The effect of physical effort on the two variables of cardiac work and the maximum oxygen consumption base on different speeds and a specific distance for football players

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Abstract
The research problem lies through field size, which offers an illustration of the lack of clarity and the ability of the teacher to choose via self-evaluation, and this, therefore, constitutes a case of lack of correct evaluation and accordingly building training curricula which are deficient and now not dependent on numerical values, which researchers have a trouble they wanted to have a look at and broaden solutions It has by means of designing one-of-a-kind bodily efforts with an exclusive speed connotation and with a particular distance and understanding the extent of the effect at the paintings of the heart and lungs and hence the ability to give numerical connotations which could help professionals and running shoes inside the dimension manner. The research goal is to study the heart occupancy values and the maximum oxygen consumption, to understanding the relationship among the space traveled, the coronary heart's paintings, the most oxygen intake, and the relationship among the coronary heart's work and the most oxygen intake. The researchers used the descriptive method to its appropriateness to the character of the hassle and the pattern became selected in an intentional manner as they are outstanding secondary gamers in football in Maysan 2019, and the researchers advised bodily efforts to find out the clean effect of changes at the efficiency of functional devices and the volume in their model to the character of physical effort and what's the instant impact of this attempt and accordingly know the differences in this the adjustments. The researchers concluded that the physical efforts showed variant and distinction among the people within the studies sample and this outcome from the extent of edition for every man or woman. They recommended that bodily efforts need to be used to perceive the extent of schooling and variations for players 'physical capabilities.

Keyword: Sports Exercises, Heart, Oxygen, Football

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Introduction

Football is one of the games this is very popular due to its excitement and enthusiasm, which offers pleasure to its viewers, mainly while winning, so it has grown to be one of the games that it approach in all countries of the sector, as it's far taken into consideration the quantity of the sophistication and development of those countries. since the sports training manner is the decisive aspect inside the development of this sport, it turned into vital to divide this procedure and observe the quantity of the adjustments that took place as a result of the schooling manner, in which we observe that the whole thing that was the extent of education in keeping with the foundations of a correct manner changed into without delay meditated inside the fulfillment of winning [1].

Hence the importance of studies is evident in that information of the effect of physical attempt overall performance on functional variables is a crucial element in giving a clear perception of the impact of outside load at the body's features and for that reason, the mirrored image is fine every time the training procedure is in an orderly way [2]. The researchers also agree with that the significance of the research lies in the truth that accurate expertise of the variables of the heart's paintings and the most oxygen consumption offers a clear indication of the performance of the respiration circulatory gadget, and this for this reason method enabling the

method of oxygen and vitamins to attain the muscle cells constantly and often, which ends up in improved overall performance. Further, the researchers can, through this look at, placed inside the palms of running shoes and professionals an accurate description of what happens to the heart and lungs apparatus due to converting bodily pregnancy and the extent of the response to this pregnancy [3].

As for the studies hassle: sports education ambitions to deliver players and carrying methods to the exceptional stages and in light of specialized interest, mainly if the running shoes depend upon codified training curricula, in particular for the medical foundations, the adaptation technique is one of the priorities that both the teacher and the player searching for due to this significance inside the scientific [4]. The ability to maintain the extent of performance during the match length, which may additionally exceed to play in additional instances, and without this procedure, the opposing crew cannot be matched and adapt to the nature of the sport.

For this reason, the research problem lies within the researchers 'remark, in addition to thru their assessment of the sources and references to evaluate the level of the paintings of the heart and lungs with regards to the trainer. The form of a hard case thru field measurement, which offers an indication of lack of readability and the capacity of the instructor to decide to through self-evaluation, and this, therefore, constitutes a case of lack cautious evaluation and accordingly constructing training curricula are constrained and no longer depending on numerical values, which researchers have a hassle they desired to examine and expand solutions to by using designing one-of-a-kind physical efforts with a unique velocity and a selected distance and knowing the extent of the effect on the paintings of the coronary heart and lungs and therefore it is feasible to give numerical indicators which could assist specialists and running shoes inside the dimensioning method [5].

Research objectives are: Knowing the values of cardiac work and the maximum oxygen consumption.Identify the relationship between the distance traveled, the heart occupied, and the maximum oxygen consumption.Learn about the relationship between cardiac work and maximum oxygen consumption.

Methods

The researchers used the descriptive method in the survey approach as it fits with the nature of the research trouble due to the fact this approach represents the observation of statistics and the interrelationships between the one's information and variables and deepening them. (238: 1). Therefore, the researchers determined the studies network in an intentional way, and they are high college football outstanding gamers in Maysan, where they numbered (24) gamers for the academic year 2018-2019, and then they decided on the sample, as the number of players reached (15) gamers, representing a percent of (62.2%). From the unique community.

The researchers counseled the two bodily efforts relying on two variables, particularly the variable of different speed and the attitude of incline, in which they desired from this to know the clear impact of the modifications at the efficiency of the user devices and the extent of their model to the nature of physical attempt and what's the instant effect of this effort and therefore realize the variations in these adjustments.

The first physical effort

The laboratory starts off evolved to run at the moving belt device after the nice and cozy-up manner, where it starts to run at a pace of (10 km/hour) after which (14 km/hour) for a period of (2 mints) for every of them, then after that, the rate reaches (sixteen km/hour) for a length of (3 mints) The overall performance ends while the pulse reaches (195 Z / D). After that, the coronary heart's paintings and the maximum oxygen intake are measured.

The second physical effort

The laboratory begins to run on the moving belt device after the warm-up procedure, where it begins to run at a speed (8 km/hour) for a period of (3 minutes), and then the speed increases to (10 km/hour) and then (12 km/hour) and for a period of (2 minutes) each Then after that the speed reaches to (14 km/hour) and for a period of (3 minutes) the performance ends when the pulse reaches (195 Z/D), after that the heart's work is measured and the maximum oxygen consumption.

The main experience

The researchers, at 10:00 am on Sunday, 4/14/2019, conducted the main experiment on the sample of the application represented by the distinguished secondary players in football in Maysan for the academic year 2018-2019, where the first physical effort was applied to all members of the sample and obtained the results and then after that After five days have passed, and on Thursday, April 19, 2019, and at ten in the morning, the

second physical effort has been applied, the results have been obtained and recorded in a form prepared for that.The researchers used the statistical case SPSS V.22 to extract the following values: Mean, Standard deviation, Standard error, Coefficient of variation, Percentage, Simple correlation coefficient (Pearson), and T-test for the two associated specimens independently.

Results and discussion

Table 1: Shows the arithmetic mean, the standard deviations for cardiac occupancy, the maximum oxygen consumption, and the coefficient of variation, the highest and lowest value.

Variables		Units	Mean	SD	Coefficient of variation	Highest value	Lowest value
The first physical effort	Heart function	Jules	7351	1360	18.50%	8763	6113
	The maximum consumption of oxygen vo2max	Liter	24	2.21	9.20%	22.6	26.1
The second physical effort	Heart function	Jules	9722	1524	15.67%	10574	8124
	The maximum consumption of oxygen vo2max	Liter	31	3.61	11.64%	33.5	29.20

The researchers characteristic the reason for this to the fact that the nature of bodily attempt has an obvious impact on the spot responses of the gamers and that is due to the variations that arise within the work of the coronary heart and the respiratory system, and we note this sincerely via the distance covered, which offers a clear indication of the paintings of the heart this is affected by the gap similar to the rate and depth of performance from throughout the slope attitude, that is one of the hard techniques that want to exert a higher bodily effort in percentage to the character of the resistance to conquer it [6,7].

The researchers additionally see the motive for the difference between the primary and 2d efforts and the pattern obtaining different proportions to the technique of linking the bodily ability with the character of the physical effort, which is the important factor that have to be emphasized during the schooling process through using targeted exercises that work to perform the bodily paintings associated with the skill overall performance that is The maximum tough through the kingdom of opposition, which leads to a situation of essential organs running on a useful foundation in this process, that's related to the volume of the ability to perform operations as an accurate crew to launch electricity and restore the development of electricity-rich phosphates In conditions of relative shortage of the amount of oxygen needed via the overall performance and the more this factor should keep for so long as the player as feasible. The researchers accept as true with what (RaisanKhreibetMajeed 1999) showed that the biochemical foundations of staying power in acting a long-term work are performed through the ability abilities of the contributors to rebuild power-wealthy phosphate compounds via the antenna and oxidation (oxygen sharing) and by means of the entire price of the reserve that the participants have of electricity (mainly the amount of reserve of glycogen gift inside the liver and inside the muscle.)

The researchers also attribute the motive for this to the schooling dreams, in addition to a way to educate to expand the oxygen system, as the additives of the training load ought to be directed in step with the intensity of the training and what is the excellent fulfillment that should be achieved when performing the sports. The period of the exercising, the time of its overall performance, and the range of iterations play a primary role in developing the energy system The user and this have to be nicely linked to relaxation periods among sporting events and corporations with these foundations being a critical aspect inside the manner of overlap throughout overall performance and from right here we see that the different bodily attempt produced for us the instances of variation between the players and that it was a state of affairs that the players are not used to for the duration of training hence, it may be said that bodily exertion is an important indicator for assessing the extent of training according to the circumstance of the circulatory and respiratory device[8,9].

The researchers trust what become indicated by using (Muhammad Ali Al-Qat 1999) that the high oxygen capability of the athlete ends in a lower within the manufacturing of lactic acid, so athletes who have right oxygen training can train with excessive depth earlier than stricken by the buildup of lactic acid as compared to

athletes who do no longer have this sort of suitable oxygen base Likewise, the high oxygen ability of athletes could be very useful to them when they perform a schooling this is predominantly non-oxygen. As for the rest of the period that follows oxygen training, athletes who have a superb oxygen ability to recover their restoration. Faster than the one's athletes who do now not have a very good oxygen capability and as a way to improve the physiological potential to work in athletes, it's far very essential to increase the total training volumes that focus on the usage of the oxygen machine.

Table 2: Shows the mean, the standard deviations, the calculated and tabulated value (t) and the level of significance of the difference between cardiac work and the maximum oxygen consumption of vo2max for physical effort.

Variables	The first physical effort		The second physical effort		(t) calculate	(t) tabulated	Statistical significance
	Mean	SD	Mean	SD			
Heart function	7351	1360	9722	1524	-5.68	2.71	Sig.
The maximum consumption of oxygen vo2max	24	2.21	31	3.61	-7.93		Sig.

The researchers attribute the reason for this due to the effect of the variable of the maximum oxygen consumption of vo2max and the extent of the direct correlation between this variable and the ability of the physical variable to continue to work. This second is affected by the amount of work done through the performance time and the distance traveled, as well as its loss of energy sources and the appearance of lack of flow and this consequently affects its loss. Energy sources quickly as a result of non-economic as the difference came as a result of individual differences between the players as a result of the level of training and adaptation operations as well as morphological variables and it determines the value of the maximum oxygen consumption, which is an indication of efficiency The functional devices where this efficiency can be summarized first is the efficiency of the circulatory and respiratory system in the delivery of inspiratory air to the blood and secondly the efficiency of o2 conductions to the tissues, thirdly the efficiency of the muscles in oxygen consumption, these are the efficiency of metabolic and energy production processes[10].

The researchers agree with what he indicated (Al Kaabi, 2007) that the results of many activities are closely related to the level of the maximum oxygen consumption, which is an indicator and evidence of the ability of the periodic and respiratory systems. It can be said that the improvement in the level of records that have occurred since the seventies up to the present in long distances has come as a result of (1) High-performance ability with a high percentage of the maximum oxygen consumption for a long time. (2) Using tactical threshold exercises at (4 mmol) level. (3) Economy by effort during the performance.

The researchers attribute the reason for this to the effect on the heart's work (thus increasing the amount of blood paid in one batch (SV) as well as the amount of average arterial pressure (MABP). This is an indicator of the efficiency of the heart muscle and in addition to the vascular system. Increased cardiac work. Therefore, we note that the nature of physical efforts has the ability to distinguish between players in obtaining different degrees by continuing the physical effort that is characterized by burdens. This requires an increase in the work of the heart muscle and the vascular system by delivering blood to the working muscles by the occurrence of movement, so we note the difference between no Clear expression by the difference in the efficiency of the work of the heart muscle and the vascular system [11].

The researchers agree with what Dania mentioned, citing (Mahfouz Faleh Hassan), that the practice of physical training increases the efficiency of the heart muscle and its ability to perform its functions in a more economical way than the untrained muscle, and that is accompanied by a high adaptation of the blood vessels that is suitable in its functions with rates of strong contraction and blood volume Paid from the heart. Al-Abdullah asserts (2012) (the greater the external resistance, the high blood pressure and thus it appears that the resistance is responsible for the persistence of blood pressure).

In conclusion,The physical efforts showed a difference and a difference between the members of the research sample and this results from the level of adjustment for each individual.Physical efforts showed differences between the results of cardiac labor and the maximum oxygen consumption of vo2max between the two efforts

and in favor of the second effort as a result of the difficulty of the extreme performance in the second effort.Corrected physical efforts have the ability to identify the level of physical efficiency through the performance time of each effort, as it gives an indicator to measure a physical quality commensurate with the time of its performance.Physical efforts showed immediate responses that give an indication of the level of training for the sample and how to monitor training programs in proportion to the player's condition.The physical effort showed that controlling the angle of incline is an important factor in the player's ability to control the way of performance as a result of economic effort and performance with high flow.

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