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# Abstract

Which require Allowathb during the performance in a moment promote transfer of the horizontal speed of the center of gravity to the vertical speed at the lowest possible loss of speed gained from approaching

Requirements include the effectiveness of the motor's long jump, be the outcome resulting from the approach speed, in addition to the amount of power resulting from the upgrade, access leading to high rates of speed at the beginning of aviation and to have a high flight path Allowathb appropriate to be effective. (J. Aweys, 1989; 297)

The most important physical attributes that play an important and positive influence in the development of Falipalothb long and closely linked to motor performance and requirements is the description of the explosive capacity of the two men, and that the use of training Albleomturk of the factors that lead to the explosive increase the capacity of the two men, and for the purpose of developing strength and speed of movement, where allow for the nervous system Pthvezokpr number of muscle fibers and the development of Almnaqbdp Naqbadatha sequence leading to the production of a larger force, (H.A. Mohammad, 1992: 6) and supply only motor performance requirements as a result of the event, is to combine maximum strength and speed together to achieve a high degree of status of the explosive capacity of the two men to be developed.

It means to be a positive influence in the development of explosive power with less effort and time is Albulayomturk exercises that include jumping Tmarenat types of interference from various jumping exercises, including deep, "the exercises which are based on the fall of a man and a higher place one or both men to the ground followed by the vertical jumping up or forward power and high speed (A. Levchenko, Matveev, 1989:73)

The importance of the research based on the principle of the use of different heights for wooden boxes heights of 20 cm, 40 cm, 60 cm, and find out which one is more influential in the development of explosive power and improve the level of digital Falipalothb term.

Key words: boxes, explosive ability, long jump.

# The research problem:

It has been noted researcher through his teaching and coaching in the stage of upgrading totally irresponsible to change the course of the body center of gravity resulting from the force of evolution in the long jump one point, the basic technical and it is one of the difficulties on Allowathb. The fact that the main burden falls on the legs, which it is based Allowathb from the ground to reach a flight assist at the performance of the skill of making a better point is that the more explosive power of the two men helped him whenever Allowathb to achieve maximum height perpendicular to the body Allowathb to improve the quality of achievement. Prompting the researcher to use different altitudes of the funds, scientifically sound knowledge of any of the heights is the best and the best in the explosive development of the ability of the two men, which reflect the development level of performance when the performance of the skill of the litmus tests of significance on the evolution of the explosive capacity of the two men as well as the ability to recruit Allowathb this effort level of achievement in the development of digital

# **Goals Search:**

1 - see the effects of altitude (20 - 40 - 60) cm from the funds in the development of the capacity of the explosive two-digit level and the effectiveness of the long jump.

2 - Find out which rises more influential in the development of the capacity of the explosive two-digit level and the effectiveness of the long jump

# **Hypotheses:**

1 - There are significant differences between groups in tests before and after the explosive capacity and level of digital Falipalothb term.

2 - There are significant differences between the heights of deep jump and capacity development in the explosive tests before and after tests for a posteriori.

# The research methodology and procedures of the field:

# Research Methodology:

User:Researcher used the experimental method design groups equal the essence of the experimental method

# Sample Search:

Phase of the study included students from the second phase of the Faculty of Physical Education at the University of Babylon for the academic year 2007-2008 and took the test on the people of a, b, c, totaling 30 students from a total of 100 randomly selected students has been distributed by the sample (C.P.

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Donald, 1984) students of the group became one of our three groups and so we have three groups of experimental groups were divided randomly by lot also, as the experimental group included the first performance in the high jump deep (60 cm) and ABG second experimental performance of the high jump deep (40 cm) and the third experimental group's performance on the high jump deep (20 cm ) and control on the variable of performance art (technique) for the long jump lay-researcher training programs for the study of research as he left under the control of the article and a professor of learning so as not to affect the accuracy of the results. Homogeneity of the sample has been made possible through measurements of height and age and weight as shown in the table (A., Ballesteros, 1991).

# Training curriculumBeen :

Laying the foundations for the proposed program Albleomturk as follows:-

-The program aims to develop the capacity of the two men using the explosive exercises Albleomturk as a modern means used to develop such capacity and for beginners the effectiveness of the long jump.

- Duration of the program nine weeks for the period 7.10.2007 until 11.12.2007 by training units per week ie total of eight units Ashrouhdp training program consists of three training sessions of the medium and free movement Ptmuj (1:2) The course is composed of medium (3) weeks.

- According to the rules of free training Albleomturk have used a researcher in the program intensity ranging from 50% to 70% of the maximum capacity Allowathb for the distance of horizontal and vertical Albulayomturk exercises and the number of groups 2-8 and the number of iterations from 4-10 repeatedly with the active rest period between the groups 2 -4 minutes between iterations of \$ 60-90 seconds. (C.P. Donald, 1984:31)

- After the research sample was divided in three groups of equal researcher prepared a training curriculum was adopted in drafting the results of physical tests consisting of exercises Albulayomturks style deep jump on the funds for the development of some variables Albayumkanikip and explosive ability and achievement as the deployment of each method to the experimental group was guided by their own measure Researcher height appropriate to the Fund every two weeks, both of the two men together or each man individually to determine the appropriate height for each hopper.

- The time allocated for training jump deep three elevations (20, 40, 60) cm long

implementation of the

program ranges between 50-60 minutes.

- Taking into account the principle of increasing intensity through the maximum height of the wooden box on the hopper for each unit of 20-75 cm..

Group	Weeks	Number	Exercise	Rest	Rest	Time	Intensity
		of the	frequency	between	between	performan-	
		Group		repetitions	the	ce	
					Group		
1	One	5	6	10	2.30 - 4	S 2 - 3	% 50 - 70
2	Two	5	7	10	2.30 - 4	S 2 - 3	% 50 - 70
3	Three	5	5	10	2.30 - 4	S 2 - 3	% 50 - 70
4	Four	5	7	10	2.30 - 4	S 2 - 3	% 50 - 70
5	Five	5	8	10	2.30 - 4	S 2 - 3	% 50 - 70
6	Sixe	5	6	10	2.30 - 4	S 2 - 3	% 50 - 70
7	Seven	5	8	10	2.30 - 4	S 2 - 3	% 50 - 70
8	Eight	5	9	10	2.30 - 4	S 2 - 3	% 50 - 70
9	nine	5	7	10	2.30 - 4	S 2 - 3	% 50 - 70

# Table (1) shows the formation of free training exercises Albleomturk

# **Posteriori tests:**

The researcher tests a posteriori the research sample on Monday and Tuesday 16-17/12/2007 tribal style test himself and was keen to find the test conditions and requirements of the tribal in all the tests. **Present the results and analysis** 

# Statistical methods :

- Arithmetic mean , test (t) corresponding to the samples , - test (f) , - test LSD

Table (2) shows the results of the tests Alqublipualbaadip of the first experimental group (60 cm)

Variables	Teams	Teams	Calculated value	Significance
	circles	deviations	of(T)	level
Long jump	-0.360	0.09	-12.75	0.00
Ran 30 meters	0.756	0.26	9.31	0.00
Vertical jump	-7.856	0.55	-45.45	0.00
Hgelat right 5	-0.650	0.06	-34.58	0.00
Hgelat left 5	-0.624	0.07	-26.73	0.00

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Table (3) shows the results of tests before and after the group Altieribipalthanip (40 cm)

	-			~
Variables	Teams	Teams	Calculated	Significance
	circles	deviations	value of(T)	level
Long jump	-0.099	0.05	-5.82	0.00
Ran 30 meters	0.329	0.18	5.83	0.00
Vertical jump	-5.900	0.43	-42.95	0.00
Hgelat right 5	-0.465	0.04	-36.95	0.00
Hgelat left 5	-0.466	0.04	-37.05	0.00

(\*)Since the significance levels of less than 0.05, it means that significant differences between tests before and after the group

Table (4) shows the results of tests before and after the third experimental group (20 cm)

Variables	Teams	Teams	Calculated value	Significance
	circles	deviations	of(T)	level
Long jump	-0.121	0.04	-8.89	0.00
Ran 30 meters	0.311	0.18	5.54	0.00
Vertical jump	-4.940	0.55	-28.60	0.00
Hgelat right 5	-0.443	0.04	-35.26	0.00
Hgelat left 5	-0.451	0.04	-32.54	0.00

(\*)Since the significance levels of less than 0.05, it means that significant differences between tests before and after the group

Table (5) shows the results of analysis of variance and the value of (q) and calculated the level of significance

Variables	Source of variation	Sum of squares	Degrees of	Mean- Square	Values (f), calculated	Significance level
			freedom			
Long	Groups	0.494	2	0.247		
jump	Within	1.128	27	0.042	5.909	0.007
Don 20	Groups	1 1 2 1	2	0.565		
Kall 50	Groups	1.131	2	0.303		0.004
meters	Within	1 520	27	0.056	10.043	0.001
	groups	1.520	21	0.050		
Vertical	Groups	44.896	2	22.448		
jump	Within groups	119.198	27	4.415	5.085	0.013
Hgelat	Groups	0.292	2	0.146		
right 5	Within groups	0.560	27	0.021	7.053	0.003
Hgelat left	Groups	0.226	2	0.113		
5	Within groups	0.514	27	0.019	5.924	0.007

(\*) Since the levels of significance equal to or less than 0.05, it means that significant differences between the three groups in these variables a posteriori

Table (6) between the value of the least significant difference (LSD)

Variables	Groups	Teams circles	Significance level
Long jump	g (1) – g (2)	0.277(*)	0.005
	g (1) – g (3)	0.267(*)	0.007
	g (2) – g (3)	-0.010	0.914
	g (1) – g (2)	-0.396(*)	0.001
Ran 30 meters	g (1) – g (3)	-0.426(*)	0.000
	g (2) – g (3)	-0.030	0.780
	g (1) – g (2)	2.046(*)	0.038
Vertical jump	g (1) – g (3)	2.919(*)	0.004
	g (2) – g (3)	0.873	0.361
Hgelat right 5	g (1) – g (2)	0.194(*)	0.006
	g(1) - g(3)	0.222(*)	0.002

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	g (2) – g (3)	0.028	0.667
Hgelat left 5	g (1) – g (2)	0.176(*)	0.008
	g (1) – g (3)	0.191(*)	0.005
	g(2) - g(3)	0.015	0.810

(\*) Since some level of significance equal to or less than 0.05, it means that the differencesMorale among the three groups in these variables

# Present the results of accomplishing the long jump for the three experimental groups

#### Table (7) shows the results of the tests Algublipualbaadip of the first experimental group (60 cm) in Achievement

Variables	Teams circles	Teams deviations	Calculated value of(T)	Significance level
Achievement				
	-0.348	0.01	-174.00	0.00

(\*) Since the significance levels of less than 0.05, it means that significant differences between tests before and after the group.

**Table (8)** shows the results of the tests Alqublipualbaadip of the two experimental group (40 cm) in Achievement

Variables	Teams	Teams	Calculated value	Significance
	circles	deviations	of(T)	level
Achievement	-0.313	0.04	-25.09	0.00

(\*) Since the significance levels of less than 0.05, it means that significant differences between tests before and after the group .

Table (9) shows the results of the tests Alqublipualbaadip of the two experimental group (20 cm) in Achievement

Variables	Teams circles	Teams deviations	Calculated value of(T)	Significance level
Achievement				
	-0.220	0.04	-19.38	0.00

(\*) Since the significance levels of less than 0.05, it means that significant differences between tests before and after the group .

Table (10) shows the results of analysis of variance and the value of (q) and calculated the level of significance

Variables	Source of	Sum of	Degrees	Mean-	Values (f),	Significance level
	variation	squares	of	Square	calculated	
			freedom			
Achievement	Groups	0.494	2	0.247		
	Within	1 1 2 8	27	0.042	5.909	0.007
	groups	1.120	27	0.042		

(\*) Since the levels of significance equal to or less than 0.05, it means that significant differences between the three groups in these variables a posteriori

 Table (11) between the value of the least significant difference (LSD)

Variables	Groups	Teams circles	Significance level
Achievement	g (1) – g (2)	0.047	0.462
	g(1) - g(3)	0.203(*)	0.003
	g(2) - g(3)	0.156(*)	0.020

(\*) Since some level of significance equal to or less than 0.05, it means that the differencesMorale among the three groups in these variables

Note from the results presented in the tables, which included tests of explosive power, which represents the totals of the three experimental results showed that there are significant differences between the circles for the calculation results of the tests a posteriori, although the intensity of exercise in terms of altitude used for each sample was able to program for the development of horizontal speed of the moment, we find that upgrading Allowathb to improve performance when trying to achieve the highest possible vertical height so that it can get to fly to the highest point this has to do two variables are key. A prompt start and the momentum which it is based Allowathb of land to achieve maximum height during the vertical flight path, it is the horizontal distance to achieve better mechanical Taadalhdv for the long jump and defined three key elements of the horizontal speed and vertical speed and high center of gravity of the body during the advancement that is affected by force from the moment of the promotion. (A. Ballesteros, 1991:137) and is associated with a time of advancement, we find that as soon leave the land the greater the chance his vehicle under the influence of the horizontal speed, thus increasing the horizontal distance achieved by the additional level of Our JOURNAL is nationally acknowledged by C.N.C.S.I.S., being included in the B+ category publications, 2008-2010.

The journal is indexed in: 1. INDEX COPERNICUS JOURNAL MASTER LIST. 2. DOAJ DIRECTORY OF OPEN ACCES JOURNALS, 2009, 3. SOCOLAR departure. Allowathb as having the ability in the highest vertical jump height gain a good position to do this, aviation and depends on the ability to enjoy Allowathb of the explosive force of two men. (M.I. Saad, 1996:44) we find that the rate of speed approaching the speed of vertical turns to acquire Allowathb Ntejthaartga good outcomes coming up and forward Check the horizontal distance of the leap. and speed is of the variables that control the level of effectiveness of the digital long jump, in addition to upgrading that force is a key influential variable in this event, since the force associated with upgrading as soon as gained during the Alrkdp Rough, and the variable force is affected by raising exercises Albulayomturk used to Ttoiralqop. (A.G.O. Mohamed, 1990:333) And we reached the center of gravity body Allowathb maximum height during the vertical flight path technique allowed to perform well during the phase of flight and in preparation for the landing phase, since the increase in the high center of gravity is the result of common factors are increases in the high center of gravity before leaving the ground directly, and the angle of departure, and accelerate the instantaneous point of departure at the center of gravity directly. (S. Ahmed, 1996:242)

Note from the results presented in tables , which included tests of explosive power, which represents the totals of the three experimental results showed that there are significant differences between the circles for the calculation results of the tests a posteriori, although the intensity of exercise in terms of altitude used for each sample was able to program for the development of the capacity building requirements of the traps that are realistic and rigorous training process according to the principles of proper training, which led to the development of the three groups, due to style and format of the performance of exercises Albleomturk place on the same tracks in order to ensure the privacy of motor training and achieve the greatest benefit of them, as confirmed in this study. As a result of this "sporting achievement level rises rapidly during the use of new exercises is not used for sporting and special carrying doses" (A.N. Abdel, H.H. Kassem, 1988:105) has stimulated exercises that used to jump-style deep muscle groups to unite and lead the work out economically, which led to the development of capacity and the presence of explosive significant difference between the three groups improved explosive power should be used analysis of variance test for knowledge of moral distinctions, and the difference of the moral training of the three methods used in the explosive development of the capacity of a sample search must therefore make use of the test is less significant difference LSD to see any of the methods best course in the development of capacity explosive of the members of the research sample, the results showed that clear in the table (D.R. Chu, 1988), the first experimental group trained at an altitude of funds jumped to 60 cm deep was the best groups, which make the results of the sample in the tests is the best and that is the result of the effectiveness of deep

jump, which has become a way for the development of musculature in order to respond more quickly and strongly during the performance of movements requiring muscle ups immediately followed by a palace in the muscle itself (D.R. Chu, 1988:12). We also note that the second and third groups have evolved at rates close despite the fact that the second best of the third set reaching out for billing, but the improvement in the performance of the two groups led to the development of muscles to extend the working muscles and joints of the two men enough high-speed, which had an effective impact in increasing the rate of this tide by the use of training Albulayomturk style deep jump that led to the development of the three groups, as is the training methods of these rises and successful training methods to develop the capacity explosive, but at rates degrees as high levels of funds used with the start-ups and young people prefer to range between (50 cm - 80 cm) in order to exercise influence, not a threat and this is what has already been achieved in tests of the groups that the group being trained at a height of 60 cm was the best, followed by groups Alachritan. As a result of jumping exercises Albulayomturk style deep Ttorp speed and power as there are significant correlation between the two elements of speed and power can not be of the muscle or muscle group would quickly crunch were not strong enough for such a performance (O. Mohamed, 1990:120) for the improved and developed rapidly to all the research sample.

# **Conclusions and recommendations: Conclusions:**

1 - afternoon Ttorvi explosive development of capacity and achievement Balothb run through tests before and after the research sample.

2 - The experimental group used the deep jump from the high 60 cm had more impact in the development of explosive power and achievement Balothb term aggregates the second and third.

3 - The experimental group used to jump deep 40 cm high had more impact in the development of achievement Balothb long ABG III.

4 - The training curriculum proposed for the deep bounce helps to improve in the long jump Alanejazalno.i 5-2.

# **Recommendations:**

1 - Use a training curriculum to jump deep into the proposal and described the physical preparation of the effectiveness of various types of jump.

2 - the need to provide funds designed to bounce deep into the potential of learning activities and field athletics and training.

3 - Conduct similar studies using the higher altitudes and greater volumes of applicants.

4 - The need to use exercises Albulayomturk (jumping deep) from a height of 60 cm for beginners and beginners.

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References

- ABDEL, A.N., KASSEM, H.H., 1988, Principles of sports training, Baghdad: Higher Education Press, p, 105.
- AHMED, S., 1996, The entrance to the meaning and Vhom Albulayomtri and the importance of work, the first episode, a publication of athletics, Cairo: International Federation of Amateur Athletic Association, Center for Regional Development, No. 18, p. 242.
- AWEYS, J., 1989, athletics between theory and application, the Office of the machine socialist writer, ,p , 297.
- **BALLESTEROS, A., 1991,** Foundations and principles of education and training in athletics, the International Federation of Athletics, Center for Regional Development in Cairo, the translation Osman rose, Mahmoud Fathy ,p, 137.
- CHU, D.R., 1988: jumping into ply metrics: NSCA. Journal ,p, 12.

- **DONALD, C.P., 1984,** Jumping into Ply metrics, 2<sup>nd</sup> ., ed., California, Athlete & coach, Vol. 22, p, 6-31.
- **LEVCHENKO, A., MATVEEV, 1989,** A-speed-strength training for jumpers, soviet sports, p. 73.
- MOHAMED, A.G.O., 1990, Encyclopedia Athletics (Technik - Training - Education - Arbitration), Dar Al-Qalam, the first edition, p, 333.
- MOHAMMAD, H.A., 1992, Flag of sports training, i 12, Cairo: Dar knowledge, ,p, 6.
- MOHAMED, O., 1990, motor learning and sports training, Kuwait: Dar Al-Qalam Publishing and Distribution, p, 120.
- SAAD, M.I., 1996, Effect of training methods to develop explosive power of the two men and arms in the remote precision jumping high in the handball, PhD thesis, Faculty of Physical Education, Baghdad University, p,44.

# EXAMINATION OF THE INJURIES ON THE MUAY THAI ATHLETES

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# Abstract

**Objective:** The aim of the study, investigated the injuries of athletes who compete at elite level in Muay Thai in Turkey and seventy Muay Thai athletes participated volunteer.

**Method:** In the study "Athlete's Profile Questionnare" was applied to determine Muay Thai athlete's level of injuries that was modeled by M. Kazemi et al. (2005). The frequency and the percentage of research results were determined by us. Chi-Square test was used for differences between some variables.

**Results:** To the study, 24 female athlete (ages  $17,75\pm2,93$  years, sports ages  $7,00\pm2,88$  years, heights  $8,24\pm32,32$  m, weights  $56,56\pm7,75$  kg); 46 male athlete (ages  $18,33\pm2,76$  years, sports ages  $7,28\pm3,07$  years, heights  $1,77\pm0,17m$ , weights  $64,48\pm11,08$  kg) participated.

Frequency and the percentage according to the injuries types: Females; Sprain 3 (% 12,5), muscle cramp 1 (% 4,2), bruise 4 (% 16,7); Males; Sprain 8 (% 17,3), muscle cramp 2 (% 4,3), bruise 14 (% 30,4). Female athletes were injured of neck %4,2, lower extremities %29,3; male athletes were injured of body %2,2, upper extremities % 109 and lower extremities % 71,7. Female athletes were injured in training of 5 (% 20,8), in competition 3 (% 12,5); male athletes were injured in training of 13 (% 28,3), in competition 11 (% 23,9).

**Conclusion:** It was seen that the athletes did not live very critical of injuries. Athletes used in terms of health protective equipment more in competition. It was considered that the protective equipment pay did not attention in training.

Key Words: Muay Thai; İnjury; Sport.

# Introduction

Most of the in martial arts athletes do training 2 or 4 times in a week. Also, training hours and frequency in any sports may change depending on competition levels of individuals and sports' currency. Training can be defined as improving athletes' skills. A specific training can change between each of the athletes but there is a general format that is followed. The training sections often start with warming or usual streching; that is followed by kick, self-defense,

training forms and sparing exercises (M. Kazemi, H. Shearer and Y.S. Choung, 2005; R.M. Buschbacher and T. Shay, 1999). The martial arts sports are done with the aims such as self-defense, mental discipline, body and mental consistency, physical condition (N. Merrilee et al., 2000). Muay Thai is martial arts of Tayland which lets kick, knee and elbow using. It supports both physical and mental development, also emphasizes many useful disciplinaries, respect and morale (C. Suhongsa, 1999). It is estimated that its