

ثانيا الملخص باللغة الإنجليزية

Introduction and research problem

The field of handball it consider from the physical fields which are affected with wield positive improvement in the field of physical education science improvement of the methods the ways of training preparation of the player and it consider as an important field because it depends on the high level of physical fitness as well as quality o skillful and planning consideration while all of these consider as an important consideration for the player and team preparation. (78 : 85)

The physical preparation for any activity from the physical preparation, it consider as a fundamental support for the improvement of the level of achievement in physical activities and safe the level of the player which he reached. (27 : 23)

The muscular power it consider as an important physical ability and movement which affect on the level of achievements in the physical actives while it consider from the fundamental abilities in all shapes of physical activities while the degree of its abilities differs with the achievement of each physical abilities. (46 : 129)

Mohamed Hassan Alawy Pointed out and Mohamed Nasr El-Deen (2001) that the improvement of muscular power and its effects for the improvement of some physical characters or some components of other physical abilities such as speed ability general appearance coordination of body buildings also it consider as an important part in the speed of running, on the other hand its effects on the change of speed and body positions changes, these compounats, it consider as a fundamental fitness and appearance it was clear in handball game during practicing of movements tricks and defensive movements, such as faring the defense (83 : 16)

Layla Labebe and others (1993) remember that the rapid factor in handball game help the player from practicing the fundamental skills with suitable speed and help him from movement and rapid transferring inside, the design of the playground during the fighting process (71 : 61)

For the importance of the power and speed factor for the handball player, the Egyptian Union of handball arranged an important, extra values for the junior games and centers of training the excellent and whom gaining extra point's such as:

- Recording the registered aim from the rapid defense with two points aims with the arrival of the middle of the playground.

- Recording the registered aim from outside the ninths and result from the concentration with jumping with three points aims.
- Recording the registered aim from outside the ninths and result from the concentration with two points aim from the following of the national and international games and the motional group was weak level in the international cub for young 2003 in Brazil with less minimal level with the limitation of fighting and also defense as well as weakness of the muscular power and the speed with different types it is related two factors important fundamental factors in the group games as a general and in handball in special way and handball especially it is related to deficiency of physiological characteristics of the players and it is related to deterioration of their general levels with their suffering from general weakness for this reason the player must be with excellent physical skillful abilities as well as the high functional abilities.

The results for Emad El-Deen Abs Aboo-zeed (1998) pointed out in the field of handball that the high physical standards which the excellent individual, reached, characterized with certain abilities, some of these abilities the physical fitness physiological changes if it was separately or connected with each others (52 : 112)

As regard the previous studies (36) (57) (58) (94) (95) (108) and (114) that the shortages and poor training programs in the field of handball which aims to the improvement of muscular power with its different types and know the effect of these element, on the speed with their different types general fitness and some physiological changes which infusce the research to do this study to identify the effect of the suggested teaching, practicing program for improving the muscular power by this study to know as a triale for improvement of the skillful standard and some physiological and physical changes for handball player.

Aim of the study:

Design of training program for improvement o muscular power for handball player to identify:

1. the effect of suggested training program for improvement of (maximum power – special power with speed – endurance power) for this research of game.

2. the effect of the suggested training program for the improvement of (speed reaction – movable speed – agility) for the research of game.
3. the effect of the suggested training program on the skillful achievement level for the research study sample.
4. The effect of the suggested training program on some physiological changes (Heart rate, physical efficacy, concentration of lactic acid in blood research hypothesis).

Research hypothesis:

1. There were a significance difference of from first to second assessment in each of the following (maximum power, special power with speed endurance of power) for the second assessment as regard the study samples
2. there were statistical significance differences between first to second assessment and its effect on (speed reaction, transverse speed, agility) for the second assessment as regard the study samples.
3. there were statistical significance differences from first to second assessment in the skillful performance level for the second assessment as regard the study samples
4. there were statistical significance differences from second assessment as regard some physiological changes (Heart rate physical fitness concentration of lactic acid in the blood) for the second assessment of the study group.

Research methodology:

The research was used the experimental research approach for designing the first and second assessment for each group.

Community and sample of the study:

The study sample was included the excellent player from clubs B of Assiut Governorate for handball players their numbers (2) during the session o training 2004 – 2005 for whom are registered in the Egyptian handball group and the sample size was included (20) player of registered handball player in the Egyptian union handball in the Petrol club of Assiut Governorate was selected by the random sample and the sample of the study it was (14) player and excluded 6 player for their discontinuity in the training program variable changes.

Variables of the research:

The researcher determined the research variables according to the different considerations imposed by the theoretical frame of the research and the related studies. These variables are:

- Special measurement for physical performance standard.
- Special measurement for the skillful performance level.
- Special measurement for the physiological changes.
- Special measurement for biochemical changes.

Tools and apparatus used:

For the application of the aims of the research the following tools and apparatus was used:

1. Apparatuses used:

- Rasta meter apparatus for measurement of height.
- Medical weight scale.
- Apparatus with different multaimis for the improvement of the muscular power.
- Stop watch for deriding the time.
- Dynamometer for muscular power.
- Apparatus for measurement of lactic acid concentration.

Tools:

- Wall and shock
- Damdballs with different culorr handballs
- Medical ball.
- Aim for handball.
- Playground for handball .

The statistical analysis methods

- Mean.
- Standard deviation
- Median
- Multiple regration.
- T. test.
- The average of improvement.
- The correlation coefficient
- One way ANOVA .

* Test of L.S.D.

The conclusions:

According to the results of the study reached by the researcher, in the light of the statistical treatment, in the scope of the research objectives and the selected sample, the following conclusions were reached:

1. there were statistical significant positive differences for improvement of muscular power (maximum power special speed power, endurance power) with multiple regration with percentage between (19, 0.2% - 52.59%).
2. the training program specialized for the muscular power was used (weights) and there were statistical significance positive differences among the improvement of physical change's of the study group, while there were a regration among the other factors with slight improvement (8.7%, 11.54%).
3. the training program specially for the muscular power by using free weights with positive effects for the improvement of the skillful level with improvement of skillful performance (1.92% - 36.02%).
4. Special training program for improvement of muscular power with using weight and there was an improvement in the functional skillful efficiency level for the physiological changes as regard the research study with a percentage of improvement between (2.58% - 19.58%),
5. training program for improving the muscular power for improving lactic acid concentration in rest and after effort with a percentage of improvement between (7.72% - 11.63%).

Recommendations:

1. Using training of weight (multiple weight – Free weight) for decrease – high stretching and the study revealed that there were an improvement for muicular power.
2. Important of caring for trainers with the improvement of muscular power.
3. Importance of trainers for the physiological and biochemical measurements for physical measurement, to identify the efficiency of handball players muscular power.
4. There were certain differences between players while the specialists arranged a training program must keep in their mind this fact.

5. Importance of training weight movements program.
6. Planning for training according to the standard of improvement of the player.
7. Application of training program according to age fro handball team.
8. direction of the students for the importants f the physiological and biochemical field of the player as well as skillful and physical standard.
9. Direction of the results of the study for improvement of the training program for the benefits of handball.



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The effect of training program for the improvement of muscular power on the level of skillful practice standard and some physical and physiological changes for handball players.

Thesis

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