

## Impact-resistant Aerial Canopy(parachute)in the development of the power and flexibility of the torso and shoulders for volleyball players

Dr. Suaad Abd Hussein and Dr. Suhad Qasim Saeed

Iraq Baghdad University College of physical Education for Girls Definition OF Research  
[dr\\_suhad@yahoo.com](mailto:dr_suhad@yahoo.com)

**Abstract:** The research aims to identify the impact of Training resistantparachute Aerial torso and shoulders of the volleyball players were the research sample of players Youth Volleyball Club Industrial Sports totaling (10) players also used the researchers experimental approach to the research sample of (8) weeks by (3) training modules in the week after conducting the tests before and after were obtained several conclusions are The emergence of significant differences as a result of resistance exercises Aerial Canopy(parachute) antenna in the tests ( test the strength of the shoulders - test the flexibility of the shoulders - test the strength of the back. did not show significant differences in test flexibility pm The recommendations were : to conduct research exercises resistance Aerial Canopy antenna on other games and comparison between them and the game of volleyball

[Suaad Abd Hussein and Suhad Qasim Saeed. **Impact-resistant Aerial Canopy (parachute) in the development of the power and flexibility of the torso and shoulders for volleyball players.** *J Am Sci* 2014;10(10):66-69]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>. 12

**Key words:**Aerial Canopy. Stretching exercises, Volleyball power. Flexibility, resistant exercises

### 1. Introduction

Contributes to themodern sports training activities in general and in various sports activities Volleyball particularly outstanding contribution to achieve advanced levels through good planning and programs that appeared recently in the growing interest in physical capabilities and components as one of the most important performance requirements Volleyball.

1-Introduction research and its importance That resistance training is one of the means training are good and effective claim to improve muscle strength and development in its various forms, which can be made to the foundation, which built upon activity all sports. As these resistors provide directly in the work of the working muscles central Whether this constant contraction or moving tape that serves the goal of achieving a performance motor skill. The training of umbrellas (parachute), one of the exercises to generate different resistances to develop muscle strength and the type and amount differs depending on the goal of resistors training And volleyball, one of the mass games, which took a brief great deal of modernity and innovation in performance and this What we're saying when you watch the games local and international ears of the level of the game in the case of continuous development in all its aspects as a result of methods of physical preparation. light of the foregoing unclear how big resistance training as a means to develop and improve muscle strength and flexibility on this basis, researchers wanted to go into this matter to find out

how important the use of resistance training parachute in the development of flexibility and power of the trunk and shoulders with volleyball players. When you follow the volleyball games noticed researchers that there is consistency in the level of motor performance and physical with the young players and this is due partly to lack of use means modern training and diversification in the exercises and curriculum training and through the experience of researchers have noted through units training players low use of attention training style resistant. These exercises taken and spread widely and that in the development and improvement of physical capacity which is no less important than other methods. This prompting researcher to address the situation and investigation through the use of pneumatic drills The resistance Para(10:13) chute.Preparation exercises for resistance training Aerial Canopy.to identify the impact of the use of training resistance Aerial Canopy antenna in the development of the power and flexibility of the torso and shoulders for volleyball players there were statistically significant differences between the tests before and after training Aerial Canopy result of using the antenna.

- areas of research
- human / sample of young players in volleyball for the Police Sports Club
- temporal area / period from 03.10.2013 and up to 07.11.2013
- spatial domain / hall closed for Police Sports Club.

**Table (1): Shows the homogeneity of the sample Variables mean standard deviation median coefficient sprains connotation.**

Variables	mean	standard deviation	median	coefficient sprains	connotation
Length	<b>171.68</b>	<b>4.22</b>	<b>171</b>	<b>0.62</b>	Non-significant
Age	<b>18.11</b>	<b>0.61</b>	<b>18</b>	<b>0.89</b>	Non-significant
Weight	<b>60.33</b>	<b>0.91</b>	<b>60</b>	<b>0.61</b>	Non-significant

Test throw the ball medical weight 2 kg (5:64) - purpose of test / measurement of explosive power of the arms

**2- Used Tools/** logic space –rope - chair-football medical -tape measure

Description of performance / sitting laboratory person the chair holding the ball medical Hands rights head on the trunk adjacent to the edge of the chair and placed around the chest rope so small that holds the back by an arbitrator for the purpose of preventing the laboratory of movement for the front during the test hands. Where the process of throwing the ball using your hands without the use of the trunk

Date / given three attempt calculated from the distance between the front edge of the chair and the closest point between the ball on the ground -Tetraise the shoulders. (7:87)

The purpose of the test /measurement of the ability to raise the shoulders to the top of the ground situation lie.

Used Tools / existing divided into units, each name and prove vertically on the ground, taking into account the numbering beginning from the bottom and attached to the post based small block parallel to the floor and easily agitated bottom to top. Description of performance / take the lab put lie on the ground, with wide shoulders and extension hands caught on laboratory-based and the lifting of the highest maximum with the survival of the chin to keep in contact with the land and the extension of the elbows and wrists.

Account grades / distance is measured from the ground to the bottom of the stick directly and recorded the best three attempts between each minute to rest and hits the multiply to( 1000 )and divides the result by the length of the arm.

test dynamic flexibility of the trunk (9:174)

The purpose of the test / measurement flexibility dynamic bend and extend and rotate the spine

Gadgets / Stopwatch – wall.

Performance specifications / paint mark (x) on the two points.

-feet on the ground between the laboratory.

- on the wall behind the back of the laboratory in the middle.

Way performance / when you hear the signal to start the lab my grief trunk Ahead down to touch the ground

Fingertips when marker (x) is located between the feet and then extended trunk high with gyro face left to touch the mark (x) located behind the back fingers and then the rotation of the trunk and bend down to touch the mark (x) existing between the feet and then extended the trunk with a rotation face right to touch (x) located behind the back repeats of this work the largest possible number of times in (30) with to observe be touching the tag that once behind the back of the left hand and the other from the right face

Date / calculate the number of touches that brought about tow touch through (30).

- Test the strength of the back muscles. (7:81)

The purpose of the test / measure madder trunk extensor muscles of the back muscles

The necessary tools / device dynamometer.

Description of performance / lab take a standing position on dynamometer then bend to the front of the torso and the bar on the bottom of the iron-handed . smooth running along the railway linking the railway bar dynamometer a manner that enables the laboratory to the highest tensile bending mode of the trunk. When you give the signal for the laboratory traction so that there is movement of the trunk and tightening of the two men and not be screwing slowly to bring out the maximum madder are possible.

- exploratory experience

The researchers conducted exploratory experiment on 03.10.2013 to stand on the difficulties faced by the working group and assistant emphasis on the correct action for the conduct of the tests under discussion.

- tests tribal

Tests were conducted on tribal 10.28.2013 on the sample and researcher has sought to provide all the circumstances in terms of time and space and gadgets and the way the implementation experience.

### **2-1. curriculums proposed pilot**

After reviewing the sources of Arab and foreign and previous research has researchers prepare curriculum and train using Aerial Canopy antenna exercises to strengthen shoulders, back, and increase the range kinetic them were applying the main experiment on 02.09.2013 until 04.11.2013 a y was used Aerial Canopy antenna that was installed when the middle of the player and shoulders by ropes special Aerial Canopy antenna and the approach of (8) weeks by (3) training modules in the week were training in a part of the main section of the training

module for the application of the approach to sample individuals either ripples pregnancy were (1: 2). Posteriori tests were conducted on 11.07.2013 and under the same conditions and the potential that the tests conducted by the tribal

#### statistical methods

The arithmetic mean - standard deviation –t test.

Asymmetric samples - the mediator - coefficient sprains.

**3. Presentation and discussion of the results:** of the Pretest and a posteriori tests the strength and flexibility of the shoulders to the same search.

**Table (2) Circles shows the arithmetic normative and calculated values of T. spreadsheet and tests the strength and flexibility of the shoulders to the same search.**

Variable	Unit of measurement	Pretest		Posttest		T Calculated	T Tabulated	significance
Power shoulders	Meters	7.81	2.55	9.91	2.84	3.22	2.26	Moral
Flexible shoulders	centimeters	76.33	12.87	84.21	15.38	6.61		Moral

Through the table (2) note there are significant differences between pre and posttest in the variables of the power and flexibility of the shoulders and attribute the researchers differences spirituality to the experimental method proposed (10:176) exercises Aerial Canopy(parachute)with reference to these exercises affect Track locomotors as varied intensity of the performance of these exercises between the slow to the fast and conditions different for the purpose of reaching the optimum speed, which requires skill movement, one of the measures that help in performance. Moreover, the performance of this skill or movement which these exercises using resistance Aerial Canopy(parachute) claim to mobilize a greater number of muscle fibers and a larger number of units kinetic. (4:123) as for the flexibility of the shoulders attributes the researchers differences moral to exercises using resistance Aerial Canopy(parachute) which developed this variable, which has to do with the situation right to the body during the performance, which comes from the possibility of increasing my father kinetic shoulders through the development of aggregates muscle working in these parts so as to achieve the shoulder joint of members of the group to control Moments of inertia through reduced or increased. There is a section of sporting activities need to be flexible and robust in parallel as see the development of flexibility at the expense of strength and power at the expense of flexibility (243: 2) It must be mindful exercises the power to ensure that work on the development of a balanced device locomotors and muscle. So for Ekman sports to reach because of the weakness of the field of kinetic muscle groups responsible. So become a force Assistant kinetic flexibility that require observed during the development of flexibility and there presidents must work with them in the development of flexibility through the use of resistance training first is to work the muscles designated through the motor run full joint movement (8:47) operating upon either Second, take into account the work of the muscle through the motor run and is intended to work the muscles. The this kind of action reduces the number of fibers participation and therefore it means that the degree of tension in these thousands of people will rise, which will kills thus to lengthen the muscle (3:383).

**Table (3)Circles shows the arithmetic normative and calculated values of T. spreadsheet for tests and strength and flexibility back to the same search.**

Variable	Unit of measurement	Pretest		Posttest		T Calculated	T Tabulated	significance
Power back	kg	18.89	7.57	23.42	5.61	3.16	2.26	Moral
Flexible back	Repeat	44.61	14.56	48.22	11.14	2.13		Not significant

By looking at the table (3)note there are significant differences between pre and posttests in variables strength back and is in the moral flexibility of the back. (3:13) Attributes the researchers emergence of significant differences in the strength of the back to use the exercises different resistance parachute which led its role in the development of this variable, which contributed to the strengthening of the working muscles on the back and rally the largest number of muscle fiber fast distress and improve muscle assistance to constriction and increase curb muscle antioxidant The emergence of non-moral differences Attributes researchers to the existence of differences between pre and posttests, but did not show statistically significant and thus there is a

sophisticated holds variables result in the proposed program of resistance exercises parachute.The resistance training parachute one training methods that can be used lot of sports, so that its use despite the different kinds and sizes, is the quotient change the course of pregnancy as it underscores many of Studies importance training resistors in the development of muscle strength and vary the type and quantity of resistors depending on the target required. ( 9: 295) Recalling Hassanein that the amount of force in the performance of the motor may be simple or large and Extends on the amount of resistance and on the target module. The use **parachute** and different sizes as a means to generate resistance on the surface of these umbrellas when linked to the player during workouts

jogging providing these exercises chance in take the player appropriate mode in the joints of the body as well as the angle of inclination of his body and taken by the player to overcome this force during movement reaction to this resistance, which will increase the efficiency of the muscles. (1:180), and not that is characterized by resistance training in accordance with the Principles agreed by most experts

**4-Conclusions and recommendations:** conclusions emerged significant differences result of resistance exercises parachute tests Search–test power shoulders – test flexible shoulders - the power back  
-Im Show significant differences in tests Search –test flexible back recommendations  
-to conduct research parachute resistance exercises on other games and comparison between them and the effectiveness of volleyball  
- follow the ways of modern sports training and linking them with the kinetic aspects of the activities of other.

#### References

1. Hara dietrosh: Assets training, Abdul Ali translation Nsif.t2.mtaba Higher Education 0.1990.
2. Sareh Abdul Karim Wahbi Alwan: biomechanics, Press the faculties of Physical Education. Baghdad 2010.
3. Talha Hossam El-Din and Mustafa Kamel: Scientific Encyclopedia training in endurance biologically. Al- Qahera T1. mrkz book publishing 0.1990.
4. Taleb Faisal Abdul Alhasin: Effect of three training methods in some of the variables in the effectiveness of kinematical 110 meter hurdles , Thesis Doctorate of Physical Education for Girls 2003.
5. Abdul Razzaq Al-Zaidi: the impact of proposed approach for muscle power in the development of special skills performance of some special requirements on the floor exercise mat. PhD thesis Faculty of Physical Education 0.19996.
6. Hakim Ali Jawad Salloum: testing and measurement in the field of sports, the University of Qadisiyah Iraq, 2004.
7. Qassim Hassan and Hussein Mansour JamelAl-Anbaqy: physical fitness and ways to achieve them, Baghdad. Press Higher Education 0.1989
8. Hsanyen Mohammed Subhi. alkies and Calendar in Physical Education C. 1 university of Helwan.dar ATF 0.1993
9. WadeYassin al-Tikriti: physical preparation for Women, the University of Mosul .daralkotop for the printing and publishing 1986.
10. Augusts son S.R. 10 -Augustsson J. Thomeé R. Svantesson U. Injuries and preventive actions in elite Swedish volleyball Journal: Scandinavian Journal of Medicine & Science in Sports ISSN: 09057188 Year: 2006 Volume: 16Issue: 6 Pages: 433-440 Provider: Blackwell Publisher: Blackwell publishing DOI: 10.1111/j.1600-0838.2005.00517.x.

7/2/2014