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The Effect of (CROSS FIT) Exercises on Fatigue Indicators and Rovey Among Young Basketball Players.

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Abstract

The introduction and the importance of the research lie in the use of (CROSS FIT) exercises and knowing the extent of their impact on the fatigue and Rovi indicators for young basketball players, and the study aimed to identify the extent of the impact of training using (CROSS FIT - traditional exercises) in the indicators of fatigue and Ruvi among young basketball players, and approach The researcher is the experimental research methodology on a sample of youth basketball players, and the number of the sample individuals reached (12) players, which were divided into two groups so that the first group is trained in (CROSS FIT) exercises and the second group uses the exercises prepared by the coach, for a period of 32 / 3/2019 until 5/30/2019, and after applying the tests under research and implementing the exercises prepared by the researcher and conducting the post-tests, their results were statistically processed using the Statistical Bag System for Social Sciences (SPSS) version (V24), then the researcher concluded that the exercises using (CROSS FIT) improved the fatigue and Rovi indications for young basketball players.

Keywords: *Effect of (CROSS FIT) Exercises, Fatigue Indicators, Rovey Among Young Basketball Players.*

Introduction:

Basketball game for sports, which was greatly affected by the development of theories and methods of sports training, in order to develop different aspects of physical and skill from improved functional competence, such as the recent trend of sports research in training in general, and basketball in particular aims to develop players from different sides, Whether they are vital and functional aspects, in addition to the skill side, where they follow modern training tools and tools in a way that suits the rapid development at different levels of most sports teams. In basketball a great challenge has reached for coaches and participants in the training process, which requires them to use modern tools and training means Which suit different ages and levels, as the lack of most Iraqi sports teams to train with modern methods approved programs of scientific foundations in preparing training curricula and the adoption of most approaches used in tools and methods The traditional contributed to determining the general level of physical fitness and thus negative impact on the functional aspects. And many scientific studies have proven that the use of training tools in the field of sports training is an important role in facilitating the stimulation of suspense and the lack of feeling boredom and lack of cramping in the training of players, as Smith and others (Smith and Ital, 2013) indicate that (CROSS FIT) is "a form of training The modern physical, which uses some modern methods and exercises resistance, and aims to increase the physical capabilities."The permanent functional movements of falscovite change with a strong force in the patterns of employing a general movement that takes place in a wave of contractions that start central muscles and the end of the peripheral muscles which leads to the complexity of the movements in the sense that they are shared With several joints, they also serve as natural, effective and efficient transmission motors for the body, and refer to Moran and Magellan (Mcglynn & Moran. 1997 (And Raul) Raul. 2005) to CROSS FIT, a training program designed to give many differences. On the training program, giving improvements in oxygen, oxy endurance, muscle endurance, flexibility and agility, leading to improved performance in specialized sports

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activity.From the above, the research problem is clear to us, which lies in the fact that the training followed in most sports teams in basketball depends mainly on the amount of individual performance of the exercises granted to him without attention to the competition component, which is a major component of CROSS FIT training that provides An important incentive for the continuity of performance and thus the development of the fitness level of players, which directly affects the functional variables in the study data.The fact that the researcher, researcher and coach of the basketball match and through the follow-up field for many training units and matches indicated that there is a big problem represented in the presence of most of the player's data, which is that the player has physiological abilities that negatively affect both physical air and skills over time and thus Avoid the game atmosphere through the fluctuation of the unacceptable level during the competitions, especially in official matches, through the early appearance of exhaustion on the non-games due to the nature of the pressures experienced during the games, so the researcher sought to use modern exercises and CROSS FIT exercises and away from the traditional methods of training To find out the preference for the training methods.

The aim of the study is to

1. Training numbers CROSS FITP layer s basketball youth.
2. Identify the effect of training using(CROSS FIT -Traditional exercises) in the indicators of fatigue and Ruvi for young basketball players
3. Learn about the preference of the exercises) CROSS FIT -Traditional exercises in the indicators of fatigue and Ruvi for young basketball players

The researcher assumed that

1. The existence of statistically significant differences between Sister Barren pre and post in the indices of fatigue and Rovyi for the two sets of search
2. There are statistically significant differences for the dimensional tests in the fatigue and Rovie indicators for the two research groups

Procedures: The researcher used the experimental method. The sample of Al-Karkh Basketball players represents the number of young respondents (12). The player was divided into mg m and Otain to train Jmuah pain first on CROSS FIT training and second used traditional exercises followed by the coach. The researcher found consistency and equality in the research. The researcher used the tools and tools to complete her research, a 50-meter (1) tape, the ball fitness center (Swiss ball), the Swedish parent number (10), individual number (5), and medical weight balls (2, 3, 5 (kg) 2) For each type, iron bars weighing 8 kg No. (10), Busan iron tablets (1, 2.5, 5, 10, 15, 20, 25 (kg)), wooden boxes of different heights (20, 30, 40) cm, and belt walk.The researcher used the scientific sources to determine the tests necessary to measure some variables related to the phenomenon to be measured. The search tests were as follows:

First: RAST test for the Python muscle fatigue index (P. Fellmann, N. Bedu M. 1997 1997 233-238).

Second: The Rover Test (Ali Bin Saleh Al-Harhouri, 1994, p. 18).Purpose of the test: to assess the state of cardiac training for athletes

The researcher conducted an experimental experiment on five players in Al-Kahraba Sports Club on Sunday 2/17/2019 at exactly nine o'clock and the internal hall of Al-Kahraba Sports Club. The tribal researcher conducted the tests on 29/2/2019, practiced exercises, including exercises to develop fitness (cross training method) experimental, while the second group practiced the trainer exercises prepared by the trainer, where T Duration 3/2019 9 until 5/302019 reached The number of training units (36) units at the rate of 3 units per week and the time of the training unit (60. 120 minutes), and the intensity of the training load began 60% and reached 85% of the maximum capabilities of the players in each exercise. And rest between repetitions was between (30-60) seconds, and rest between groups (2) minutes. The researcher used low and high intensity pulse training. And the use of weights in training units for exercises between (1-10) kg. Background tests were performed under the same conditions as for pre-test procedures on 6/6/2019

Results and discussed

Table (1) Arithmetic results for the pre and post tests in fatigue and Rufi indicators

Post-test		Pre-test		the group	the exams
P	Q -	P	Q -		
0.26	10.07	0.90	14.69	CROSS FIT	Fatigue index
0.37	13.62	1.08	15.04	Traditional style	
0.25	9.21	1.02	12.37	CROSS FIT	Rovey
1.04	11.55	1.11	12.71	Traditional style	

(*) Degree of freedom.(5 = 1 - 6)

Table (2)Results of differences for pre- and post-tests in fatigue and Ruvi indicators

Indication of differences	Error level	Calculated t	PF	P-	the group	Variables
moral	0.000	10.32	0.99	4.61	CROSS FIT	Fatigue index
moral	0.014	4.15	0.76	1.41	Traditional style	
moral	0.003	6.32	1.11	3.16	CROSS FIT	Rovey
moral	0.045	2.87	0.90	1.16	Traditional style	

(*) Meaning at the significance level (0.05) if the error level is ≤ or = (0.05)

Table (3) results of calculated (t) values and result of differences between the two researches groups in physical abilities

Result of differences	Error level	Calculated value (t)	A F	F	Traditional style		CROSS FIT		exams
					A	S	A	S	
Moral	0.000	17.34	0.20	3.54	0.37	13.62	0.27	10.07	Fatigue index
Moral	0.001	4.87	0.48	2.34	1.04	11.55	0.25	9.21	Rovier Index

Meaning at the significance level (0.05) if the error level is ≥ or(0.05) =

Through tables (1) and (2), it becomes clear that there are significant differences between the previous and subsequent tests of the variables under study for both groups (CROSS FIT- the traditional method), and the researcher attributes the development achieved in the indicators of fatigue and turkeys to the nature of the exercises that were prepared In it, the researcher took into consideration the principle of privacy in training, overload, adaptation and graduation, as these units relied on various training and progress in each training and emerging unit, such as (Kusenzov1972), citing

(Mamdouh Muhammad Al-Shenawi) to "the importance of skills training and the development of muscle strength Where strength must be exercised in different forms and amounts and in full accordance with the performance of skills, where this strength is developed subject to rapid changes in the frequency of nerve signals, where the muscular activity is characterized by a high degree of compatibility between time and size of nerve signals, and the use of exercises (CROSS FIT) works on developing endurance through the introduction of excitement and excitement, as the exercises developed by the researcher were compatible with energy systems and in light of the time spent as effort such as change or rotation in the use of pressure Reliance on training energy systems that have the required effectiveness or skill, and therefore, requires strength exercises with multiple repetition and long-term contribution to achieving these results, as "the ability of the body's systems to combat fatigue through a continuous effort characterized by its long duration and its association with several levels of muscle strength (Kemper. T: 1996) This is confirmed by (Mohamed Reda Ibrahim and Mahdi Kazem Ali) careful introduction of various exercises in the training curricula to preserve the athlete's desire to implement the requirements of heavy training and shift from a state of boredom and boredom to a state of happiness and joy And pleasure during training "(Naif Mofdi, 2011) indicates that" the gradual use of exercise and the difficulty of working to adapt to the body and increasing the processes of physiological adaptation and physical skill, and this in turn works on development, and progress in exercises of training units creates a state of continuous increase in job science The members and the physical then raise the level of adaptation to performance and stresses Mohamed Ibrahim Shehata that "fitness increases quickly while using new exercises that are not used by athletes." Therefore, the development returned in both Musher and Ruffy's stress. The contribution of training (CROSS FIT) to the career development of circulatory and respiratory systems, the important thing is to indicate the maximum oxygen consumption (VO2MAX). Therefore, each of them (1996, Apple, David) indicates that there are two factors explaining the increase in the maximum amount of The oxygen used as a result of regular motor activity, i.e. an increase in the volume of cardiac output) Cardiac output (as a result of an increased heart rate) On the mitochondria and the muscular muscles, as these changes in the body's vital systems to counter the effort resulting from exercising most of the body's systems respond to these changes is the respiratory system by increasing the depth of the movements of the respiratory system after each simple physical effort on the players increases the breathing process, which means saving the quantity The appropriate amount of oxygen to meet developments in the needs of the body and provide the muscles with the ability to work to increase the amount of oxygen inhaled in the body by increasing the volume is the rate of breathing and this I have an increase in vital capacity and tidal volume, and therefore there is a strong impulse and exhalation, and this is confirmed by both (Martin, Gibala, 2008). To use high intensity and short term long-term exercises (6) (weeks increase oxygen absorption). Mitochondrial enzymes in the skeletal muscles "where the evolution of the physiological variables under consideration is evidence of the efficiency of the circulatory and respiratory systems, because the continuous physical effort leads to increased respiratory muscles, the degree of air resistance in the air passages, and high functional efficiency, which helped in the ability to Resistance to fatigue, improvement of lung function and development.

Through Table No. (3) there appears to be statistically significant differences between the experimental and control groups (the group (CROSS FIT) and the traditional method group (in indicators of fatigue and Rovey for the subsequent test and in favor of the group) CROSS FIT), and the development of the referral researcher to the effectiveness of training (CROSS FIT), Which contributed to focusing on the muscles controlled by the main limbs in the body Kaadilat and the muscles of the upper abdomen and back, which are of great importance movements compound and the muscles of the lower extremities where it was a comprehensive training, which contributed to the development of the muscle strength of both arms, abdomen and legs as indicated (Muhammad Othman 2001) to "that targeted mass training is a positive stage of muscular functional adaptation, which leads to avoiding the level and speed of the rate of decline during training and competition" and this is confirmed by Macardle et al, 1981) "structured port training creates adaptive adjustments in every From the respiratory and circulatory system becomes evident through the economic heart rate, the maximum oxygen consumption and vital capacity per minute, ”notes (Pilate, 1996) notes that“ codified training programs affect the level of career status positively and lead to a fundamental improvement in the ability of the players to exert more effort and improve the transportation of oxygen and its delivery to the working muscles and the delay in the emergence of fatigue. One of the main exercises used, contributed to the development events in the ability of the players to endure the continuous performance of different parts of the body and thus develop endurance, as he notes (Glassman, 2010) until "the use of" exercises "(cross fit) should be most of his exercises with high intensity. Being the most common independent variable in the events of desired adjustments from the exercise. This is confirmed by (Ciolac, 2012), which confirms that there is a strong relationship between exercise intensity and cardiovascular fitness. The more intense the exercise, the more effective it is to improve fitness compared to moderate-intensity exercises.

One of the conclusions reached by the research

1. Affected training (CROSS FIT) prepared by the researcher in the development of indicators of fatigue and turf among young basketball players
2. The exercises used by the control group affected the development of signs of fatigue and turf in young basketball players, and to a lesser degree than the exercises in the experimental group.
3. At the level of the results of the comparison test for experimental samples - the search for the armpits at risk of infection, whether tests for fatigue and fatigue with Ruffy (crossover) skills appeared on the traditional exercises.
4. Diversification and change between exercises using (CROSS FIT) and had a clear impact on the research sample, which is a history of increasing desire, excitement and excitement among players to practice the training units.

The researcher recommends the following

1. The need to pay attention to exercises (CROSS FIT) and work to develop training curricula to develop marine and functional variables because of their great importance in developing fatigue indicators and young basketball players.
2. The necessity of conducting similar research and studies using exercises (CROSS FIT) for different ages and for both sexes.
3. Establishing specialized training centers in Iraq to develop fitness and health elements using training exercises (CROSS FIT)
4. Spreading cultural awareness of the need for coaches to adopt the RASTA test, which is a basic test for measuring fatigue index and assessing the physical condition through which players can be identified in various sporting events.

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The appendices

Template for cross fit training

Rest between totals	**Rest between exercises**	**Totals**	**Performance time**	**the exercise**	**T**
- Rotate the arms forward together waving the - rotate the arms back bending - arms back and forward torso forward and then the twisting the body to the - straightening bending and extending the - sides - knees from the standing position light jogging			5D.	Preparatory section (Warming up)	
2minutes	-	1	2 1minutes	degree of B running on a device (Tread mail) No degree (0.5) ascension	1
2minutes	50seconds	4	25seconds + 25seconds	Bing) performance terrace lie down on the Put to ground from a standing position lie on the + (Press arms and then stand again extend the and bend and	2
2minutes	50seconds	4	25seconds	top of ground to the disc from the the Lifting bench on the rise the and downgrades and , head the cm 30 height	3
2minutes	50seconds	4	25seconds + 25seconds	lifts stand Press + lifts Olympic Winter use of A	4
2minutes	50seconds	4	25seconds	From standing position, bend the body and carry the disc forward, extend the arms forward, and then rotate to both sides, return to the first position, and return the extension and bending	5
2minutes	50seconds	4	25seconds	medical ball to the top of the ground, the Raise throw it over the head, then grab it and hit the ground	6
2minutes	50seconds	4	25seconds	on boxes with a height jumps consecutive The cm and landing (40) of	7
2minutes	50seconds	4	25seconds	knee touching the back leg with the deep steps Take of the floor by holding weights in front of the head	8
2minutes	50seconds	4	25seconds + 25seconds	Holding the weight in hands and bending and extending the arms from the standing carrying the weight in the hands from the + position position of bending the arms for the longest period possible	9

2minutes	50seconds	4	25seconds	Work on the rowing machine	10
2minutes	50seconds	10	25seconds	abdominal exercises Various	11
-	-	-	12minutes	a gradual With (Tread mail) Running on a machine increase in speed every two minutes	12
Flexible and calming exercises with walking, breathing and exhalation			5D.	The final section	