

The rate of change in the level of physical abilities as a result of stop training for athletes

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Abstract- The research aims to identify the rate of change in the level of physical abilities as a result of stop training for athletes, was used descriptive approach through a three measurements on a sample of (31) soccer player during the most important month results showed an average increase body weight, And decreased muscle strength levels of the two groups, the back, the muscle power of two groups and some other physical variables such as speeding, agility and distance throw recommends researchers need to develop alternative programs and the use of camps training interface emergency conditions and interest force development programs and the ability of muscle to football players as well as an early start in the general preparation periods , and the use of training programs through compensatory stop training of swimming and exercises outdoors to keep your fitness and skill levels periods.

Keywords- Stop Training, Physical abilities, Athletes.

I. INTRODUCTION AND RESEARCH PROBLEM:

Sports training organization process aims to reach the individual to achieve the best athletic achievement and within the limits permitted by the physical and physiological capabilities, where to continue the process of sports training cause certain physiological changes in the body.

And refers Matveev (Matveev, 1998) that athletic training is based actions on scientific and private educational foundations, which lead to the construction of the sports building integrated of all physical and skill and tactical and psychological aspects, which led the orientation towards upgrading and accomplished athlete continuously in the sport specialist in order to reach to a higher level. (7: 5)

Notes Mr. Hassan Abu Abdo (2004) that the physical condition of the soccer players one of the important bases that determine the skill and tactical performance, because any plan regardless of the degree of her choice could fail if not developed physical abilities in mind. Implementation of performance skills in a way mechanism also cannot be played without having the physical attributes and characteristics that serve kinetic performances of basic skills. (2:37)

The stop training of the most dangerous factors that lead to reduced fitness of the athletes level,

the reasons for stopping to many factors, and is the revolution of January 25, one of the main reasons to stop training during that period, and through that the researcher found a great opportunity to get to know the impact of downtime for training on the fitness level of the athletes.

And refers Bangspo (Bangsbo, 1993) that unlike a lot of other sports, in which the performance of the physical effort is the pace of one continuous, such as a marathon or was 1,500 meters, or 100m, the sport of football gathered in performance between the elements of strength, power and speed and endurance and agility and many other qualities, which makes it a physiological requirements of the sport. (5: 143)

Where explains Matveev (Matveev, 1998) to drop out of training (Detraining) is the change that is happening in the body's physiological adaptations and physical leading to a decrease in athletic achievement and a decline in the level of performance. (7: 8)

In football, the antenna physical training developing heart and lung efficiency and helps the muscles to extract oxygen, leading to an increased reliance on fat as fuel, thus providing glycogen

muscle, which is important for good performance in the sport of football. (10: 371)

Explains Hazza Mohammed (2005) to study the impact of downtime for physical training on the physiological functions of the footballers, scientific studies published in this regard, very few, and the study only available on this subject has been conducted on a group of football players undergraduates by more than 30 years, and that most of the studies on the effects of the cessation of physical training in the functions of the body organs were purely sports tolerability, or for athletes practicing drills muscle power only, but not on the football that combine their training between aerobic and anaerobic aspects. (1:14)

And to stop the training of the things that exposed players in different periods, or other reasons may force players to stop training, which could lead to the decline in their levels, so what is evident in the contrast research sample levels after you stop training after the January 25 revolution and the subsequent events prevented continuity in athletic training, and this is why the researchers conducting this study.

II. AIM OF THE RESEARCH:

In light of the importance of research and the need for it and the emanation of its objectives researcher puts the following groups:

- A. Does stop training on the level of fitness?
- B. What level of fitness for athletes after a period of 2 weeks of downtime for training.
- C. What fitness level of the athletes after a period of 3 weeks of downtime for training.

A. Terms contained in the search:

Drop out of training: Pauses regular physical training directed to the development of physical and skill capabilities and maintain them, which often occurs after the end of the sports season and before the start of the new season. (6: 79)

B. Previous studies:

- 1) Hazza Mohammed Al-Hazza Study (2005) entitled "The physiological effects of downtime for physical training for 8 weeks with footballers outstanding," The total sample size (22) soccer player the Premier League, the researcher used the descriptive approach, noting the most important results both lower than the maximum oxygen consumption, pulmonary ventilation, and the level of muscular strength of the two men, increased heart rate and percentage of body fat. (1)
- 2) Imad Saleh Abdul Haq study (2005), entitled "The Impact of dropping out of

training in some of the physical variables and body composition among the squad Najah National Football League," sample size (20) for a soccer player, was the use of the experimental method, the results of the study showed that there are significant differences between the results of pre and post tests and in favor of tribal body composition variables (weight, body mass index, and metabolism during rest, and the percentage of fat), and the physical variables (speed of 50 m, and leg strength). (3)

- 3) Srkinj study (Sergei 2003) entitled "The seasonal changes in body composition and speed of performance of footballers" The total sample size (30) for the player, and the researcher used the experimental method and descriptive measure the thickness of the folds of the body of the players has been the expense of body fat percentage at the beginning of the season and central and end and after a break from training during the transition period indicated that the most important results that a relationship exists between the percentage of fat in the body and the time of the enemy 50 meters in favor of the least fat percentage during the middle and end of the training season for the players, but for the players during the period of interruption of the training was the relationship counterproductive whenever fat percentage has increased in the body the enemy time increased. (11)
- 4) Yassin Taha and Ayad Faraj study (2002), entitled "The effect of stopping the practice of a variety of youthful exercises for a period of 6 weeks, the blood pressure rate after an enemy 400 meters," The total sample size (28) players, it was the use of the experimental method, and the most important results increase the enemy 400 meters and high blood pressure, diastolic and systolic rate after the enemy groups search time. (4)

III. RESEARCH METHODOLOGY:

The researcher used the descriptive approach to the appropriateness of the nature of search by conducting three measurements for one set through (4) weeks of downtime for training.

Society and the research sample: the study sample was selected purposively players collective activities Club Arab Contractors (Soccer - basket - hand) under 20 years old and enrolled from 2010 to 2011 m and totaling season (31) player table (1).

TABLE I. ARITHMETIC AVERAGES AND DEVIATIONS STANDARD, INTERMEDIATE AND COEFFICIENT SPRAINS VARIABLES IN GROUPS

Variables	Unit	Average	S.division	Mean	Sequence
Weight	Kg	67.758	4.595	69	-0.282
Leg Dynamometer	Kg	134.258	3.54	135	0.63
Back dynamometer	Kg	115.79	3.989	117	-1.778
Through ball	M	9.171	1.369	9.3	0.143
30 m speed	Sec	4.482	0.198	4.48	0.751
Zigzag run	sec	8.731	0.584	8.67	0.465
Endurance	sec	4.63	0.392	4.55	0.661
Vertical jump	m	2.389	0.185	2.4	0.013

N=1

It is evident from Table 1 that the values of torsional modulus in all the variables in groups has been narrowed between (± 3) which shows significant data in these variables.

Means of data collection: To collect the data, the researcher used the following means:

A. Hardware and tools:

Medical scales, a Dynamometer, footballs, holder of the two men, cones, stop watch, chalk, tape measure, cones. The tests used:

- 1) Test measuring static strength of the muscles of the two men.
- 2) Test measuring static force to back muscles.
- 3) Test a throw.
- 4) Test the enemy 30 meters from the enemy.
- 5) Test run zigzag (Barrow).
- 6) Endurance test.
- 7) Test vertical jump (Sargent).

B. Measurement tribal:

The measurement of all tribal members conduct research sample numbering (31) Athletic Hall Fitness Club Sports Mansoura, during the period from 00 billion / 12/1010 AD to Saturday, 12/04/2010.

C. Telemetric:

Post test measurement was made at the end of the period prescribed for the implementation of the training program was done in the period from 22/02/2011 to 02/24/2011.

D. Statistical treatments:

Has statistical treatment by using a computer program SPSS & EXCELLE, and achieve the objectives of the research and testing hypotheses researchers used the following statistical treatments:

- T Test of the significance of differences between measurements.
- Analysis of variance.
- Test the least significant difference L.S.D.
- Test rate of change.
- Arithmetic average.
- Standard deviation.
- Convolution coefficient.

IV.RESULTS

It is evident from Table 2 that the P value was statistically significant between the three measurements where the P value calculated is greater than the value of the P spreadsheet in variables (Dynamometer leg - Dynamometer back - the enemy of 30 m - Durable - vertical jump), while came not function in the rest of the variables, so the researcher test will be used less moral teams to find the differences between the three measurements in these variables.

The use of educational software as a variable pilot in improving the performance of some of the basic motor skills for students in the primary grades of primary "experimental group.

Seen from the table (3) as follows: Fixed strength to the muscles of the two men: no statistically significant differences between the measurement of tribal and inter-tribal and for the benefit and there are differences between the pre and post measurement and in favor of Egypt.

- T Fixed strength to the muscles of the back: no statistically significant differences between the measurement of tribal and inter-tribal and for the benefit and there are differences between the pre and post measurement and in favor of Egypt. 30 m enemy. There are significant differences between the measurement of tribal and inter-tribal and for the benefit and there are differences between the pre and post measurement and in favor of Egypt.

TABLE II. THE CONTRAST BETWEEN THE THREE MEASUREMENTS ANALYSIS (TRIBAL - INTERCONNECTION - POSTTEST) IN THE VARIABLES UNDER CONSIDERATION

Variables	Source of variation	Sum of squares	Degree of freedom	The average sum of squares	P	Sig.
Weight	Between groups	32.33	2	16.16	0.89	0.41
	Inter groups	1629.63	90	18.11		
	total	1661.96	92			
Leg Dynamometer	Between groups	958.02	2	479.01	22.97	0
	Inter groups	1876.77	90	20.85		
	total	2834.8	92			
Back dynamometer	Between groups	867.53	2	433.77	15.28	0
	Inter groups	2555.58	90	28.4		
	total	3423.11	92			
Through ball	Between groups	2.55	2	1.28	0.63	0.53
	Inter groups	181.29	90	2.01		
	total	183.84	92			
30 m speed	Between groups	1.23	2	0.62	16.35	0
	Inter groups	3.39	90	0.04		
	total	4.62	92			
Zigzag run	Between groups	0.65	2	0.33	1.15	0.32
	Inter groups	25.54	90	0.28		
	total	26.19	92			
Endurance	Between groups	3.85	2	1.93	11.65	0
	Inter groups	14.88	90	0.17		
	total	18.73	92			
Vertical jump	Between groups	0.75	2	0.38	14.98	0
	Inter groups	2.26	90	0.03		
	total	3.01	92			

P value when tabular degrees of freedom (2.90) and the level of significance (0.05) = 3.11

- Endurance: no statistically significant differences between the measurement of tribal and inter-tribal and for the benefit and there are differences between the pre and post measurement and in favor of Egypt.
- Vertical jump: There are significant differences between the measurement of tribal and inter-tribal and for the benefit and there are differences between the pre and post measurement and in favor of tribal, and no differences between the measurement interface and posttest and in favor of interoperability.

Seen from table (4) that there are statistically significant differences at the level (0.05) between tribal and dimensional measurements in all

measurements and in favor of tribal measurements.

Seen from the table (5) that the change between the averages of tribal measurements and dimensional ratios may be confined between (-10.36, -2.03).

V.DISCUSS THE RESULTS:

The results of this study indicate that there is a clear contrast through the marked decline in the average of the three measurements of the research group in the variables (fixed strength to the muscles of the two men, the fixed strength of the muscles of the back, the enemy of 30 m, endurance and vertical jump) and it is clear from the results table (2)

TABLE III. THE SIGNIFICANCE OF DIFFERENCES BETWEEN MEASUREMENTS ALL THREE VARIABLES (DYNAMOMETER LEG - DYNAMOMETER BACK - THE ENEMY OF 30 M - DURABLE - VERTICAL JUMP) USING THE LEAST SIGNIFICANT DIFFERENCE

Variables	Average	Test	Pre	Between	Post
Leg Dynamometer	134.258	Pre		6.193*	7.290*
	128.06	Between			1.096
	126.96	Post			
Back dynamometer	115.79	Pre		5.564*	7.112*
	110.225	Between			1.548
	108.67	Post			
Through ball	4.481	Pre		0.186*	0.276*
	4.668	Between			0.09
	4.758	Post			
30 m speed	4.63	Pre		0.123	0.356*
	4.753	Between			0.356*
	5.11	Post			
Zigzag run	2.388	Pre		0.098*	0.121*
	2.29	Between			0.121*
	2.169	Post			

TABLE IV. SIGNIFICANCE OF DIFFERENCES BETWEEN TRIBAL AND DIMENSIONAL MEASUREMENTS IN THE VARIABLES UNDER CONSIDERATION

variables	Pre test		Post test		Average p	S. Division P	T
	Average	S. Division	Average	S. Division			
Weight	67.76	4.6	69.19	4.02	-1.44	1.83	- 4.37
Leg Dynamometer	134.26	3.54	126.97	5.32	7.29	4.69	8.65
Back dynamometer	115.79	3.99	108.68	6.07	7.11	6.98	5.67
Through ball	9.17	1.37	8.77	1.48	0.4	0.61	3.72
30 m speed	4.48	0.2	4.76	0.21	-0.28	0.19	- 8.24
Zigzag run	8.73	0.58	8.91	0.5	-0.18	0.17	- 5.84
Endurance	4.63	0.39	5.11	0.42	-0.48	0.29	- 9.07
Vertical jump	2.39	0.18	2.17	0.11	0.22	0.19	6.56

T. tabular value at the level of significance (0.05) = 1.697

Variables	Unit	Pre average	Post average	Rates of change
Weight	Kg	67.76	69.19	-2.11
Leg Dynamometer	Kg	134.26	126.97	-5.3
Back dynamometer	Kg	115.79	108.68	-6.14
Through ball	M	9.17	8.77	-4.42
30 m speed	Sec.	4.48	4.76	-6.16
Zigzag run	Sec.	8.73	8.91	-2.03
Endurance	Sec.	4.63	5.11	-10.36
Vertical jump	m	2.39	2.17	-9.19

TABLE V. % CHANGE BETWEEN THE AVERAGES OF TRIBAL AND DIMENSIONAL MEASUREMENTS IN THE VARIABLES UNDER CONSIDERATION

This is because the researcher this decline to stop training to occur during this period where Flick indicates (Fleck, 1994) to drop out of sports training leads to a change in the adaptations body's physiological and physical shortages of physical and athletic achievement, resulting in a drop in the level of athletic performance in various events. (6)

And is consistent with the results of the study carried out by Mujak and others (Mujika et al., 2000) to drop out of training, whether it be an interruption in whole or in part, it leads to loss of adaptations anatomical, physiological and performance-related sports, the more disruption period increased training increased quality adaptations physical Missing and quantity. (9)

He notes the low level of both the fixed power of the legs, back, and the ability of muscle as a result of stop training where results indicate Shephard study (Shephard R. 1999) that the ideal physical training do not lose sight of the development of both the anaerobic capacity and muscular strength and muscular endurance, flexibility and agility for athletes in football and in fact, the training currently prevailing in world football combines training and exercises muscle strength. (12: 757)

This is consistent with the results of Flake study (Fleck, 1994) that the interruption of training leads to lower prescription endurance, where he found that to stop training for a period of 15 days leads to a reduction of the maximum oxygen consumption (25%), and that the drop training has to do with low muscle strength, and this depends on the duration of stopping the increased duration of downtime (6),

also agreed that the results of the current study with Costel and Uellemor (Wilmore JH study, Costill DL, 1994), which aimed to effect

disconnection of training on my recipe strength and ability The results have shown to have 45% of muscle strength and muscle 8-15% of the capacity due to interruption of training. (13).

Through the results table (3) it is clear that there are significant differences between the results of the tribal measurements and a posteriori and in favor of tribal measurements among a sample search variables (body weight, fixed strength to the muscles of the two leg, the fixed strength of the muscles of the back, throw-in, the enemy of 30 m, running zigzag, endurance and vertical jump).

It is known that exercise muscle strength is important and vital for the physical performance in the sport of football, which indicate the results of research conducted on footballers Danes and Norwegians to the importance of muscle strength component in addition to the aerobic capacity of the continuing physical and technical performance of the player in top form throughout the 90 minutes of play. (5)

As well as notes by the results table (4), (5) increase in the average body weight of the players after a period of interruption of training, reaching - 11.2% change kg Ohz is consistent with the results of a study Srkinj (Sergei 2003) to increase the proportion of fat to the players during the period Outage for training. (11)

VI.CONCLUSIONS

For In the study sample and procedures and tools used light and in light of the results that have been reached to conclude the following:

- 1) Increase the proportion of fat to the players and that due to the increase in the average body weight they have.
- 2) Low levels of muscle power of the legs, back, and also the ability of the two men after stopping the training compared to the period before you stop training.
- 3) Outage affects about training in some other physical variables such as speeding, agility and distance throw.

VII.RECOMMENDATIONS

Based on the conclusions of the study, we recommend the following:

- 1) The need to develop alternative programs and the use of the training camps of the facade of the emergency conditions that may hinder the performance of their doses training.
- 2) The interest in the development of muscular strength and power programs for football players, especially during stop training and periods of transition periods.
- 3) The early start in the general preparation periods or early season training in a gradual, especially when you stop training or after the transition period.
- 4) Help of training programs through compensatory stop training of swimming and exercises outdoors to keep your fitness and skill levels periods.
- 5) Conduct similar studies to determine the impact to stop training on the skill level of the athletes.

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