# THE IMPACT OF A PREPARATION EDUCATIONAL PLAN IN TWO STRATEGIES FOR APPROPRIATION AND CENTRALIZATION OF POWER, AND THEIR RELATIONSHIP TO ACCOMPLISHING 100 METERS RUNNING FOR THE YOUTH

Ansam Khazaal Jabbar<sup>1</sup>, Shatha Mhawesh Khefi<sup>1\*</sup>

1. Faculty of Physical Education and Sports Sciences, University of Basra, Basra, Iraq

\*Corresponding Author E-mail: <u>Shathaalsabtee@yahoo.com</u> (Khefi)

## ABSTRACT

The destinations of sports preparing right now have left its general system to jump into the profundity and establishments of preparing objectives to arrive at the most elevated levels. This implies the essentials of preparing science have been generally processed, particularly in sports that have accomplished subjective leaps forward in the consummation of certain exercises, the issue of research has been centered around utilizing Two sorts of conveyed and thought power to see which contributes superior to the next in building up the most extreme power and the unmistakable speed of the lower limits and the degree of their effect on the accomplishment of 100 meters running. With respect to the goals of the examination, it is to recognize the impact of the preparation technique in the two strategies for appropriation and convergence of power in building up the greatest power and the unmistakable speed of the speed for the lower closes and achieving 100 meters running for the two gatherings of the exploration test and furthermore to distinguish which of the two strategies is better in building up the most extreme power and the exploration test

The scientist presumed that the preparation strategy utilized in the beautician and distributer complex technique builds up the most extreme power and the unmistakable power at the speed of the lower furthest points, the technique for preparing by circulating the force is better in building up the greatest quality and the particular speed at the lower limits, the strategy for appropriating the force contributes adequately and decidedly to the improvement of the accomplishment of 100 meters running.

Keywords: educational plan, power, running, youth

How to cite this article: Jabbar AK, Khefi SM (2020): The impact of a preparation education plan in the two strategies for appropriation and centralization of power, and their relationship to accomplishing 10 0 meters running for the youth, Ann Trop Med & Public Health; 23(S10): SP231029. DOI: <u>http://doi.org/10.36295/ASRO.2020.231029</u>

# INTRODUCTION

Iraq is one of the nation's looking for logical improvement in the field of sports preparing, as the advancement of sports and the expansiveness of its base mirrors the cultivated essence of the nation, and likewise endeavors must be made to accomplish the best levels that assurance the advancement of game in our cherished Iraq. In this manner, we locate that numerous mentors and competitors look for the best and quickest implies that help in building up the physical and physiological highlights that ought to be created to accomplish the best outcomes for them<sup>1</sup>.

The targets of sports preparing right now have left its general structure to jump into the profundity and establishments of preparing objectives to arrive at the more significant levels and this implies the basics of preparing science have been to a great extent processed, particularly in games that have accomplished subjective leaps forward in achieving a few exercises, and this doesn't come aimlessly Rather, in light of the exertion made by the player and the propelled preparing gave by the mentor, and among these exercises is the viability of 100 meters, which is one of the troublesome exercises in games that need to create uncommon physical prerequisites, so there must be a fitting selection of strategies and techniques used to create Physical traits private successful for use in the preparation stages and the most unmistakable of these strategies is the strategy (circulation and convergence of power), which assumes a conspicuous job in the improvement of physical credits to give this occasion. Thus the significance of the exploration showed itself in exhibiting this preparation point in logical approaches to know the degree of the effect of the preparation in my style (appropriation and centralization of preparing force) as a stage to help laborers in the field of preparing, from which we can concoct results that add to building up the adequacy level of 100 meters running for youthful people.<sup>1,2</sup>

Also, the muscle quality speaks to the most significant and significant basic components that can't be abstained from in accomplishing accomplishment in most games, particularly the 100 meter running occasion where the greatest power and the quality set apart by speed play a central and significant job in fortifying the body individuals and creating muscle bunches which have a key job in the player's speed just as his capacity From conquering the resistors encompassing it. What's more, the probability of raising the capacity of antagonistic vibe and overhauling it to as well as can be expected just be done through choosing the most fitting techniques, strategies and means notwithstanding how to frame preparing burdens to build up the physical qualities of every movement. More research and concentrates must be directed to arrive at numerous logical facts,<sup>2</sup> so I felt The specialist is to address this issue and study it utilizing two sorts of conveyed and thought power to see which one contributes superior to the next in building up the most extreme power and the unmistakable power at the speed of the lower furthest points and its effect on the accomplishment of 100 meters running<sup>3</sup>.

# **Objectives of the study**

- 1. Identify the effect of the training curriculum with two methods of distributing and focusing intensity in developing maximum force and speed characteristic of the lower extremities and accomplishing 100 meters running for the two groups of the research sample.
- 2. Identify which of the two methods is best at developing the maximum and distinctive velocity at the lower extremities of the two groups of the sample.

## MATERIAL AND METHODS

The analyst utilized the test strategy which implies (target perception of a specific marvel that happens in a particular circumstance portrayed by accurate referee and incorporates at least one factors while fixing different factors).

The examination network has been adulterated by the antagonistic vibe of Basra Governorate for youth for the games season 2016, whose number is 16 displays. The examination test was looked over the governorate focus' clubs, who are (10) running in a purposeful way, and whose ages went from (18-19) years, so the example shaped a level of (62.5%) Of the exploration network. There are various purposes behind choosing an example:

- 1. The scientist's capacity to legitimately direct the preparation procedure.
- 2. The duty of the example and their vicinity to the preparation site.
- 3. The scientist ensures the example holds fast to the preparation educational plan.

The exploration test was partitioned into two gatherings, each gathering notwithstanding (5) sprinters, as gathering (An) is prepared in a technique for power fixation, and the subsequent gathering (B) is prepared in the strategy for circulating force.

Variables	Mean	SD	Median	Skewness
Length(Cm)	178.500	5.599	177.500	0.539
Weight(Kg)	71.225	4.219	69.950	0.907
Training age(Year)	2.593	0.725	2.450	0.592
Completion of 100 meters / second	11.52	0.123	11.68	0.610

**Table 1:** The homogeneity of the research sample in the variables and measurements (length, weight, training age, completion of 100 meters)

After the researcher performed the homogeneity of the sample, and for the purpose of knowing the extent of equivalence of the two groups, the researcher performed the equivalence tests of the two groups Annals of Tropical Medicine & Public Health <u>http://doi.org/10.36295/ASRO.2020.231029</u> through the variables previously mentioned in the homogeneity which are (length, weight, training age, completion of 100 meters and a law (t) was used for the independent samples, as the results showed The calculated value of (t) for all studied variables is smaller than the tabular value (t) of (2.042). This indicates the equivalence of the two groups, as shown in Table (2).

**Table 2:** The equality of two experimental groups in height, weight, age training, achievement and the value of t calculated and tabular type of statistical significance

Variables	First group		Second group		(t) calculated	Type of significance	
, unucles	Mean	SD	Mean	SD	(t) curculated	JI 8	
Length(Cm)	77.57	6.852	79.42	4.353	-0.605	Random	
Weight(Kg)	70.25	3.711	72.19	4.755	-0.849	Random	
Training age(Year)	2.41	0.859	2.77	0.571	-0.915	Random	
Completion of 100 meters / second	11.53	0.554	11.52	0.819	1.043	Random	

#### The physical tests used are

## Full Squat Test using weights <sup>3</sup>

The purpose of the test: To measure the maximum strength of the leg muscles.

Necessary tools: Iron bar (Shift) weights of different weights.

Performance specifications: Two of the auxiliary work team places the iron bar on the player's shoulders, and then the player bends fully and extends the two legs of the player's maximum possibility for one time so that the player cannot count the ball again.

# Wide jump of stability <sup>4</sup>

The goal of the test: to measure the muscular strength of the two legs (force marked with speed).

Instruments: Suitable for jumping, tape measure, colored pieces of chalk.

Test description: The laboratory stands behind the starting line, the laboratory begins swinging the arms back with the knees bent and leaning forward slightly, then bouncing forward as far as possible, by extending the knees and pushing the feet with a weighted arms forward.

Registration: The measurement is taken from the starting point to the closest point left by the laboratory with any part of its body provided that it is perpendicular to the elevation line.

The researcher has prepared a training curriculum, to develop the maximum strength and the distinctive speed at the lower extremities, as the curriculum consists of (8) weeks and an average of (3) units per week, from the period 3/10/2018 to 2/5/2018 as the time for one training unit was (30-45) minutes from the main section, as the number of training units reached (24) training units along the curriculum, and the intensity used in the exercises ranged between (70% - 95%) for the maximum strength while the intensity was between (55 - 75%) strength training with speed from the most extreme sample achievement. After completing the implementation of the program, the sample members were tested. The conditions and instructions for implementing these tests were taken into account and under the same conditions and available capabilities used in the tribal tests in order to obtain approved results. The statistical program (SPSS) version 22 was used and extracted.

- Mean.
- standard deviation.
- Coefficient of torsion.
- (t) test for linked samples.
- percentage.

## **RESULTS AND DISCUSSION**

**Table 3:**The values of the squat mean, the standard deviations, and the calculated (t) values of group (A) in the test of maximum force, and the force marked by the velocity of the lower and upper extremities and achievement.

	Pretest		Post	test	(t) calculated	Type of
Tests	Mean	SD	Mean	SD		significance
Test full Squat (kg)	145	1.345	160	1.760	6.503	Sig.
Test the broad jump of stability (m, cm)	2.46	0.07	2.77	0.09	3.35	Sig.
Completion of 100 meters / second	11.55	0.14	11.01	0.62	2.67	Sig.

**Table 4:**The values of the squat mean, the standard deviations, and the calculated (t) values of the intensity concentration group (B) in the test of maximum force, the velocity characteristic of the lower extremities and achievement

Annals of Tropical Medicine & Public Health http://doi.org/10.36295/ASRO.2020.231029

	Pretest		Pos	ttest	(t)	Type of
Tests	Mean	SD	Mean	SD	calculated	significance
Test full Squat (kg)	145.8	1.997	150	1.794	2.603	Sig.
Test the broad jump of stability (m, cm)	2.46	0.17	2.67	0,1	3.36	Sig.
Completion of 100 meters / second	11.55	0.14	11.21	0.72	2.90	Sig.

**Table 5:**The values of the mean, the standard deviations, and the calculated values (t) between the two intensity distribution groups A, the intensity concentration B, the sample in the post test

	Group A		Grou	up B	(t)	Type of
Tests	Mean	SD	Mean	SD	calculated	significance
Test full Squat (kg)	160	1.997	150	1.794	2.603	Sig.
Test the broad jump of stability (m, cm)	2.77	0.07	2.46	0.09	3.35	Sig.
Completion of 100 meters / second	11.01	0.14	11.21	0.62	3.32	Sig.

The results shown in Tables (4) and (5) showed the search variables for the first and second groups. On the existence of a moral difference between the pre and posttests and in favor of the post test. The researcher believes that the development is due to the effect of the proposed training approach to develop the maximum strength and strength characterized by speed for the two groups, which had an effective impact in developing the muscles of the two men because they contained training loads based on scientific foundations of size, intensity, and comfort commensurate with the capabilities of the research sample, <sup>5</sup>The trainer must be able to succeed in setting the training program that takes into account the size and intensity of the load used and the extent of its suitability to the capabilities and capabilities of the runner as well as the goal set for it, <sup>6</sup> as it is mentioned that the use of the codified training load based on scientific principles that is appropriate for your The runner's loyalty, ability and capabilities and capabilities of the athletic level, but in the event that the loads used do not match the capabilities and capabilities of the athlete, then training takes two different directions: in the case of the stability of the amount of training load used, this leads to stability or a decrease in the ability to accomplish, but if the training load increases About the capabilities and capabilities of the athlete.<sup>7</sup>

The athlete suffers from an overload. The researcher also sees that the development is a result of the stimulation of a large number of muscle fibers during the exercises carried out by the two groups, and they

Annals of Tropical Medicine & Public Health http://doi.org/10.36295/ASRO.2020.231029

(Hassan, meanings) went on this topic to the fact that the muscle strength increases in the case of the ability to excite all or most of the muscle fibers of one muscle,<sup>8</sup> so the increase in the nervous stimuli increases. The number of muscle fibers involved in contracting. In this regard, too, the maximum force depends mainly on employing the largest number of motor units in the muscle. The responsibility for this lies on the central nervous system, as the contraction increases as the number of motor units employed by stimuli of the nervous system increases.<sup>9</sup>

As for the characteristic of strength characterized by speed, the researcher sees that the development that occurred in the characteristic of the maximum strength of the muscles themselves and the transfer of the effect of training to the characteristic of strength characterized by speed, which is what (Qasim Hassan Hussein) indicated that ((the higher the maximum strength with the stability of the performance time, the stronger the speed with the speed )) one of the basic methods of developing the force marked with speed by developing maximum force.<sup>10</sup> As for the 100 meter run test, there are differences between the pre and posttests and in favor of the post and posttest, and the researcher attributes this development to special exercises to develop strength.<sup>11</sup> Shear The strength and speed marked by the research sample had a clear effect on correcting the motor pathway and increasing neuromuscular compatibility, which implicitly affected development rates,<sup>12</sup> as training is a constructive process in developing and developing physical capabilities for athletic effectiveness in order to achieve a certain achievement and this is done using regular training The programmer by regulating the rated intensity and the optimum comfort between the repetitions and certainly leads to the development of achievement,<sup>13</sup> and through table (5) it turns out that the results of the post-test for the two groups are significant and in favor of the first group and for all the variables under study and the researcher attributes this development to The exercises used by the group were carried out in a manner that distributes the severity between the two parties together.<sup>14</sup>The bilateral performance of the two parties can improve more than the individual performance as it is with the Quartet in lifting weights, thanks to the role of high nervous adaptation in training.<sup>15</sup>

# CONCLUSION

- 1. The training curriculum used in the stylistic and diastral-style approach develops the maximum and distinctive velocity of the lower limbs.
- 2. The method of training by distributing the intensity is better in developing the maximum force and the distinctive force at the speed of the lower limbs.
- 3. The method of distributing distress contributes effectively and positively to the development of the achievement of 100 meters running.

## ETHICAL CLEARANCE

The Research Ethical Committee at scientific research by ethical approval of both environmental and health and higher education and scientific research ministries in Iraq

# **CONFLICT OF INTEREST**

The authors declare that they have no conflict of interest.

FUNDING: Self-funding

## REFERENCES

- 1. Abu El-Ella Ahmed Abdel-Fattah: Sports Biology. Cairo. Arab Thought House. 1982, P. 119.
- 2. Essam Abdel-Khalek: Mathematical Training, Theories Applications, 9th Edition: Alexandria University, 1999, p. 116.
- 3. Qassem Hassan Hussein, The Science of Athletic Training in Different Ages, 1st floor, Amman, Dar Al-Fikr Al-Arabi, 1998. p. 87.
- 4. Margret Wilson: The metabolism and its role in physiotherapy, translated by DagherAlawneh, The Book Center for Publishing and Distribution, Amman, 2007, p:116.
- Mofty Ibrahim Hamad: Fitness for Health and Sport, 1st edition, (Cairo, Modern Book House, 2010), p. 291.
- 6. Qassem Hassan Hussein: Jumping and jumping activities, Amman, Dar Al-Fikr for printing, publishing and distribution, 1999, p. 12
- Essam Abdel-Khaleq: Mathematical Training, Theories and Application, 9th Edition 1999, Cairo, p. 127.
- Samadi Ahmad, Yasser Abdel-Azim: Athletic Training Ideas and Theories, Cairo, Zagazig University 1999, p. 163.
- 9. Margret Wilson: The metabolism and its role in physiotherapy, translated by DagherAlawneh, The Book Center for Publishing and Distribution, Amman, 2007, p:116.
- 6-Mofty Ibrahim Hamad: Fitness for Health and Sport, 1st edition, (Cairo, Modern Book House, 2010, p. 291.
- Majed Ali Musa: The effect of forming speed training loads on some functional and biochemical variables by running short distances. Unpublished doctoral thesis, College of Physical Education, University of Basra, 2003, p. 54
- Mufti Ibrahim Hammad: Modern Sports Training, Planning, Application and Leadership, Cairo, Dar Al-Fikr Al-Arabi, 1998, p. 117.

Annals of Tropical Medicine & Public Health http://doi.org/10.36295/ASRO.2020.231029

- Muhammad ZaidanHamdan: Scientific Research as a System, Modern Education House, Amman, 1988, p. 121.
- 14. Mansour Jamil and others: Theoretical and practical foundations in weightlifting, Baghdad, Higher Education Press, University of Baghdad, 1990, p. 25.
- 15. Muhammad Hassan Allawi, Muhammad NasruddinRadwan: Kinetic Performance Tests: (Cairo, Dar Al-Fikr Al-Arabi, 1982), p. 93.
- 16. Mohamed Hassan Allawi: The Science of Athletic Training, Cairo, Dar Al-Maaref, 1979, p. 92.
- 17. Mohamed SobhiHassanin; Ahmed KesryMaani: The Encyclopedia of Applied Mathematical Training, 1st edition: Cairo, The Book Center for Publishing, 1998, p. 17.
- 18. WajihMahjoub: Methods and Methods of Scientific Research, Dar Al-Hekma for Printing and Publishing, Baghdad, 1992, p. 179.
- 19. Astrand and Rodale, K: Text book of work Physiology, 1979, p112-113.