

CrossFit Exercises and Their Impact on the Explosive Power and Speed Characteristic of Young Goalkeepers in Football

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Abstract

The importance of the research lies in the preparation of compound exercises for goalkeepers in a style of competitive fitness (CrossFit), which is characterized by competition and diversity in the use of many tools that give the guards a rush in training and developing many of the basic skills of young goalkeepers in football, and the research aims to prepare complex exercises in a manner of competitive fitness (CrossFit) for young football goalkeepers, and to identify the effect of complex exercises in a competitive fitness method (CrossFit) to develop some basic skills of young goalkeepers in football, and the exploratory sample amounted to (3) players, the training units were subjected to direct supervision by researchers and with the help of goalkeeper coach, As the training curriculum included (8) weeks during the special preparation stage, by (3) units per week, and the total training units amounted to (24) training units. The application of compound exercises has a positive effect on developing some basic skills for young goalkeepers.

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Introduction:

The continuous and increasing emphasis towards reaching athletic achievement led scientists to search for training methods and methods that have positive effects on performance, and CrossFit training is one of these methods that has attracted attention in recent times, and it is one of the modern methods of fitness developed by the founder and CEO (Greg Glassman) in 2002 in order to increase the health and fitness of the trainees, which are a variety of physical sports movements that depend on the collection of some movements and technical sports skills such as gymnastics skills, weightlifting, and body weight exercises, as it is an example to achieve the maximum amount of work done in the shortest time, as Intensifying the effort is necessary in order to achieve the best results, and it is done through the employment of a diverse curriculum and continuous training to reach an evolution in physical fitness. The importance of research lies in preparing the exercises for goalkeepers in a crossfit style and knowing their impact on the explosive power and speed characteristic of young goalkeepers.

Previous studies similar to the research study:

including the study (Abdullah Yassin Ahmed, 2021), which aimed to prepare competitive fitness training (CROSSFIT) for WOLF GYM trainees at the ages of 25-30 years and to identify the effect of competitive fitness training (CROSSFIT) on some variables Biochemical and physiological among WOLF GYM trainees and to identify the effect of competitive fitness training (CrossFit) on

some physical abilities of wolf gym trainees. Search for (8) subscribers.

And also the study of "Bufffield and Anderson" (2014) (39) in the Barfield, J.P, & Anderson, A study, which aims to know the effect of CrossFit exercises on health-related fitness. The experimental approach was used for a period of 12 weeks on a sample of 50 players who were divided into two groups, one of them Experimental and the other a control group, each of 25 players, and the most important results were the presence of statistically significant differences in favor of the experimental group in the variables of aerobic capacity and endurance.

Also, "Goins, Justin Michael" (2014) 45) studied his study aimed at Michael Justin, Goins to identify the physiological effects of CrossFit exercises using the experimental method on a sample of 12 players for a period of 6 weeks, and the most important results were an improvement in aerobic and anaerobic capacity and the maximum For the consumption of oxygen, diastolic blood pressure and the level of energy systems for the research sample.

And also the study of "Alexander Yuryevich, Osipov, and others" (2017) (38) by Aleksander Osipov et al, with a study aimed at evaluating the effect of CrossFit training on the fitness level of young athletes (16, 17) years of judo players using the experimental approach for two groups, one experimental and the other Controller, and the most important results were that there was a significant superiority of the experimental group over the control group in competitive matches, as well as the decrease in blood lactate

concentrations of the experimental group over the control group.

And also the study "Muhannad Khalil Abdel Mohsen (2016)", which aimed to prepare CrossFit exercises for participants in the fitness center. The study was conducted on a sample of (38) participants, as each group includes (19) participants, and the researcher used the method Experimental design of the experimental and control groups, and the researcher reached conclusions, the most important of which was the CrossFit training program, which had a significant impact on increasing the efficiency of the ability and oxygen capacity, or else and oxygen, for the individual athlete.

Method and tools:

The researchers used the experimental method for its suitability to the nature of the problem and for the purpose of achieving the objectives of the research and in the style of a single experimental group with two tests, pre- and post-tests. The community of origin was deliberately determined, where (4) young football goalkeepers were selected, and the researchers used the following means (Arab and foreign sources, the Internet, observation and experimentation, personal interviews, testing and measurement and using training tools), the exploratory experiment was conducted on goalkeepers Youth football, the aim of which was to ascertain the validity of the proposed exercises for application, to identify the suitability of the proposed exercises used with the level of the sample members, to know the appropriate time to implement the training units, to overcome the errors that may appear when implementing the

main experiment, to identify the adequacy of the work team The assistant and the appropriate number to conduct the tests.

Tests used in the study:

1- A medical ball throwing test weighing (2 kg) (**Hussain Jabbar Jassem, 2012, p. 56**):

2- The triple jump test and receiving a soccer ball from above (receiving the high ball) (**Hussain Jabbar Jassem, 2012, p. 70**):

After completing all the preparations, the two researchers and the assistant work team did the tribal tests on (Tuesday) (corresponding to) 8/2/2021, and after preparing the test requirements and the auxiliary work team, the tests took place at the Balad Sports Club stadium located in Salah al-Din Governorate. Of the special exercises and their application in the CrossFit style, and the method of CrossFit work that the researcher used is the stations (exercise) that have a fixed repetition and a specific time that the trainee performs to move to the next (exercise) station, i.e. the guard is required to have a number of repetitions and demands for a specific time that is determined in the main part of the unit training

When reviewing the results:

Table Number (1) shows the difference of the arithmetic means, standard errors, the calculated t value, and the significance and significance value.

Variables	Measuring unit	Aithmetic mean difference	Standard error	Calculated (t) value	significance value	significance
Throwing medicine ball weighing (2) kg	M	0.675	0.175	3.857	0.031	Moral
Triple jump and receiving the ball over the head.	M	0.430	0.111	3.854	0.031	Moral

When reviewing all physical abilities tests shown in Table (1), as well as what the results of the T-test for the corresponding samples showed about the presence of a significant difference in favor of the post test, and the researcher attributes the reason for those moral differences between the results of the tribal and remote tests and in favor of the post tests and for all physical abilities The special questioned

for goalkeepers, to the effectiveness of the effect of (special exercises according to the competitive style (cross fit) on the goalkeepers used in the training curriculum of this group and planned according to sound scientific foundations that are commensurate with the characteristics and capabilities of the research sample members, where the exercises were varied and gradual in Difficulty and repetitions, the length of the implementation period, which took (8) weeks, which gave the research sample members a great desire to commit to applying the exercises and continuing to attend and not feeling tired and bored because of the suspense, and this is what was indicated (included, 1982, p. 84) that the purpose of obtaining For development there must be attempts to practice, and the most important condition for learning is practice and exercise.

Both (Allawi and Abul-Ela, 2000, p. 22) stress that "the training load is the main means of inducing the physiological effects of the body, which achieves the improvement of its responses and then the adaptation of the body's organs and the rise in the athletic level." As for (Edacten, 1979, 8-10), he asserts that "training results in an increase in the individual's performance ability as a result of performing physical exercises for several days, weeks, or months, by adapting the body's organs to the optimal performance of those exercises", as well as the difficulty used in implementing these exercises. These exercises were appropriate with the specificity of each ability, as the selected abilities are characterized by high intensity during their performance, and they were gradual when

implementing the special exercises according to the method of competitive fitness (cross fit) on young goalkeepers, which contributed to their improvement and this is what was indicated by (Hamdi and Muhammad, 1999, p. 67) that “importance is given to the intensity, size and comfort used to suit the level of the trainee individual.” The vocabulary of crossfit exercises was formulated in line with the abilities and capabilities of the research sample members, which resulted in this improvement in performance.

As well as the process of gradual performance in the difficulty of performance in light of the rise in the intensity of training units and with appropriate repetitions in order to develop such special abilities, the purpose is to perform with high efficiency during the competition, and this was confirmed by (Amr Allah Ahmed, 1997, p. 42) “Circumstances must be The exercise is similar to the conditions of the match or higher than it, as to obtain the highest effective level of training, the coach must subject the trainees to various forms of exercise.

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