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The Effect of Training Using (Plume-Shoe - Rubber Bands) on Explosive Power and Enzyme (CPK-LDH), Accuracy and Aiming With a Three-Point Jump for Young Basketball Players

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Abstract

The study aimed to identify the effect of training using the (plastic shoe - rubber bands) in the explosive and enzymatic capacity (CPK-LDH) and the accuracy and correction of the three-point jump for young basketball players, and the researcher adopted the experimental research method on a sample of Mahmoudiyah Sports Club for youth, The number of individuals in the sample reached (12) players, which were divided into two groups so that the first group is trained on the palladium shoes and rubber bands, and the second group uses the exercises prepared by the coach, for the period from 10/4/2018 to 10/6/2018, and after applying the tests Physical, physiological, and skilled in research and implementation of exercises prepared by the researcher and conducting post-tests, the results of which were statistically processed using the Statistical Bag System for Social Sciences (SPSS) version (V24), as the researcher concluded that it is possible to reach that the exercises using (plastic shoes and rubber bands) Contributed to the development of explosive power and enzyme (CPK-LDH) accuracy and correction by jumping three points for basketball players.

Keywords: *Effect of Training, Explosive Power and Enzyme (CPK-LDH), Three-Point Jump for Young Basketball Players*

Introduction

The basketball game is one of the sports games that was greatly affected by the development of theories and methods of sports training, with the aim of preparing the player from the physical and skill side and increasing his physiological efficiency, since the modern trend of training in general and basketball in particular aims to develop the physical and physiological abilities besides skill performance, This trend is a major challenge for coaches and those involved in the training process, which requires them to follow the modern training tools and tools in a way that suits the rapid development in the various levels reached by most sports teams in basketball, since the use of training tools, whether they are with rubber bands or the palladium shoe, which is one of the tools Which are appropriate for different ages and levels if

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the back leg muscles and tendons are weak, and training can be effective for young players if the exercises are associated with wearing a plumetric shoe with box training (deep jump training) and bouncing jumps whether they are on barriers and repeated vertical jumps and other jumps As these exercises can affect the development of public and private strength For the muscles of the two men, as many scientific studies have proven that the use of training tools in the field of sports training is an important role in facilitating and spreading the spirit of suspense and lack of boredom and the continuation of training among the players, as it is a set of methods and equipment that are used to facilitate the process of sports training as it increases interest and diversity in The training process "(3), and the auxiliary tools play an important and effective role in the training process by raising efficiency and training ability, stimulating blood circulation, and raising the sufficiency of the heart, lungs, and internal organs (11).

As the researcher is a former player in the basketball game and through his follow-up to the field for many training units and matches, he noticed that there is a major problem that most players are exposed to, which is the players losing their physiological and physical skills over time and thus avoiding the atmosphere of the matches by showing the unacceptable level during competitions Especially in the games that are distinguished by their strength and importance through the emergence of early fatigue on the players as a result of the pressures they are exposed to during the games, so the researcher sought to use modern training tools and move away from the traditional means of training to know the preference of the methods used in training.

The aim of the study is to

1. The number of exercises using the pomometric training shoes and rubber bands for the young basketball players.
2. The effect of training using (boot - rubber bands) and traditional explosive and enzymatic capacity exercises (CPK-LDH), accuracy and shooting with three points jumping for young basketball players
3. Learn about the advantage of the exercises used (balletometer - rubber bands), traditional exercises in explosive and enzymatic capacity (CPK-LDH) and three-point precision for young basketball players

The researcher imposed

There are significant differences between Sister Barin before and after the two groups (palladium shoe exercises - rubber bands) and conventional exercises in favor of subsequent tests of research variables. There are statistically significant differences between the background tests for the two groups (multidimensional preamble - rubber bands) and conventional explosive and enzymatic capacity exercises (CPK-LDH), accuracy, and three-point hopping for young basketball players.

Measurements: The researcher adopted the method of the experimental approach in the manner of two experimental groups and two coherent groups, and control of Mullah Mullah in the nature of research and several ways to solve the research problem through which its goals can be achieved. The first m and Otain practice on shoe B to Ayomtra and rubber bands, and the second uses the traditional exercises used by the trainer and the researcher using the following devices and tools- :

Bachelors and semi-auto degree (CPK-LDH). Blood drawing devices. A tape measure to measure lengths. Baskets No. (15). Palladium training shoes. Rubber bands. The weight of the medical ball (3 kg. Stop watch. K ourse basketball court irregular. Portable belt device. A set of physical, physiological, and skill tests were chosen as an indicator to measure the development that appears after the exercises used in the research

Ability tests for explosive

1. Throwing a 2-kilogram medical ball with the hands above the head from the sitting position on the chair[14] .
2. Adjusted vertical jumping (modified sargent)
3. A test correction Balagafzamahzb three - point basketball[11]

Test enzymes (CPK-LDH)

A sample of the players 'blood was drawn by (5) copies before performing the effort so that the players were in a state of rest where the blood was drawn by a specialist and kept in a (cool box), then it was performed, which included the physical effort (test the mobile traffic to Koonjham and Volknz (2), which contains running at full speed and an angle of (9) and fast (8) miles / hour (12.5 km / hour) for 3 minutes and after taking blood samples from physical effort in the same way, tribal tests were performed: from 3/29 / 2018, the program implemented the period from 10/4/2018 to 10/6 201 8, and included strength training in different types of athletic shoes The bleometric lace that basketball players need in the same direction is muscle work during the competition knowing that the appropriate density for each Exercise was taken into consideration in proportion to the capabilities of the players and its intensity was noted according to the level of the players who used the maximum that can be performed in one exercise, and the exercises were applied in the main section of the trainer training unit for the experimental group, bearing in mind that the time of the training unit ranges between 0- 30-30 minutes The number of training units reached (24) training units, at the rate of (3) Training units per week. Dimensional tests were performed on 12/6/2018

Results and discussion

Table (1) shows the statistical operations of Law (T) to compare pre- and post-test tests and their importance for the two groups (experimental control) in the variables under discussion.

Indication of differences	Error level	Calculated t	PF	P-	Post-test		Pre-test		the group	Variables
					P	s-	P	s-		
moral	0.000	7.61	0.31	0.77	0.16	6.22	0.31	5.45	Experimental	Throw a 3 kg medical ball in front of the chest
moral	0.002	4.34	0.32	0.44	0.38	5.68	0.43	5.24	Control	
moral	0.000	7.83	3.02	7.50	2.42	46.10	2.59	38.60	Experimental	Vaulting Sargent
moral	0.012	3.13	3.92	3.90	2.26	40.30	3.02	36.400	Control	
moral	0.000	12.1	16.86	64.60	11.78	146.40	13.97	81.80	Before the effort	CPK Experimental

moral	0.000	8.89	33.15	93.30	19.68	40 219	22.10	126.10	After the effort	
moral	0.000	7.61	16.99	40.90	10.72	125.40	11.28	84.50	Before the effort	CPK Control
moral	0.009	3.30	29.74	31.10	23.98	156.90	24.82	125.80	After the effort	
moral	0.000	14.60	31.15	143.90	30.03	559.60	31.54	415.70	Before the effort	LDH Experimental
moral	0.000	14.94	58.20	275	32.55	721.20	44.42	446.20	After the effort	
moral	0.001	5.22	66.61	110.10	70.52	492	71.02	318.90	Before the effort	LDH Control
moral	0.000	6.23	67.91	134	17.81	591.80	65.80	457.80	After the effort	
moral	0.000	8.78	0.90	2.51	0.32	4.22	0.85	1.71	Experimental	Aiming
moral	0.001	4.55	0.69	1	0.56	2.59	0.72	1.59	Control	

(*) Ethics at the error level ≤ from (0.05)

Table (2)

Indication of differences	Error level	Values (t) Calculated	PF	P-	Control group		Experimental group		the test
					P	s	P	s	
moral	0.001	4.08	0.13	0.54	0.38	5.68	0.16	6.22	Throw a 3 kg medical ball in front of the chest
moral	0.000	5.53	1.04	5.80	2.26	40.30	2.42	46.10	Vaulting Sargent
moral	0.001	4.16	5.03	21	10.72	125.40	11.78	146.40	CPK Before the effort
moral	0.000	6.37	9.81	62.50	23.98	156.90	19.68	219.40	CPK After the effort
moral	0.012	2.78	24.23	67.60	70.52	492	30.03	559.60	LDH Before the effort
moral	0.000	11.02	11.73	129.40	17.81	591.80	32.55	721.20	LDH After the effort
moral	0.000	7.91	0.20	1.62	0.56	2.59	0.32	4.22	Calculation of three

									points

The differences between the two experimental groups (the experimental group and the control group) in all research variables

(*)Degree of freedom (6 + 6) -2 = 10.

(*)Not significant at the significance level (0.05) if the error level is less than (0.05)

To review the results of the test machine skills and the tribal dimensions of Mjmo p Tin (experimental and controlling) in the test variables, everything showed a clear development of Mjmo Otain who underwent training modules using (traditional style polometric training shoes and rubber band) that improved the search in all Variables. She attributed the researcher's development in the physical variables to the nature of the prepared exercises in which the researcher took into account the principle of privacy in excess training, adaptation, and graduation, such as using training shoes in size. Rubber bands contributed significantly to the development of the capacity of the upper and lower bursting ends by strengthening the tendons, ligaments and connective tissues in the muscles, which affected the mobilization of muscle fibers more than usual and the latest state of neuromuscular modification in the members of this group through the rapid exchange of Rve signals between the nervous system The muscular, as well as the organization and coordination in the work of the kinetic units of the arms of the arms, such as exercises that were linked to the development of strength and according to performance skills that increased the effectiveness of this phenomenon among the members of the sample, but this topic may be due to the nature of the movements that were applied during the implementation of the exercises on the research sample, which helped The correct link between achieving the highest levels of energy production and muscle filling as much as possible is to push the stability of a large jump during the day as well as when making forces momentarily repeatedly during the performance of repeated movements such as partisanship or bending and stretching the arms from the position of chinu, and this is confirmed by both (Allawi and Abu Ella) that "pregnancy training is the main means of causing the physiological effects of the body that achieve improved responses and then the Kiev systems for the body and art. Be aware of the level, therefore it is one of the most important factors for training on the success of the program and thus improving performance. (13) This means that training with less resistance to performing the most talented technically, with consideration leading only to the muscles, and this fatigue is characterized by kinetic performance with the right timing, flow and relaxation, o leads to development performing special abilities, (Saeb et al. 1991) that "The more force is used in a shorter period of time, the greater the effect of momentum, which has achieved the so-called maximum achievement in all rapid activities, and therefore the force when used in a greater short period of time. R of whether in a long period of time "(7), as with the concentration of each of the enzymes (CPK-LDH) before the effort, the researcher attributes the effect of the training programs that contributed to improving internal metabolic processes and the associated changes in the level of biochemical variables in Muscle fibers in the long run, as increased enzyme concentration is an indicator of muscle training. With the increase in CPK, it is an indicator of the efficiency of muscle training for players, and creatine level increases phosphate for trained people and decreases for untrained people. As for the effort, the increase of the CPK enzyme due to the nature of the exercises that caused the muscles to work lies in the production of strength and speed through contraction and

expansion in order to overcome the external resistance, and this work requires high energy production for the purpose of completing this function, where the enzymes are a catalyst for energy production, Since "any activity that accompanies muscles is a series of chemical reactions in which enzymes play as catalysts that make an effective and effective contribution, and in this way the activity of enzymes that act as cofactors in anaerobic metabolism increases, due to training. (4) As for the enzyme increase (LDH) (before the effort, it is due to the nature of the exercises that characterized it as the increase is directly proportional to the intensity of training, and this was confirmed by Reisan Khraibat Majeed, who indicated that "the athletic pathway often leads Ning to increase the concentration of the enzyme (LDH) if it is In anaerobic conditions, where its increased concentration indicates that the athlete possesses more cologne, which enables it to make lactic "(6), but the enzyme (LDH after the effort, the increase process plays an important role in the reactions of the N-system Hypothalamic, because this enzyme is the main factor responsible for the lactic acid metabolism, which increases players 'ability to perform, because" the importance of this enzyme appears when stimulating the reaction in the opposite direction, energy production (ATP), and low oxygen levels, while the reaction in The other way, it provides the cells with pyruvic acid, which is oxidized in a cycle (the citric acid cycle) to produce the energy required by the availability of oxygen "(1). As for the development in the accuracy of aiming with a three-point jump, it is due to the use of force shoes and rubber bands that were applied to members of this group, which affected the packing of muscle fibers more than usual. And the last case of neuromuscular modification. Training is the use of special resistances below the maximum performance of the most technically gifted, with consideration only leading to muscle fatigue, proper motor performance, flow and relaxation leading to the development of special abilities performance, and this is confirmed by (Hussein Mardan Al Ali - Raed) that events require some ability Physical activity, including the explosive ability of nature to jump or jump, which contributes significantly to determining the level of performance if available to the athlete, which develops through the performance of exercises the effectiveness of exercise using body weight or other external resistances such as (rubber bands, heights , Canopy, weights of tools, medical balls ..... etc), where the use of these exercises greatly contributed to raising the efficiency of absence from a disease that enables all players to carry out the duty of movement, that is, whenever the movement is carried out faster and more powerful ul the explosion is more explosive Dyachkov and others in this field have demonstrated the importance of force to produce rapid explosive movement, especially in jumping. (9)

Conclusions and Applications

1. Training programs using (Poly-Meter Boots - Rubber Bands) have developed explosive strength in arms and legs and precision correction by jumping by hitting three points from young basketball players.
2. Training programs using (pallometry - rubber bands) lead to the development of an enzyme (CPK-LDH).
3. At the level of the results of the comparison test for the experimental samples to find the armpits at risk, whether physical and biochemical variables and skill feature exercises (strength measurements - rubber bands) appeared in the traditional exercises.

4. Diversity and switching between exercises using (weightlifting - tendon rubber) had a clear impact on the research sample, a history of increased excitement among the player.

The researcher recommends the following

1. The necessity of using training (a polyometric boots - rubber bands) to develop both the ability of explosives on the arms and legs.
2. Emphasizing the importance of the training exercises (polyolometric preamble - rubber bands) to develop the efficiency of the concentration of biochemical variables (CPK-LDH).
3. The necessity of conducting research and studies using something similar to that (bolumometric primer - rubber bands) in improving the physical, physiological, skill, and different life stages.

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