64].

The sport of wrestling is characterized by the multiplicity and diversity of its technical skills, which requires strength, flexibility and speed of performance to implement different movements and skills. Suplex movements are considered one of the backward curving skills and one of the most important movements that a wrestler can use in a match. The wrestler can also get one, two or more points in the event of successful skill performance, so it is considered a key skill part in wrestling training. (12: 10) Mohammed Al-Ruby (2004) points out the need for trainers and specialists in the field of wrestling training to pay attention to the range of movements of the skill of arcing backwards because of the importance of these movements for the wrestler. (12 : 10)

The researcher has noticed through his work that there is a deficiency and slow pace in the performance of some Suplex movements, despite the importance of these movements, whether in training or competitions, which reflects negatively on the outcome of the wrestler, and through access to the Global Information Network (the Internet) and what was made available to the researcher from previous studies and within the limits of the researcher's knowledge of the absence of Arab studies that dealt with the movements of Suplex in the sport of wrestling, which prompted the researcher to conduct this study.

He also noted that there is a shortage and decline in the level of wrestlers to use Suplex movements during training, in addition to the need of second stage wrestlers (cubs) to develop some elements of physical fitness for the muscles of the lumbar, pelvis and hip complex (LPHC), which contributes to improving their skill level and given the importance of the element of strength, flexibility and skill performance, in addition to the novelty of the proposed training method, which is the flexible resistance method and its impact.

Therefore, the researcher believes that he proposes to design a training program with flexible resistors for the muscles of the lumbar, pelvic and hip complex (LPHC) and to know its impact on the improvement of the level of performance of Suplex movements among wrestling players in the second stage (cubs).

The importance of the study:

The importance of this research and the need for it are highlighted in the following:

Scientific importance:

The scientific importance of the research is clear as it is an attempt to contribute to: -

1- Knowing the training of flexible resistors to achieve some of the goals of the Roman wrestling sport.

2- The trainers' knowledge of the use of flexible resistors in the skill

performance of the SUPLUS movements.

3- The research comes in response to keeping pace with the trend of modern training, which calls for the development of training programs.

4- Taking advantage of the search results in other games as it is one of the new topics on the Arabic library.

Second: The practical importance:

The research is also of practical importance as it is:

1- Submitting proposals to sports institutions regarding the treatment of deficiencies and weaknesses in the low level of technical and physical skills in the sport of wrestling.

2- Developing the physical and skill capabilities of wrestling athletes.

3- The attention of Romanian wrestling coaches is focused on the correct technical performance of the technical skills of the Sobles movements.

The Aim of the Research:

The research aims to identify the impact of elastic resistance training on the lPHC muscle group and improve the level of skill diseases of SUPLEX movements for Cub Wrestlers Phase II (Cadets).

* Research hypotheses:

In light ofthe current research, the researcher assumes the following:

1- There are statistically significant differences between the averages of pre and post measurements in the level of skill performance of the SUPLUS movements in the experimental research group in favor of post measurement.

2- There are statistically significant differences between the averages of pre and post measurements in the level of skill performance of the SUPLUS movements in the control research group in favor of post measurement.

3- There are statistically significant differences between the mean of the two dimensional measurements in the experimental and control research groups in the level of skill performance of the substitution movements in favor of the experimental group.

Terms used in the research :

Resistors:

It is the system that is done through the development of biting force using exercises for a special function that is performed against rubber ropes, geese, sandwiches, or variable resistance. (203)

Lumbar, Pelvic and Hip Complex (LPHC):

It is an area of the body that has a tremendous impact on the structures above and below it, (LPHC) contains between (29 and 35) muscles that attach to the lumbar spine or pelvis, and (LPHC) is directly connected to both the lower limbs and the upper limbs of the body. For this reason, a defect in the lower and upper extremities can lead to a defect in the LPHC and vice versa. 135

Wrestling.

It is a fight between two wrestlers during three rounds of two minutes each. The match ends before the specified time when the shoulders are fixed, multiple errors or exclusion. If it ends and none of the wrestlers gets three points, additional time is played. 4:39

Suplex Movement:

The Suplus movement consists of a single wrestler picking his

opponent by the waist and then using a large portion of his body weight to forcefully push the opponent down on the mat back and almost all of the suplexes make the attacker come down to the ground as well with the opponent landing on his back.

Stage 2 Wrestlers (Cadets):

It is an age stage in the sport of wrestling that includes cub wrestlers from the age of (16-17) years andless than 15 years. A medical certificate and the consent of the guardian are required. (Procedural definition)

Previous studies:

1- A study by Abu Sabri Muhammad (2022) (4) entitled The Impact of Posterior Bowing Exercises on the Deviations of the Cervical Spine of Wrestling Sports Players. The study aimed to identify the impact of posterior bowing exercises on the deviations of the cervical spine of wrestling sports players. The size of the core sample was (10) wrestlers. The exploratory sample also reported (2) wrestlers from the Mahalla Hunting Club and those enrolled in the Egyptian Wrestling Federation. The researcher used the experimental approach. The most important results of the study were the absence of a tangible change in the impact of posterior bowing exercises on the anterior deviations of the spine, the absence of a tangible change in the impact of posterior bowing exercises on the lateral deviations of the spine, the interest in ration of training and the correct guidance of loads during the use of posterior bowing exercises.

2- The study of Hamada Mansour Hamada (2022) (5) entitled "The Effect of Strength Fitness Exercises on the Effectiveness of Performing Some Curving Movements behind Wrestlers". The study aimed to identify the impact of strength fitness exercises on the effectiveness of performing some curving movements behind wrestlers. The sample included (20) pomegranate wrestlers registered with the Egyptian Wrestling Federation from the City Youth Center in Mansoura Stadium. The researcher used the reference survey and exploratory studies to collect research data. The most important results of the study were the application of the training program using strength fitness exercises for its positive impact on the curving skills and the effectiveness of the skill performance of wrestling players and their application to similar samples. The need for coaches to develop strength fitness exercises and put them in the form of gradually difficult exercises in terms of composition, making them more interesting and similar to what is happening in matches.

3- Dr. Abdulhadi Hassan Abdulhadi (2022) (7) entitled "The Influence of the Use of Flexible Resistors on the Development of the Muscular Ability of the Wrestling Player", the impact of flexible resistance training on some of the physical variables of the Roman wrestling player, and the size of the core sample (20) wrestlers as reported by the exploratory sample (5) wrestlers from the Muslim Youth Club who are registered with the Egyptian Wrestling Federation, and the results of the study were that the exercises of the flexible

components applied to the experimental sample under discussion are a significant improvement in the physical variable (bearing speed, bearing strength, bearing performance, bearing antenna, transition speed, maximum speed, characteristic strength of speed), and the results of the flexible components applied to the experimental sample resulted in a significant improvement in functional (respiratory) and skill responses.

4- The study of Ali Salman Abdul Tarafi, Muhammad Khalid (2019AD) (10) entitled "The Use of Training Means According to Special Exercises to Develop Resilience and the Performance of Abduction Skills " for wrestlers aged (14-15). The study aimed to prepare special exercises using training means suitable for the research sample, to identify the impact of special exercises in the development of special flexibility, and to identify the impact of special exercises in the development of abduction grip performance. The researchers used the experimental approach, and the sample size was (40) wrestlers whose ages are limited to (9-16) years. The most important results of the study were that the designed training means proved their ability to develop special flexibility. These test methods are characterized by the ease of application to them as well as giving an honest digital result.

5- The study of Mahmoud Al-Saeed Al-Rawi (2016) (14) entitled "The Impact of Using Pilates Training to Maintain the Training Gains of Wrestlers", aimed to develop a set of platts exercises and identify the extent of their impact on the physical abilities of wrestlers, the level of nervous stress, the improvement of the level of skill performance of the skill of the front center, and the size of the core sample (40) wrestlers. The exploratory sample (12) wrestlers from the Muslim Youth Association in its province of Qalyubia exaggerated, and the results of the study were that the proposed training program using platts exercises has a positive impact on improving obesity variables in addition to improving the psychological aspect of nervous stress, which improves the level of skill performance of wrestlers.

Search Procedures:

- The Approach of The Research :

According to the nature of the research and its problem, in order to achieve its objectives and test its hypotheses, the researcher followed the experimental approach using the experimental design of two groups, one of which is a control group and the other is an experimental group, using the pre and post measurement of both groups.

:Research population

The research community is represented in the second stage wrestling (Cadets) Cubs from the age of (16-17) years

From the Muslim Youth Association in Banha, Qalyubia Governorate, registered for the sports season 2023/2024AD, and their number is (30) players.

- The research sample

The researcher selected the research sample in a deliberate way from the research community, which enabled the researcher to take administrative

approvals and conduct personal interviews with them. The size of the basic research sample was (20) wrestlers from the Muslim Youth Association in Benha, and they were divided into the total of the first (experimental) fig and (10) wrestlers, which were subjected to the proposed program using some means of flexible resistance training on a muscle group (lPHC), and the second group (control) was (10) wrestlers, which were subjected to a lot of training, while the size of the exploratory research sample was (10) players selected from within the research community and from outside the core sample of the research to conduct scientific tests, and a table (1) shows the description of the research community and sample.

Table (1)
Total sample size and divisions

Research Sample	Number	Percentage
Top search terms	20	66.7%
Research Sample:	10	33.3
Research community:	30	100%

Table (1) shows the number of members of the basic study and the number of members of the exploratory study and the total research community.

Conditions for the researcher's selection of the research sample:

- The players must be registered in the Ubiyyawrestling area.
- Thewrestler must be from the second stage (Cadets) Cubs from the age of (16-17) years.
- He must have participated in the Republic Championships.
- The sample can perform the selected motor skills with a high level of efficiency.
- To have the selected sample in the research group.

- **Sample Homogeneity:**

To ensure the homogeneity of the sample in the growth andskill variables of the substitution movements in the sport of wrestling, the researcher found the coefficient of torsion for those variables, as shown in Table No. (2)

Table (2)
Homogeneity of the research sample in the variables of height, weight, chronological age and training age (n=30)

S.No	Variables	UOM	Arithmetic mean	Mediator	Standard Deviation	Modulus of torsion
1	Chronological age	Year	16.45	16.0	2,15	0.63
2	Length	cm	164.3	165	9.24	0.23
3	Weight	kg	67.8	67.5	6.24	0.14
4	Training Age	Year	4.21	4.50	0.852	-1.02

It is clear from Table (2) that the values of the torsion coefficients in the homogeneity variables (chronological age – height – weight – training age)

ranged between (- 1.02: 0.63), which are values less than ±3, which indicates the homogeneity of the members of the research sample growth variables.

Table (3)
Homogeneity of the total research sample in the skill variables of the Sobolus movements for backward curving skills (n=30)

S.No	Test used	UOM	Moderate	Mediator	Standard Deviation	Modulus of torsion
1	Bridge Skill Performance	Frequency	.056	5.00	0.786	0.21
2	Arm & Center Cordon & Bow Back	Degree	2.31	2.50	.562	1:01
3	Cordon arms and waist and arch back	Degree	2.62	3.00	0.586	1.95
4	Cerclage of the waist with arms and arching back	Degree	2.45	2.50	0.497	0-30
5	Holding the neck from above and passing under the armpit and arching	Degree	2.05	2.00	0.507	0.31
6	Reverse center grip and backward curvature	Degree	1.96	2.00	0.437	0:27

It is clear from Table(3) that the value of the torsion coefficient was limited to a value of (±3) for the skill variables of the Sobles movements for curving skills, back in the sport of wrestling, where the value of the torsion coefficient was limited to (- 1.95: 0.31), which indicates the homogeneity of the sample in the skill variables in question.

- **Research Sample:**

After the researcher confirmed that the research sample was drawn from a homogeneous community, the sample was divided into two groups, one experimental, by (10) wrestlers, and the other control, by (10) wrestlers , and the area achieved parity by finding (parity) between the two research groups, using the "T" test as shown in Table (4).

Table (4)
Equivalence of the two research groups (control - experimental) in the pre-test measurements of the variables "under research" (n=20)

Variables		Measurement Unit	Control group		Experimental group		(T) value	Significance level
			S.No	E.	S.No	E.		
Growth variables	Chronological age	Year	16.45	2,15	16.29	2.11	.309.	(Nonsignificant)
	Length	cm	164.3	9.24	165	9.31	0.330	(Nonsignificant)
	Weight	kg	67.8	6.24	66.9	6.22	1.243	(Nonsignificant)
	Training Age	Year	4.21	0.852	4.32	0.86	312	(Nonsignificant)
Skill variables	Bridge Skill Performance	Frequency	.056	0.786	5.19	0.79	0.237	(Nonsignificant)
	Arm & Center Cordon & Bow Back	Degree	2.31	.562	2.28	0.55	1.369	(Nonsignificant)
	Cordon arms and waist and arch back	Degree	2.62	0.58	2.51	0.59	0.357	(Nonsignificant)
	Cerclage of the waist with arms and arching back	Degree	2.45	0.49	2.40	0.48	0.954	(Nonsignificant)
	Holding the neck from above and passing under the armpit and arching	Degree	2.05	0.507	2.11	0.51	xiii, 1–21 1.	(Nonsignificant)
	Reverse center grip and backward curvature	Degree	1.96	0.43	1.88	0.44	1.232	(Nonsignificant)

Table T value at a significant level of 0.05 and a degree of freedom of 18= 2.101

It is clear from Table (4) that the value of (T) was statistically non-significant between the control and experimental research groups on all measurements of growth rates (chronological age – height - weight – training age) and the skill variables of the Sobles movements for curving skills back in the tribal measurements, which indicates the equivalence of the two groups in these measurements " under research".

- Means and tools of data collection:

First : The forms used in the research:

• Registration form for the personal data of the research sample members (Attachment2).

• The evaluation form of the skill tests of the SUPLUS movements in the research sample (Attachment3).

• Flexible resistance training on lPHC muscle group provided (Attachment4).

Second: The devices and tools used in the research:

- Rstamitr device for measuring length in centimeters.
- Medical scale to measure weight (in kilograms).

- Wrestling Mat.
- Swedish seats.
- Weight trainingequipment
- Elastic cords.
- Medical balls.

Third: Tests and measurements used in the research:

By reviewing specialized scientific sources and references and reviewing some previous studies such as the study of Ihab Sabri Muhammad (2022AD) (4), Hamada Mansour Hamada (2022AD) (5), Mahmoud Al-Saeed Al-Rawi (2016AD) (14), the researcher adopted a set of skill-level tests for the movements of Sobolus in order to suit the nature of the study, as it was applied after finding its sincerity and stability.

- Arm and center cordon and back arch.
- Cordon arms and waist and arch backwards .
- Circumference of the center with the arms and arching backwards.
- Holding the neck from above and passing under the armpit and arching.
- Reverse center grip and backward curvature.

- Method of evaluating the skill level tests of the Sobles movements:

The attacking player gets (5) technical points when the opponent descends in the direct danger mode. Even if the opponent does not descend in the immediate direct danger mode, the attacking player may get (4) technical points. Even if the movement is allowed and implemented from inside the zone to outside, the attacking player gets (2,1) technical points due.

- The studyisvoluntary :

The researcher conducted the exploratory study from Saturday, 10/12/2022 AD until Saturday, 14/12/2022 AD on (10) players from the original community of the research and outside the core sample of the research, and this study aimed at the following procedures: -

Managerial Actions and Punishments:

The researcher contacted the technical and administrative staff to conduct administrative approvals regarding the dates of applying the experiment to the research sample.

• Regulatory Actions:

The researcher used some assistants to conduct the experiment for the purpose of:-

- Conducting pre and post measurements and recording tests.
- Assisting the researcher in preparing, preparing and implementing the experiment.

• Instructions and Guidelines: -
- Alerting all research sample to be present at the place of measurement at the specified date.
- Explain the instructions of the tests before starting the implementation.
- Recording the names of each group in the data registration form (Attachment 2)
- Conducting scientific transactions for the tests used.
• Scientific transactions of tests:
First: Validity coefficient:

The researcher verified the validity of the tests "under research" using experimental validity (differentiation), by applying the tests "under research" to the survey sample of (10) players, and they were divided into two groups, one of which is distinctive and (5) players and the other is an undistinguished sample of (5) players with the same specifications, but they do not practice an activity that shows this in Table (5).

Table (5)
Validity of differentiation Skill tests for substitution movements in question (n1 = 5, n2= 5)

S.No	Testing	Unmarked group		Featured collection		Difference between two averages	T value
		Hours	ayin	Hours	ayin		
1	Bridge Skill Performance	3.24	0.632	5.24	785.	0.153	2.501
2	Arm & Center Cordon & Bow Back	1.22	423.	2.32	.562	0.139	3.576
3	Cordon arms and waist and arch back	1.62	.456	2.34	0.602	.146	382.
4	Cerclage of the waist with arms and arching back	1.45	0.321	2.36	0.521	0.2	2.586
5	Holding the neck from above and passing under the armpit and arching	1.27	0.485	2,15	0.635	0.15	307.
6	Reverse center grip and backward curvature	1.41	0.364	2.01	0.534	0.17	146

Table T value at a significant level of 0.05 and a degree of freedom of 8 = 1.85

It is clear from Table (5) that the value of (T) calculated is greater than the value of (T) tabular, as the value of (T) calculated was limited to (2.501, 8.382), which indicates the existence of statistically significant differences between the distinctive and non-distinctive group in favor of the distinctive group in the skill tests of the SUPLUS movements in question at a significance level of (0.05), which

indicates the validity of the tests in question.

1- Stability coefficient: -

The researcher calculated the stability of the skill tests of the Sobles movements through the application and then reapplied to the unmarked group of (5) players after a period of time of (4) days to ensure the end of the impact of fatigue from the first performance and then calculated the difference between the two medians and also found the correlation coefficients between the degrees of application and the degrees of reapplication.

Table (6):

Correlation coefficient between the first and second application of the skill tests of SUPLUS movements (n=5)

S.No	Exams	test1		test2		...
		Hours	ayin	Hours	ayin	
1	Bridge Skill Performance	3.24	0.632	2.94	0.685	0.763
2	Arm & Center Cordon & Bow Back	1.22	423.	1.32	462.	0.653
3	Cordon arms and waist and arch back	1.62	.456	1.34	0.402	0.206
4	Cerclage of the waist with arms and arching back	1.45	0.321	1.36	0.321	0.492
5	Holding the neck from above and passing under the armpit and arching	1.27	0.485	1.15	0.435	218
6	Reverse center grip and backward curvature	1.41	0.364	1.31	0.334	0.301

Table t-value at a significant level of 0.05 and a degree of freedom of 3 = 0.805

It is clear from Table (6) that there is a strong correlation between the first and second applications, where the value of the correlation coefficient was limited to (-0.218: 0.763) and the calculated value (t) was greater than its tabular value at a significant level (0.05), which indicates the stability of the physical tests under consideration.

Proposed Program (Attachment4):

The researcher developed the proposed program using flexible resistance exercises based on previous studies such as the study of **Hamada Mansour Hamada (2022AD)** (**5), Abdulhadi Hassan Abdulhadi (2022AD)** (**7), Ali Salman Abdul Tarafi, Muhammad Khalid (2019AD) (10)**. In addition, the views of a number of specialists in the field of wrestling education and training were used (Annex 1). Accordingly, the content of the training modules was modified until it became final.

Table (7)
Percentage of experts' agreement on appropriate tests to measure research variables (n=5)

Axes		Exercises									
Content of the proposed trainings	Exercise #{NUMBER}	1	2	3	4	5	6	7	8	9	10
	Frequency	5	5	4	5	5	4	5	5	4	4
	PERCENTAGE %	100%	100%	80%	100%	100%	80%	100%	100%	80%	80%
	Exercise #{NUMBER}	11	12	13	14	15	16	17	18	19	20
	Frequency	4	5	5	5	4	5	5	5	4	5
	PERCENTAGE %	80%	100%	100%	100%	80%	100%	100%	100%	80%	100%
	Exercise #{NUMBER}	21	22	23	24	25	26	27	28	29	30
	Frequency	4	5	5	5	4	5	5	4	5	5
	PERCENTAGE %	80%	100%	100%	100%	80%	100%	100%	80%	100%	100%
	Exercise #{NUMBER}	31	32	33	34	35	36	37	38	39	40
	Frequency	5	4	5	5	5	4	5	5	4	4
	PERCENTAGE %	100%	80%	100%	100%	100%	80%	100%	100%	80%	80%
	Exercise #{NUMBER}	41	42	43	44	45	46	47	48	49	50
	Frequency	5	5	4	4	5	4	5	5	5	4
	PERCENTAGE %	100%	100%	80%	80%	100%	80%	100%	100%	100%	80%

It is clear from Table (7) that all exercises have achieved a percentage ranging from (80%: 100%), which means that they are on a high degree of honesty, and thus the researcher was able to identify the proposed training exercises where the researcher accepted (80%) for approval, and thus the exercises and trainings were determined according to the opinions of experts and then placed in training units using exercises on a muscle group (lPHC), and the trainings were distributed on the training units and became in its final form (Attachment4).

- **Overall programme objective**

The program aims to identify the impact of flexible resistance training on the lPHC muscle group and its impact on improving the level of skill performance of SUPLEX movements for Cub Wrestlers Phase II (Cadets).

- **Foundations of building the program:**

1- The content should be appropriate to the purpose of the program for which it was developed.

2- The exercises should be appropriate to the age , gender and abilities of the research sample.

3- Taking into account the gradation of the program from easy to difficult and from simple to complex.
4- The program should be flexible, diverse, simple and inclusive.
5- Taking into account the appropriate time for the implementation of the program so that it is more effective and positive.
6- Taking into account the provision of the appropriate place and the necessary capabilities for the implementation of the program and the factors of security and safety.
7- Provide assistants with the appropriate number and ensure that each individual adheres to what is required of him.
8- Permanent and continuous encouragement from the researcher and assistants to wrestlers.

Building the proposed training program:

- **Program Components :**

The proposed training program using flexible resistance training included a muscle group (lPHC) to improve the level of skill performance of the SUPLEX movements of the second stage cub wrestlers, and it was distributed to the training units.

- **Program time periods:**

In the light of theoretical studies and scientific references, the time of the program was determined as follows:
- The duration of the implementation of the program is (8) weeks.
- Dental fun (16-17 years).
- Timing of the program from Tuesday, 2/1/2023 to Sunday, 2/3/2023
- The place of application of the program (Muslim Youth Association in Qalyubia Governorate).
- Number of training units per week (3) units.
- The duration of the training module is (60) minutes.
- Total number of training units (24).
- The time of the program as a whole is (1440) minutes.
- Time distribution of the components of the training module: -

- Introductory part (10) minutes.
- The main part (40) minutes.
- Closing part (Calming) (10) minutes.

Table (8)
Time distribution of content for the training modules of the proposed program

Module Elements		Time:	Number of units	Total Time
Preamble	Warm me up.	10 m	24 health units;	240
Here's the main thing.	Flexible Resistance Drills	ق		960
Closing part	Defusing	10 m		240
Total unit time		ق		1440BC

Table (8) shows the aspects of the proposed training modules, which were longer for the main part (flexible resistance training) by (91.7%) with a time of (960) of the total time of (1440) minutes.

Table(9)
Sample Module of the Proposed Program Using Resilience

Unit time: 60 min		Unit No. (1) of the proposed program	First Month first week The Day : TUESDAY				
			Time	Frequency	Comfort	HSA Group	Intensity carrying
1	Preamble	- Warm up and run lightly.	10 mpq				
2	Basic part	EXERCISE 1	ق	8	- 4'10.	2	Moderate 60-80%
		EXERCISE 3		8	- 4'10.	2	
		Exercise No. (5)		8	- 4'10.	2	
		Exercise No. (8)		8	- 4'10.	2	
		Exercise No. (12)		8	- 4'10.	2	
		Exercise No. (15)		8	- 4'10.	2	
		Exercise No. (18)		8	- 4'10.	2	
		Exercise No. (20)		8	- 4'10.	2	
		Exercise No. (23)		8	- 4'10.	2	
		Exercise No. (25)		8	- 4'10.	2	
3	Closing part	Relaxation and Calming Exercises	10 m				

Basic Study:
The researcher applied the basic study after calculating the scientific transactions of the tests on a sample of (20) wrestlers from the Muslim Youth Association in Benha for the age stage of (16: 17) years during the sports season 2023/202AD.

Implementation of the investigation
The measurements were carried out for all members of the sample under the same conditions and with the same capabilities :

- **Tribal Measurements:**

The researcher conducted the pre-test measurements of the research variables on the research sample on Sunday (25/12/2022) until Tuesday(27/12/2022) for the research variables in the skill performance of the SUPLEX movements of the second stage cub wrestlers (Cadets) under research.

- **Application of the Baseline Research Study:**

The researcher applied the proposed program to the research group from Tuesday(2/1/202 3AD) until Sunday (3/3/202 3AD) by three units per week for a period of two months, to the experimental group, and the control group applied the training and traditional program to them without undergoing the proposed program.

- **Dimension Measurements:**

The post measurements were carried out on the research group during the period from Tuesday (5/3/2023) to

Thursday (7/3/2023) in the same order as the pre-tribal measurements and under the same conditions and place.

Statistical processors:

The researcher used the program (Excell) to analyze and process the data statistically.

1- Mean arithmetic mean .
2- Standard deviation .
3- Median .
4- Torsion coefficient Skewness .
5- Correlation Coefficients .
6- T.Test.
7- Ratios & Rates Test .

Presentation, discussion and interpretation of findings:

In order to achieve the goal of the research and to achieve its hypotheses and within the limits of the researcher's data reached through the methodology used, the research sample, the selected data collection tools and the statistical analysis used, the researcher presents the research hypotheses and discusses them.

First : Presentation and discussion of the results and interpretation of the first hypothesis:

Presentation and discussion of the results and interpretation of the first hypothesis, which states that there are statisticallysignificant differences between the averages of preand post measurements in the level of skill performance of the Sobles movements in the experimental research group in favor of post measurement.

Table 10

Indicator of differences and percentages of improvement between pre and post measurement in the research group Experimental in the level of skill performance of the substitution movements (n= 10)

Variables	UOM	Pre-measurement		Meta-measurement		Mean square differences	T value	Improvement	Significance Direction
		Hours	ayin	Hours	ayin				
Bridge Skill Perform ance	Frequency	.056	0.786	8.5	1.03	3.44	5.24	68-12-2	Meta-measurement
Arm & Center Cordon & Bow Back	Degree	2.31	.562	3.97	.745	1.66	3.57	71–86.	
Cordon arms and waist and arch back	Degree	2.45	0.497	4.21	0.821	1.49	3.21	71-84	
Cerclage of the waist with arms and arching back	Degree	2.25	0.507	3.89	0.755	1.76	6.54	89	
Holding the neck from above and passing under the armpit and arching	Degree	2.62	0.586	4.11	.801	1.64	4.57	87	
Reverse center grip and backward curvature	Degree	2.27	0.437	3.77	0.763	1.5	7.14	.08	

Table T value at a significant level of 0.05 = 1.85

It is clear from Table (10) that there are statistically significant differences at a significant level (0.05) between the pre and post measurements in the experimental research group in the level of skill performance of the Sobles movements, where the calculated value (T) ranges between(3.21 : 7.14), which are values greater than the tabular value (T), and the percentage improvements ranged between(56.57% : 72.89%).

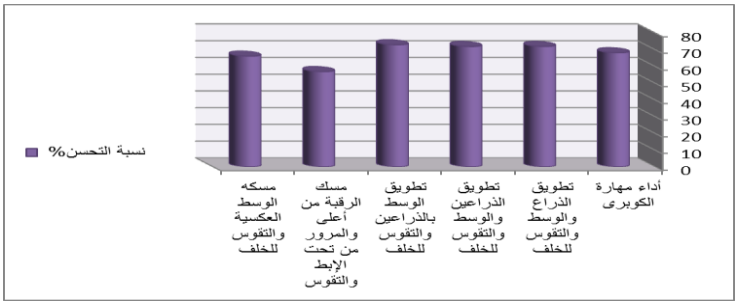


Figure 1: Number Of Weapons And Ammunition Cases By Country, 2017–2018
Percentage improvement between pre and post measurement in the experimental group In the level of skill performance of the sublime movements

Table (11)

Significance of the size of the impact on the level of skill performance of the Sobolus movements in the experimental research group N = 10

Economic Significance / Variables	UOM	(T) value	Eta	effect size	effect size
Bridge Skill Performance	Frequency	5.24	0.81	3.6	High
Arm & Center Cordon & Bow Back	Degree	3.57	0.74	3.0	High
Cordon arms and waist and arch back	Degree	3.21	0.85	4.1	High
Cerclage of the waist with arms and arching back	Degree	6.54	0.86	3.7	High
Holding the neck from above and passing under the armpit and arching	Degree	4.57	0.82	2.2	High
Reverse center grip and backward curvature	Degree	7.14	0.73	2.3	High

Impact Volume Levels: 0.2 Low, 0.5 Medium, 0.8High

It is also clear from TableJ (10-11) and Figure No. (1) that the rates of improvement and the size of the impact between the pre- and post-measurement of the experimental research group in the level of skill performance of the Sobles movements under study in favor of post-measurement, and the researcher attributes this improvement and impact

to the proposed training using flexible resistors on the lPHC muscle group, where the movement of encircling the middle with the arms and arching backward got the highest improvement rate of (72.89%) and a high impact size of (3.7), while the movement of encircling the arms and middle and arching backward got an improvement rate of (71).68%) with a high impact value of (4.1), and the movement of encircling the arm and middle and arching backward got an improvement rate of (71.84%) with a high impact value of (3.0), and the movement of the performance of the bridge skill got an improvement rate of (68.12%) with a high impact value of (3.6), and the reverse center grip movement and backward curvature got an improvement rate of (66.08%) with a high impact value of (2.3), and the movement of holding the neck from the top and passing through the armpit and arching also got an improvement rate of (56.87%) with a high impact value of (2.2).

The researcher also attributed these statistically significant differences for the players of the experimental group in the skill variables to the positive impact of the proposed training using elastic resistors on the lumbar, hip and thigh muscles group (lPHC), and the various training using elastic resistors that contributed to the development of the physical capacity of the working muscles under study, through what the player was exposed to as a result of the proposed exercises that lead to the same kinetic path of the soap movements in Roman wrestling.

Owais Al-Jabali (2000) indicates that modern sports training aims to develop the general and special physical abilities required by the practicing sports activity, in addition to focusing those special physical abilities in order to activate and develop the motor performance of that activity, which is reflected in the improvement and development of different playing strategies. (11: 171)

This is in **line with** the **study** of **Ihab Sabry Mohamed (2022)**, which aimed to identify the impact of posterior bowing exercises on the deviations of the cervical vertebrae of the spine of wrestling athletes. The most important results of this study showed interest in rationing training and correct guidance of loads during the use of posterior bowing exercises because of their positive impact on skill performance.

Mohammed Al-Ruby **(2004)** points out the need for trainers and specialists in the field of wrestling training to pay attention to the range of movements of the skill of curving backwards, because of the importance of these movements for the wrestler. (12: 10)

This is in **line with** the **study** of **Hamada MansourHamada (2022)**, which aimed to identify the impact of strength fitness exercises on the effectiveness of the performance of some curving movements behind wrestlers, and the most important results of the application of the training program using strength training for its positive impact on the skills of curving and the effectiveness of the skill performance of wrestling

players and applied to similar samples , the need for coaches to develop strength training and put it in the form of gradually difficult training in terms of composition, making it more interesting and similar to what happens in matches. (5)

Thus, the validity of the first hypothesis is achieved, which states that "there are statistically significant differences between the averages of pre and post measurements in the level of skill performance of the Sobles movements in the experimental research group in favor of post measurement."

- **Presentation and discussion of the results of the second hypothesis:**

Which states that there are statistically significant differences between the averages of pre and post measurements in the level of skill performance of the Sobles movements in the control research group in favor of post measurement.

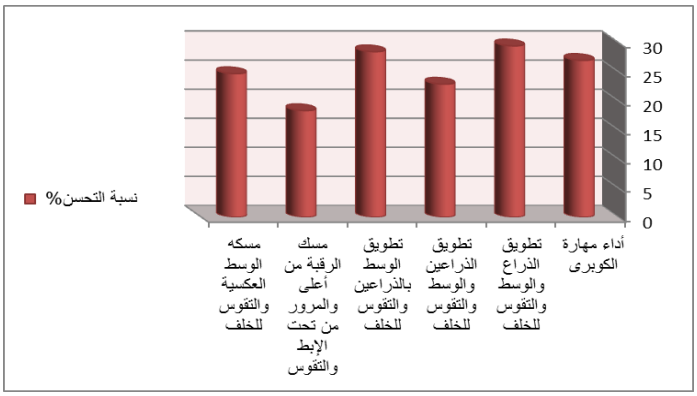
Table (12)

Indicators regarding the change in the number of migrants with tertiary education in countries of the Organization for Economic Cooperation and Development: 1990-2000 Indicator of differences and percentages of improvement between pre and post measurement in the research group Control in the level of skill performance of the SUPLUS movements (n= 10)

Variables	UOM	Pre-measurement		Meta-measurement		Mean square differences	T value	Improvement	Significance Direction
		Hours	ayin	Hours	ayin				
Bridge Skill Performance	Frequency	5.12	0.711	6.5	7.96	1.38	4.01	95	Meta-measurement
Arm & Center Cordon & Bow Back	Degree	2.31	0.567	2.99	0.6.11	0.68	12.3	29.44	
Cordon arms and waist and arch back	Degree	2.45	0.485	3.01	0.5.09	0.56	2.89.	22.86	
Cerclage of the waist with arms and arching back	Degree	2.25	.491	2.89.	0.5.22	0.64	3.48	28,44	
Holding the neck from above and passing under the armpit and arching	Degree	2.62	519	3.10	0.5.43	0.48	5.45	18.32	
Reverse center grip and backward curvature	Degree	2.27	0.443	2.83	0.4.91	0.56	5.48	24.67	

Table T value at a significant level of 0.05 = 1.85

It is clear from Table (12) that there are statistically significant differences at a significant level (0.05) between the pre and post measurements among the control research group in the level of skill performance of the Sobolus movements, where the calculated value (T) ranges between(2.89 : 5.48), which are values greater than the tabular value (T), and the percentage improvements ranged between (18.32% : 29.44%).



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Percentage improvement between pre and post measurement in the control groupIn the level of skill performance of the sublime movements

Table (13)
Significance of the size of the impact on the level of skill performance of the Sobolus movements in the control research group N = 10

Economic Significance / Variables	UOM	(T) value	Eta	effect size	effect size
Bridge Skill Performance	Frequency	4.01	0.42	1.2	High
Arm & Center Cordon & Bow Back	Degree	12.3	0.54	0.91	High
Cordon arms and waist and arch back	Degree	2.89.	0.33	0.71	Moderate
Cerclage of the waist with arms and arching back	Degree	3.48	0.45	12.1	High
Holding the neck from above and passing under the armpit and arching	Degree	5.45	0.56	0.28	Moderate
Reverse center grip and backward curvature	Degree	5.48	0.41	0.62	Moderate

Impact Volume Levels: 0.2 Low, 0.5 Medium, 0.8High

It is also clear from TableJ (12-13) and Figure No. (2) that the rates of improvement and the size of the impact between the pre- and post-

measurement of the control research group in the level of skill performance of the SUPLUS movements under discussion in favor of post-measurement, and the researcher attributes this improvement and impact to the traditional exercises followed within the club where the movement of encircling the arm and middle and arching backward got the highest improvement rate of (29).44%) with a high impact volume of (0.91), while the movement of encircling the center with thearms and arching backwards obtained an improvement rate of (28). 44%) with a high impact value of (1.12), and the movement of the performance of the bridge skill obtained an improvement rate of (26.95%) with a high impact value of (1.2), and the reverse center grip movement and backward curvature got an improvement rate of (24.67%) with a medium impact size of (0.62), and the movement of encircling the arms and middle and arching backward obtained an improvementof (22.86%) with a medium impact size of (0.71), and the movement of the neck grip from the top and passing through the armpit and arch also obtained an improvement of (18.32%) with a medium impact size of (0.28).

The researcher returns these statistically significant differences for the players of the control group in the variables of the skill movements of the Sobles skill to the regularity of the traditional training process that contributed to the development of the physical and skill capabilities of the research sample through the basic training to which the player was exposed.

This is in line with the study of **Mahmoud Al-Saeed Al-Rawi (2016)**, **which** aimed to **develop a set of exercises and identify the extent of their impact on the physical abilities of wrestlers, the level of nervous stress and the improvement in the level of skill performance of wrestlers**. Regularity in traditional training has a positive impact on the development of physical variables, which led to a high rate of improvement in the skill level of the control group. (14)

Thus, the validity of the **second** hypothesis is achieved, which states that "there are statistically significant differences between the averages of pre and post measurements in the level of skill performance of the Sobles movements in the control research group in favor of post measurement."

Presentation and discussion of the results of the third hypothesis:

Which states that there are statistically significant differences between the average of the two dimensional measurements in the experimental and control research groups in the level of skill performance of the SUPLUS movements in favor of the experimental group.

Schedule-14
Indicator of differences and percentages of improvement between the two dimensional measures in the experimental and control research groups in the level of skill performance of the SUPLUS movements (n = 20)

Variables	UOM	Experimental group (n=10)		Control Group (N=10)		Mean square differences	Value No.	Improvement	Significance Direction
		Hours	ayin	Hours	ayin				
Bridge Skill Performance	Frequency	8.5	1.03	6.5	0.96	2	4.55	23.53	Experimental group
Arm & Center Cordon & Bow Back	Degree	3.97	.745	2.99	0.611	0.98	2.78	25.69	
Cordon arms and waist and arch back	Degree	4.21	0.821	3.01	0.509	1.2	6.54	28.50	
Cerclage of the waist with arms and arching back	Degree	3.89	0.755	2.89.	522	1.0	7.45	25.71	
Holding the neck from above and passing under the armpit and arching	Degree	4.11	.801	3.10	0.543	1.01	4.21	24.57	
Reverse center grip and backward curvature	Degree	3.77	0.763	2.83	.491	0.94	4.87	24.93	

Table T value at a significant level of 0.05 = 1.812

It is clear from Table (14) that there are statistically significant differences at a significance level of 0.05 between the two dimensional measures in the experimental and control research groups in the level of skill performance of the Sobles movements in favor of the post-measurement of the experimental group, where the calculated value of (T) ranged between (2.78: 7.45), which are values greater than the tabular value of (T), and the percentages of improvement ranged between(22.53% : 28.50%).

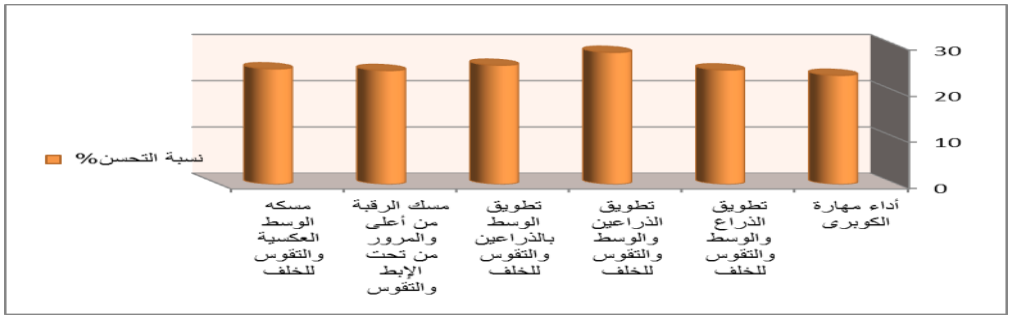

Figure (3)

Percentage improvement between the two baseline measures in the experimental and control research groups

In the level of skill performance of the sublime movements

Table (15)

Significance of the size of the impact on the level of skill performance of the Sobel movements I have the experimental and control research groups (n = 10)

Pragmatics Economic / Variables	UOM	(T) value	Eta	effect size	effect size
Bridge Skill Performance	Frequency	4.55	7.88	0.92	High
Arm & Center Cordon & Bow Back	Degree	2.78	8.77	12.1	High
Cordon arms and waist and arch back	Degree	6.54	8.57	1.78	High
Cerclage of the waist with arms and arching back	Degree	7.45	5.54	1.58	High
Holding the neck from above and passing under the armpit and arching	Degree	4.21	7.48	0.78	Moderate
Reverse center grip and backward curvature	Degree	4.87	4.57	0.65	Moderate

Impact Volume Levels: 0.2 Low, 0.5 Medium, 0.8High

It is also clear from TableJ (14-15) and Figure No. (3) that the rates of improvement and the size of the impact between the two posterior measurements in the experimental and control research groups in the level of skill performance of the SUPLUS movements under discussion in favor of the posterior measurement of the experimental group. **The researcher attributes** this improvement and impact to the proposed flexible component exercises, where the movement of encircling the arms and middle and arching backward obtained the highest improvement rate of (28).5%) with a high impact volume of (1.78), while the movement of encircling the center with thearms and arching backwards obtained an

improvement rate of (25). 71%) with a high impact value of (1.58), and the movement of encircling the arm and middle and arching backward got an improvementof (25.69%) with a high impact value of (1.12), and the reverse center grip movement and backward curvature obtained an improvement rate of (24.93%) with a medium impact size of (0.65), and the movement of holding the neck from the top and passing through the armpit and arching got an improvement of (24.57%) with a medium impact size of (0.78), and the movement of the performance of the bridge skill obtained an improvement rate of (23.53%) with a medium impact size of (0.92).

The researcher attributes the high rate of improvement of the experimental group from the control group to the regularity of the traditional exercises in addition to the proposed training using elastic resistors on the lumbar, hip and thigh muscles group (lPHC), with the application of the training load variables during the unit, which led to the development of the physical aspects of the working muscle group to implement the SUPLUS movements, which in turn was reflected in the improvement in the skill performance of the movements, as the flexible resistors training contributes to improving the level of performance to a greater extent in the experimental group from the control group as a result of developing muscular performance in line with the motor path of the skill.

Van Raalte, et. al (2002) indicates that training is related to the fact that the best way to develop performance is through training in a manner that is very similar to the style of the competition itself, and the more specific the training, the better the training return during the competition, as this principle can be observed in a large number of sports skills and match conditions. (24 : 48)

This is in line with the study of **Mahmoud Al-Saeed Al-Rawi (2016)**, which aimed to develop a set of platts exercises and identify the extent of their impact on the physical abilities of wrestlers and the level of nervous stress and improve the level of performance I see for the skill of the front center. Its most important results showed that the training program has a positive impact on improving obese and skilled variables in addition to improving the psychological aspect and otherwise reducing nervous stress, which improves the level of skill performance of wrestlers. (14)

It is also consistent with the study of Ali Salman, Muhammad Khalid (2019), which aimed to prepare special exercises using training means suitable for the research sample, to identify the impact of special exercises in the development of special flexibility, and to identify the impact of special exercises in the development of skill performance in wrestling. The most important results of the study were that the designed training means proved their capabilities in the development of special flexibility. These test methods are characterized by the ease of application to them as well as giving a result in the improvement of these skills. 10

It is **also consistent with the study** of Abdulhadi Hassan Abdulhadi (2022), which aimed to find out the impact of flexible resistance training on some of the physical variables of the Romanian wrestler. The most important results of the study were that the flexible component training applied to the experimental sample under study is a significant improvement in the physical variables (bearing speed, bearing force, bearing performance, bearing antenna, transitional speed, maximum speed, distinctive force). The results of the flexible component training applied to the experimental sample also resulted in a significant improvement in functional (respiratory) and skill responses. (7)

Thus, the validity of the third hypothesis is achieved, which states that " there are statistically significant differences between the average of the two dimensional measurements in the experimental and control research groups in the level of skill performance of the Sobolus movements in favor of the experimental group."

Conclusions and Recommendations

Conclusions

In light of the results of the study, the researcher reached the following conclusions:

1- There are statistically significant differences between the proposed program in the flexible resistance method in the level of performance of Mahari for SUPLEX movements in favor of the post-measurement of the experimental group.

2- The control group showed a positive impact on the variables under consideration in order to be regular in the training.

3- The proposed flexible resistance training program had a positive effect on the lumbar, hip and thigh muscles group (lPHC).

4- Resistance training has a great impact on developing the strength and flexibility of the muscles of the wrestlers' suppulatory movements.

5- During the match, the opponent places an inverted and vertical opponent over the attacker, and the attacker falls back on his back, using his body weight to also hit his opponent on his back hard in the mat.

6- The use of new tools in the training of wrestlers, which are commensurate with the form of skill performance used, has led to a change in the form of muscle contractions, which contributes to the physical direction and skills under study by increasing the strength, muscle tone and flexibility of the wrestler.

Second: Recommendations:

In light of the findings and data reached by the researcher and based on the conclusions, the researcher recommends the following:

1- Applying the proposed training program to wrestling players in the same age stage of the research sample and other stages because of its positive impact on the progress of the skill level of wrestling players.

2- Using flexible resistance training in a way that simulates the motor and temporal path of the skill, taking into account its divisions.

3- Using and developing new tools in wrestling training increases the development of offensive performance

and also allows the use of multiple types of skills that were not used before in general.

4- Paying attention to the development of skills in wrestling as it is one of the most important factors for learning and developing skill performance.

5- The need for trainers to pay attention to the use of flexible resistance within special training programs in the sport of wrestling, because of its positive impact on raising the level of performance of the skill of SUPLEX.

6- The use of posterior curvature exercises is under study and in accordance with the appropriate age group.

7- Conducting similar studies to create auxiliary tools for other skills in the sport of wrestling.

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