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The use of different weights to develop some physical abilities and their impact on the scoring accuracy of young football players

Israa Abdulridha Younus[1], Ali Hussein Ali[2]

[1]Master's in Physical Education and Sports Science, Ministry of Education,
Dhi Qar Education Directorate
asraaaaa.19901990@gmail.com
[2]Master's in Physical Education and Sports Science, Ministry of Education,
Dhi Qar Education Directorate
ah6200391@gmail.com

Abstract:

The aim of the research is knowing the impact of using different whights on development the physical abilities and they are relate in scoring skill for the young football players, and to identify how useful the training with weights, and the hypothesis of the research was that there were an real statistically significant differences between the pre and post-trsts for the control and experimental groups.

The researchers used the experimental method in a controlled manner for its suitability and the nature of solving the research problem, as this method is one of the most accurate, best and most efficient types of approaches in reaching accurate results, as the research sample was determined which are 24 football players, they were distributed randomly (by lottery) into two control and experimental groups, each group consisting of (12) player. The experimental group used training with weights while the control group used the regular training program (without whights), which it was prepared by the researchers. That shows development of doing football skills (passing and dribbling), Significant differences appeared between the two research groups in the post-test. So the impact was better in results for the experimental group in scoring accuracy skill and that because of the training prepared by the researchers.

Keywords: Weights, Develop, Physical abilities and Scoring accuracy in football.

Introduction:

There is no doubt that scientific progress in the field of sports has witnessed a remarkable development in various levels of sports, most of which have a great achievements in some sports and as a result of the development of various sports sciences, as football the most popular game, and that The distinguishing feature of the football game is the diversity of its performance, special skills and repetition throughout the match time in terms of defense and attack, and depends on the player's physical, skill, tactical and psychological abilities to achieve the best levels.

There have been many training methods depends of development the strength and speed endurance qualities for football players in particular, and among these methods are the use of different weights, which are widely used in strength training for various sports skills and contribute significantly to the development and improvement of these physical abilities, which are of great importance to improving the level of performance and improve the ability of the neuromuscular system and speed of motor performance.

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Research problem:

Through the field observation of the researchers, it became clear that there is a weakness in the ability to endurance force and endurance of speed among young football players, which affects the level of their own physical fitness and also causes poor repetition of their performance in the different game skills required by the nature of the game during the two halves of the match, which prompted the researchers to use A training method by changing the position of the resistance during the training units, as exercises to develop strength endurance and speed endurance using resistance are among the means that have not been widely applied by some coaches and researchers in the field of football training, and on the other hand, strength and speed endurance exercises did not take their true size in formulating the training process, which has been put into practice in recent research and studies in most sports, including football. For this reason, researchers are seriously interested in this topic to develop some scientific and training solutions to address this problem by applying strength and speed endurance exercises based on the use of different weights.

Research Aims:

1. Using different weights to develop strength endurance and speed endurance for young football players
2. Recognizing the effect of weights used to develop strength endurance, speed endurance and scoring accuracy for young football players.

Hypothesis:

There are significant differences between the results of the pre and post tests for the experimental and control groups in the physical tests and the scoring accuracy of football players.

Research Methodology:

The researchers resorted to using the experimental method for its suitability to the nature of the research and to achieving its objectives, and the experimental, which is "a design that allows the researcher to know the effect of one independent variable on a dependent variable while determining the impact of other variables that may interfere in the relationship between the two main variables" (1.22).

The research sample:

The researchers chose the research sample by the (intentional) method, which is the Nasiriyah Football Academy team, the young category of Dhi Qar Governorate, and the number of players was (24).

Then the researchers divided the sample randomly into two groups, the first is a control group and the second is an experimental group, each group consisting of (12) players.

Equipment, tools and means used in the research:

- Medical scale (1).
- Laptop.
- Measure tape.
- Manual stopwatch (4)
- A cube-shaped wooden box with a side length of 40 cm (4 boxes).
- Footballs (10).
- Cones (30).

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- Whistle number (2)
- Barriers (30).
- Football goal divided by ropes (5).
- Electronic devices placed on the wrist of the left hand to measure the pulse rate (4).
- Iron bar weighing 20 kg / 4 pcs - Iron bar weighing 10 kg / 4 pcs.
- Iron weights (5 kg) /10 pcs.
- Small wooden targets.
- Assistant Team17.

Test:

Test name: Sitting test - jumping up for (60) seconds (2.74).
Purpose of the test: To measure the endurance of the muscles of the legs.
Tools used: Stopwatch.
Performance: From a long sitting position with hands touching the ground, the player rises up and jumps into the air by extending the knees and wrists, then returns to the first position and so on.
Recording: The number of valid attempts for a period of (60) seconds is calculated.

Test name: Dribbling test with the ball for a distance of (30m x 5) speed endurance.
Purpose of the test: To measure the endurance of speed.
Tools used: Footballs, 2 cones, stopwatch, whistle, metric instrument.
Performance: From the high starting position, the player stands behind the starting line and the ball is on the starting line. With the start signal, the player dribbles the ball at full speed (30 m) to the finish line and turns around the end line and returns the ball, repeating the test (5) times continuously.
Recording: The recording calculates the time taken back and forth and back and records the time to the nearest (1/100) of a second.

Test name: Scoring test on the target divided by degrees from a distance of 10 m (3.82).
Purpose of the test: To measure the accuracy of scoring.
Tools used: a measuring tape, a footballs (3), a goal divided by ropes or adhesive tape into (9) sections, a poster, a registration form, and a whistle.
Performance: The player is at a distance of (10 m) from the target.
Recording: Three attempts are given to the tester, as the grades are recorded according to the location.

Pre-tests:

The assistant work team conducted the pre-tests on the two groups (control and experimental), which numbered (24) players, at a rate of (12) for each player per group. The test was attended by all members of the two groups, and then tests related to the research were conducted by the assistant work team. Also, the researchers sought to apply the conditions related to the work. With tests in terms of time, place, devices, tools and method of implementation in order to apply as much as possible to create the same or similar conditions when conducting post tests, then the tests were conducted according to the following sequence:

Day 1:

- Speed endurance test: Dribbling 30 x 5 times with the ball.
- Strength endurance test: Sitting test - jumping to the top for (60) seconds.

Day 2:

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- Scoring test.

Main experiences:

The researchers made measurements to know the special weights of the body parts of the experimental group, and these included measurements (the weight of each player and extracting the relative weights of each part) in order to set a level or degree that could be a point or criterion in the light of which we can determine the amount of relative weights used by the players For each training unit, where the real weight of the arm or leg was extracted in this study in order to add the weight in the correct proportion and according to the player's ability when performing in light of the mentioned criteria, and to give correct and standardized non-random measurements, and the researcher adopted the rounded values. The researchers applied the training program with different added weights and for two training units per week for a period of (6) weeks.

It was applied using different weights in the exercises of the main part of the training unit, that is, in the physical part and the skill part. The researchers took into account the proportion of each part of the body and the appropriate weight ratio for that part. The researchers gave an appropriate time of rest between one part and another so that the players could do some relaxation exercises without weights so that they could recover and return to the normal state in preparation for the next part and represented the training curriculum, the initial intensity at the beginning of the exercises reached 70% of the maximum intensity and the researchers gradually increased the intensity to reach the intensity 100% of the ability of the sample players, which is one of the principles of sports training, ripples in the ratio (1:3) of the smaller circles, that is, the intensity takes higher, but with a greater intensity than the first. The researchers took into account this model also with the weekly units as well. The researchers determined the intensity by means of the pulse index by devices that measure the level of the pulse by attaching it to the wrist of the left hand.

The researchers relied on work by increasing the size and intensity in order to meet the specificity of the ability.

Post-tests:

The researchers conducted the post-tests of the research sample after the completion of the main experiment of the Nasiriyah Football Academy. The researcher took into account the availability of the same organization conditions in the implementation of the tests and under the same conditions and capabilities used in the pre-tests in order to obtain high credible results.

Statistical means:

The statistical data was processed using the ready-made software system (SPSS).

Result:

Table 1

#No	Tests	Measuring unit	Group	Mean	S.D	t	Sig
1	Jumping test	Numbers	Control	2.500	1.243	6.966	0.000
			Experimental	5.666	1.969	9.967	0.000
2	Dribbling	Time	Control	0.002	0.042	0.206	0.840

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	test		Experimental	0.053	0.018	10.119	0.000
3	Scoring test	Degree	Control	2.750	0.179	9.753	0.000
			Experimental	5.166	1.114	16.057	0.000

Discussion:

The researchers see that the reason for the emergence of morale for the experimental training group prepared by the researchers, as it was developed in a scientific and accurate manner by applying scientific rules and theories and avoiding randomness through the formation of methods, methods and training methods used using special exercises and using them according to the goal of training, so the main duty or special goals For each training stage, which is to reach a high level of physical fitness and to develop the physical capabilities of the chosen type of game,

As the endurance of strength and endurance of speed as one of the main components of the special muscular strength of the football player, real work must be done to develop these two abilities, and here (Muhammad Reda Ibrahim) When he indicated on the subject of building muscular strength curricula, "the trainers should take the following criteria into consideration the number of exercises used in training, age, level of achievement, the need for strength games and sporting events, and the period or training stage" (4.624).

The researchers attribute the development of the experimental group to the exercises prepared by the researcher, as they were designed on scientific grounds, taking into account the characteristics of sports training when developing exercises and taking into account the specificity of speed endurance and strength training. Research has used it to develop speed endurance and force endurance. This was confirmed by Imad Al-Din Abbas Abu Zayd, who mentioned "that the best means of training endurance of speed and endurance of strength is the method of repetitive training to deal with high intensity and not to return to the natural state when giving rest as the intensity used in this method ranged 70-90% " (5.349).

These exercises had a description similar to the cases of playing during the match, as they were characterized by the movement of the players by free running and the exchange of positions in a large area in the middle of the field or more when performing exercises on the target or without it using the balls. The researchers also attribute the development of the scoring skill to the effect of the prepared training program in developing the ability to withstand force and endurance of speed, which has a significant impact on developing the level of performance of the scoring skill by following training methods appropriate to the level of the sample. This is what was indicated by (Kazim al-Rubaie and Muwaffaq al-Mawla 1988) that "the exercises should be appropriate for the age of the player and according to his muscular ability" (6.41). Note that the adoption of the physical and skill linkage and taking it out as one exit in the exercises made the effect clear on the skills under discussion and the skill of scoring and thus raising the level of skill.

Al-Saffar 1988 indicated that "the series of compound exercises can be for the purpose of establishing training situations for players, and it can be for the purpose of increasing the player’s speed in their performance Also, repeating a series or shortening the rest period makes it turn into one of the means of developing endurance" (7.39). As for the effect of physical abilities on skill, it was mentioned (Hanafi Mahmoud Mukhtar 1998, as "choosing the appropriate exercises enables the trainer to develop physical qualities and at the same time works on the player’s mastery of skills" (8.46. As well as the adaptation and harmony of the experimental group players with the exercises developed based on the use of Exercises

with different weights in terms of applying this in the vocabulary of the training curriculum according to the pulse index, as rest periods were set according to criteria that fit and specificity of the experimental ability, and the number of repetitions was determined according to the ability of the group players, which led to the development of the ability to endurance force and endurance speed, which reflects positively in the performance of the scoring skill.

Conclusions:

1- There is an effect of defriend weights to improving player physical abilities, then the performance of scoring in football.
2- There were significant differences between the two research groups in the post-test and for the benefit of the experimental group.

References:

1- Nouri Al-Shouk, Rafe' Al-Kubaisi: Research Guide for Writing Research in Physical Education, 1st Edition, Baghdad, 2004.
2- Ahmed Abdel Aziz: physical fittnes, dar alhikmah for publishing, baghdad, 2011.
3- Wisam Shamel Kamel: The effect of physical effort on some special physical abilities and biokinetic variables and the level of performance of the scoring skill in futsal, Master's thesis, College of Physical Education, University of Baghdad, 2007.
4- Muhammad Reda Ibrahim: Field application of sports training theories and methods, Baghdad, University, House for Printing, Publishing and Translation, 2009.
5- Imad El-Din Abbas Abu Zaid: Planning and Scientific Foundations, Building and Preparing -Theories and Applications, Alexandria, Manshaat Al-Maaref, 2nd edition, 2007.
6- Kazem Al-Rubaie and Muwaffaq Al-Mawla: Physical preparation in football, Mosul, Dar Al-Kutub for Printing and Publishing, 1988.
7- Sami Al-Saffar and others: Football, Volume 1, 2nd Edition, Baghdad, Dar Al-Kutub for Printing and Publishing, 1987.
8- Hanafi Mahmoud Mokhtar: The Technical Director of Football, Cairo, Al-Kitab Center, 1998.