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Using falling (deep) Jump training units to improve the explosive and characterized by speed forces for the badminton players

Dr. Huda Shihab College of physical education, and sport science for girls

Dr.Suhad Qasim AlMosawi College of physical education, and sport science for girls

Afhraa Hussein Hamza College of physical education, and sport science for girls

ABSTRACT

The research abstract included introduction and the importance of the research, also included display of the problem represented by weakness for the players when performing some of the basic skills in badminton and the shuttle not reaching to the back corners of the court which gives the player the opportunity to win through applying the pressure on the opponent and make him away from the control center(T) which definitely required level of a collection muscular strength contributed in performance perhaps this related to a number of reasons related with weakness in physical changes especially explosive and characterized by speed forces for the badminton players and be acquainted with them and knowing the extent of their effect in performance, based on this the researcher resorted to study the effect of the training units of falling(deep) jump to develop the explosive and characterized by speed forces for the badminton players. The research problem is exclusive by lack of the coaches attention in perfect way to develop the explosive and that characterized by speed forces on which the basic skills of badminton and the reason of the improvement occurred for the experimental community comes as a result of using the independent variable for training units of the falling(deep) jump which effected actively on the players' performance. The researcher has used the experimental method and the research sample was chosen from the young players certified by the Iraqi badminton central union of age groups(14-16) years old affiliated to Al-Athori club amounted (6) players.

KEYWORDS

The research objectives:
Setting training units of falling(deep) jump.

Identifying the effect of falling(deep) jump training units to improve the explosive and that characterized by speed forces for badminton players

Identifying the effect of falling(deep) jump training units on some of functional changes.

Identifying of the research

The introduction and importance of the research
practicing the sport training leads to functional changes in the organs of the body as whole and as a result of practicing the training for along time and regular and rationed method, there occurred functional adaptabilities in various organs of the body in general and especially in heart organ, but these functional adaptabilities occurred either as peripheral or central changes and the central adaptabilities are known that occurred inside the heart vascular system which are as a result of practicing the regular and rationed sport training for long periods which are a collection of factors and psychological changes which effect on the heart muscle ability to obtain blood and pumping it to provide the blood with (oxygen and energy) for the operating muscles and amongst these factors the heart pulse rate the number of the beat also .

Upon this concentrated and via the researcher scientific attempt to explore modern training units alternatives via using the falling (deep) jump in light with the kinetic performance paths of its basic skills and using them in means of developing the collection of contributing muscles towards developing the operating muscles in skillful performance and the second importance this study participating in it , is to draw the coaches attention for updated training units on which the training programs depended to develop its physical features of badminton as alternative for other classical training units, in this it is considered constructive study of the coaches work and their training programs and from it could access sound planning state to promote the physical and skillful aspects of the young players and to develop the game and expand its popularity in our beloved Iraq.

The objectives:
1-Setting the falling(deep) training units.

2-Identifying the effect of falling(deep) jump training units to improve the explosive and that characterized by speed forces for badminton players

Identifying the effect of falling(deep) jump training units on some of functional variables.

The research hypotheses:
1- There are differences of statistical significance among the pre and post- tests results for the control and experimental groups the explosive and characterized by speed forces for the badminton players in favor of post-tests.
2- There are differences of statistical significance among the pre and post- tests resulted from some of functional changes of badminton players in favor of post-tests.

The research scopes:-
- The human scope: Al-Athori sport club badminton young players of age groups(14-16) years old.
- Time scope for the period (20/1/2016-20/3/2016)
- Special scope:-Al-Athori sport court club of badminton.

The research method and its field procedures:
2-1 The research method
The researcher has used the experimental method

In one of its basic designs(called design of the equivalent two collections) for its suitability of this design with the nature of the research problem, where the experimental researches are considered the most precise scientific researches could effect on the correlation between the independent and the affiliated variable in the experiment.

2-2 The research community and the research sample

Choosing the sample from items and basics of the main scientific research for they represented the original community and the model on which the researcher performed his research as whole and the pivot of his work.

The community of the research is represented by two young category of badminton players of age groups(14-16) years old of Al-Athori sport club amounted (10) players and they are chosen deliberately.

As for the research sample, it has chosen(6) players from them in deliberate manner for the main research experiment to consist the research sample of(60%) of the original research and the reasons behind choosing this sample for the availability of the security aspect and the players' participation who are achieving the study objectives by training and regularity in attendance its training units with the specialized coaches, besides the availability the current necessary material potentials for the study and the researcher purposed to perform consistence for them to secure the interior safety for experimental design of the study of the interior variables of effect on some of the study tests and has represented in height, weight also the time and training period as illustrated in table.

Table (1)

Consistence of the research sample with Anthropometric measures

Variables	No.	Mean	mediator	Standard .deviation	Torsion coefficient
Height (CM)	6	15567	155	6.683	0.326
Weight(Kg)	6	71.17	75	12.238	0.641-
Time period(year)	6	15.5	16	0.873	1.537-
Training period (year)	6	5.33	5	1.033	0.666

We could notice from table (1) that the value of torsion coefficient was confined among(±1) and this illustrated the consistence of the research sample referred to in the table and all their distribution within the natural curve.

3-3 means ,tools and devices used in gathering data.

"Mohammed Khaleel et al.., mentioned that(specifying the suitable tool in light with the research objectives, hypotheses and the questions aiming to answer them and the tools are the means which the researcher used to obtain data"

4-3 The research field procedures

Three long jump test.

Long jump from stability

Oblique backing (Shnaw)by leaning and stretching the arms on the earth for 10 seconds.

Measuring pulse rate

systolic blood pressure

Vital capacity.

Display, analyzing and discussing results

Display of the results and analyzing and discussing the research variables for the control and experimental groups of the pre and post tests.

Table (2)

Illustrated means and standard deviations for the post tests of the control and experimental groups and calculated(T) value and the significance level.

Tests	Control community		Experimental community		Calculated(T) value	Type of significance
	-mean	S.D	- mean	S.D		
The explosive force for the legs	40.41	2.43	41.13	4.01	3.72	significance
The force characterized by speed for the arms	8.96	1.13	9.63	1.32	5.371	significance
Pulse Rates	71.3	0.92	71.19	1.12	3.118	significance
Systolic blood pressure	115.28	3.421	118.47	1.31	4.142	significance
Vital capacity	433.1	2581.1	491.21	316.1	4.261	significance

Table(3) illustrated that there are significant differences in the post - test for the control and experimental groups in favor of the experimental group of the research variables(the explosive force, the force characterized by speed, pulse rate, systolic blood pressure and the vital capacity) and the researcher ascribed these significant differences to two types of training units set in the main part of the training unit used for the experimental group and the method of the used training and the process of manipulation of time and gradation in intensity of the training units leads to remarkable development, and the researcher ascribed this to biometric training of the explosive force of the arms muscles used during throwing the medical balls with various weights and positions during them, the muscle is loaded with increasing tolerance loads and this increasing load to develop the efficiency for stretching ring-shortening in muscle and during the decentralized tolerance of contraction, a large amount of energy saved. The improvement occurred in (pulse rate, systolic blood pressure, and increasing of vital capacity) resulted in increase

Exchange of gases with the blood, and(Alawi Abdulfatah) has mentioned that the sport training lead to increase the breathing muscles strength, and increasing the vital capacity of the lungs also increase the amount of breathing air.

Conclusions:-

The statistical evaluation results in applying training of falling(deep) jump have showed positive development in favor of the experimental sample of the research which coincident with the training along the experiment period.

There appeared improvement in the explosive force as a result of using some biometric exercises.

The exercises of the falling(deep) jump have helped to develop some of functional changes.

2-5 Recommendations

The researcher has set the following recommendations depended on what is access by the current research of recommendations that should be observed.

The necessity of emphasizing on training process in using exercises of the falling(deep) jump for their direct effect on performance.

Emphasizing on diversity of exercises related with the falling(deep) jump via diversity of heights.

Performing similar studies on another skills and games

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