Effect of Plyometric Training on the Skills of Football Players

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Abstract :-

The scholar selected the research study that the "Effect of plyometric training on the football skills of football player. For the study the scholar selected SAI football skills containing (1) 30 mtrs. running ball (2) Kinking the ball in goal and (3) Jugging the ball. The scholar selected 22 football player of independent club and given them 5 weeks plyometric exercise training for 1 hour daily in the evening. After the 5 week training of plyometric exercises the scholar collected the scores of football skills of football players and in the beginning before starting the plyometric training collected the scores. After the statistical analysis of the scores calculated the 't' value and compared the 't' value with tabulated 't' value which was greater than tabulated 't' value. Hence the scholar drawn the conclusion that there is positive significant effect of plyometric training on football skills of football players.

Key words :- *Plyometric, football skills, football players.*

Introduction :-

There are various number of exercise exit in the field of sports and games. Exercises like weight training isometric esoteric exercise, physical training, exercises, etc. still the sports coaches and sports scientist are trying to develop new methods of training the player. The sports scientist is in recent years developed the functional training imaginary training and plyometric training. Plyometric is known as "plyos" this training method is used to develop the explosive power of muscles.

The scholar is himself a football player of independent club Amravati and coaching the players of the club.

Selection of the subject :-

For the study the scholar selected 22 football players of the Independent club, Amravati and explain them the importance of Plyometric training. All the players shown their willingness to participate in the plyometric training programme and co-operate the scholar.

The scholar decided to give the plyometric training in the evening from 4.30 to 5.30 pm because the players are coming for football practices in the evening. The scholar designed the plyometric exercise training for 5 weeks.

Hypothesis:-

The scholar made the hypothesis "that there is positive significant effect on the foot ball skills of the football player". For the football skills the scholar selected the SAI Football skills they are (1) 30 meters run with the ball (2) Kicking the ball in the goal and (3) Juggling the ball.

Methodology :-

The scholar selected the experimental method for the research the plyometric exercises selected by the scholar for the football players were (1) Medicine ball exercise (2) Jump on the box and off the box (3) Bounds (4) Hurdle hopping (5) Single leg hopping (6) Box Jump (7) Depth Jumps (8) Two legged Hops (9) Tuck Jump and (10) Incline push ups. The scholar gave the demonstration of plyometric exercises and ask them to perform these exercise one by one player on the 10 stations of exercise booths.

Before starting the plyometric training the scholar conducted the pre-test of the football skill of the football player and collected the scores and calculated means and standard deviation of football skill of the players give the table number 1 below.

Table No. :- The means and standard deviations of the SAI football skill of the football players before plyometric training

Sr. No.	Football skills	Pre-test	
		Mean mn	Standard deviation Sd.
1	30 meters Run with Ball.	2.45	0.54
2	Kicking the ball in the goal	2.45	0.59
3	Juggling the ball	1.90	0.68

Sources :-From the pre-test score of the SAI Football skills of football players.

Discussion :-The above table number 1 indicates the means and standard deviation of the scores of SAI football skill of 30 meters run with the ball is 2.45 and 0.59 the means of Kicking the ball in goal is 2.45 and standard deviation is 0.59 the means of juggling the ball is 1.90 and standard deviation is 0.68.

The scholar given the 5 weeks plyometric training. The football players and conducted post test of SAI football skills of the football players and scores were collected and means and standard deviation were calculated which are given below in the table number 2.

Table No. 2 :- The means and standard deviations of the football skills of football players.

Sr. No.	Football skills	Post-test	
		Mean mn	Standard deviation Sd.
1	30 meters Run with Ball.	3.09	0.48
2	Kicking the ball in the goal	2.97	0.09
3	Juggling the ball	2.95	0.21

Sources :-From the scores of post-test of football skills

Discussion :-The above table number two indicates the means and standard deviation of the scores of SAI football skill of 30 meters run with the ball is 3.09 and standard deviation 0.48. The means of kicking the ball in goal is 2.97 and standard deviation is 0.09. The means of juggling the ball is 2.95 and standard deviation is 0.21 these means and standard deviations are of the SAI football skills of football players are after 5 weeks training of plyometric exercises.

To see the effect of plyometric exercises training on the football skill of football players the scholar calculated 't' value between pre-test and post-test scores and compared it with tabulated 't' values.

Table No. 3 :- Means and standard deviations of pre-test and post-test scores of football skill of football players and calculated 't' values and tabulated 't' value

S.No.	Footb all skills	Pre-test		Post-test		Calculated 't' value	Tabulated 't' value
		mn	sd.	Mn	sd.		
1	30 meters Run with Ball.	2.45	0.59	3.09	0.48	3.81	2.81 at 0.07 level of significant and 21 degree of freedam
2	Kicking the ball in the goal	2.45	0.59	2.97	0.9	3.4	
3	Juggling the ball	1.90	0.68	2.95	0.21	11.95	

Source :-From the pre-test post-test score's means and standard deviation and calculated 't' value and statistical 't' values. Adopted by the permission from R.A. Fisher and F. yates, 1995 statically table for biological, agricultural and medical research (Essex united Kingdom Pearson Education) 46.

Discussion :-

The above table number indicated the pre-test and post-test means and standard deviation of the football skills of 30 mtrs. run with the ball; kick in the goal and juggling the ball scores. The calculated 't' value and tabulated 't' value. The calculated 't' value of 30 meter run with the ball is 3.81 whereas the tabulated 't' values 2.81 at 0.01 level of significance and 21 degree of freedom. The calculated value of Kicking in the goal is 3.4 where as the tabulated value is 2.81 at 0.01 level of significance and 21 degree of freedom. The calculated value of jugging the ball is 11.95 where as the tabulated value is 02.81 at 0.01 level of significance and 21 degree of freedom the calculated 't' values of all the three skills of football players are greater than tabulated 't' values hence the hypothesis made by the scholar is accepted.

Conclusion :-

The scholar drawn the conclusion that the plyometric training for 5 weeks has a positive significant effect on the ball skill of football players.

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