

Effect Of Plyometric Exercises Training On The SAI Basketball Skills Of The Players Of The Age Group 14 To 16 Years

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Abstract:-

the scholar selected the study “Effect of Plyometric Exercises training on the basketball Skills of the players of the age group 14 to 16 Years”, for the study 25 Basketball players were selected of age group 14 to 16 years of age. The players were given the plyometric exercise training for 2 months 90 minutes pe day excluding Sundays. The SAI basket ball skills selected were (i) Wall pass test (ii) Dribbling test (iii) Jumping and turning in the air. The tests were conducted before plyometric training and scores were recorded, after induction of 2 months training again the SAI basketball skills were tested and score recorded , which were further statistically analyzed and conclusion was drawn that there is positive significant effect of plyometric training on the SAI basketball skills test of basketball players.

Key words – SAI basketball skills, basketball players, Plyometric Exercises, Plyometric training.

The scholar being basket ball player observed that basketball is one of the popular and widely played games in schools and colleges in our country, parents send their kids to various clubs to play basketball for fitness and height gain scholar decided to undertake study of the age group 15to 18 years old, of basket ball club the average age of the players was 16.5 yrs.

The scholar decided to see the effect of plyometric training on the skills of basketball players, for study the scholar selected SAI basketball test battery consist of following three components

- (i)Wall pass test
- (ii)Dribbling test
- (iii) Jumping and turning in the air

The points for the skill decided by the SAI Basketball skill testing evaluation standards.

Age	Wall pass test	Dribbling test	Jumping and turning in the air	Points
14 yrs and above	45&more	12.7& less	630 & more	3
	40-44	12.8-13.1	540-629	2
	35-39	13.2-13.5	560-539	1

The Scholar selected 25 basketball players from basketball club for his research, and then the scholar designed the plyometric exercises and training schedule for selected players. The training

schedule was of 2 months daily 90 minutes in evening from 4 pm to 5.30 pm excluding Sundays on clubs basketball court.

The following exercises were selected by the scholar 1)Medicine ball exercise, 2)Jump on and off the box, 3)bonds, 4)Hurdle hopping, 5)Box jump, 6)Depth Jump, 7)Two leg hopping, 8)Single leg hopping, 9)Depth jumps, 10)Incline Pushups.

Hypothesis:-

The scholar made the hypothesis that there is positive significant effect of plyometric exercise training on SAI Basketball skill testing evaluation standards of players.

Before starting 2 months training of plyometric exercises , The Scholar conducted the SAI basketball skills test before the plyometric exercises training to players and collected the scores (pre test) , then mean and standard deviation of scores were calculated

Table No.1 Mean and standard deviation of pre test scores of SAI basket ball Skill Tests.

Sr. No	Basket Ball Skills	Pretest Mean	Standard Deviation
1	Wall pass test	1.48	0.64
2	Dribbling test	1.68	0.54
3	Jumping and turning in the air	1.28	0.39

Source: - From the actual scores recorded of pre test scores of SAI basket ball Skill Tests.

Discussion: -

The above table no. 1 reveals the scores (mean & standard deviation) before the start of the plyometric training for pre test of Wall pass test mean was 1.48 and standard deviation was 0.64. The Dribbling test mean was 1.68 and standard deviation was 0.54. The Jumping and turning in air mean was 1.28 and standard deviation was 0.39.

After 2 months training of plyometric exercises, the following exercise training given below were given to the Basket ball Players
 1) Medicine ball exercise, 2) Jump on and off the box, 3) bonds, 4) Hurdle hopping, 5) Box jump, 6) Depth Jump, 7) Two leg hopping, 8) Single leg hopping, 9) Depth jumps, 10) Incline Pushups.

The training schedule was of 90 minutes daily excluding Sundays. After the completion of training again the SAI Basketball skills test were performed on the players to record the post test scores after the training. The recorded scores were statistically treated and the mean and standard deviations was calculated, which are given in the following table no2

Table No.2 Mean and standard deviation of post test scores of SAI basket ball Skill Tests.

Sr. No	Basket Ball Skills	Post test Mean	Standard Deviation
1	Wall pass test	2.36	0.69
2	Dribbling test	2.64	0.48
3	Jumping and turning in the air	1.68	0.74

Source: - From the actual scores recorded of post test scores of SAI basket ball Skill Tests.

Discussion: -

The above table no. 2 displays the scores (mean & standard deviation) after the plyometric training (post test scores) of Wall pass test mean was 2.36 and standard deviation was 0.69. The Dribbling test mean was 2.64 and standard deviation was 0.48. The Jumping and turning in air mean was 1.68 and standard deviation was 0.74

Now to see the efficacy and impeccable results of the plyometric training given to Basket ball players the data comparison of pre test score and post test scores is done, this comparison is made by

calculating 't' values and comparing it with tabulated 't' values

Table No.3 Mean and standard deviation of Pre test and post test scores with calculated and tabulated 't' values respectively of SAI basket ball Skill Tests.

S r. n o.	variable	Pre-test		Post test		C al 't'	tabulated 't' value
		m e a n	s t d	m e a n	s t d		
1	Wall pass test	1.48	0.64	2.36	0.69	4.63	2.78 at level of significance 0.01 and degree of freedom 24
2	Dribbling test	1.68	0.54	2.64	0.48	6.85	
3	Jumping and turning in the air	1.28	0.39	1.68	0.74	4.00	

Source :- From the scores of Pre test and post test scores and calculated and tabulated 't' values respectively of SAI basket ball Skill Tests.

Discussion:-

From the above table no 3 has the scores (mean & standard deviation) before the start of the plyometric training for pre test of Wall pass test mean was 1.48 and standard deviation was 0.64. The Dribbling test mean was 1.68 and standard deviation was 0.54. The Jumping and turning in air mean was 1.28 and standard deviation was 0.39. It also show the scores of (mean & standard deviation) after the plyometric training (post test scores) of Wall pass test mean was 2.36 and standard deviation was 0.69. The Dribbling test mean was 2.64 and standard deviation was 0.48. The Jumping and turning in air mean was 1.68 and standard deviation was 0.74

To see the effect of Plyometric exercises training on SAI basket ball Skill Tests. The scholar Calculated 't' values of Wall pass test i.e. 4.63, Dribbling test is 6.85 and Jumping and turning in the air is 4.00 respectively, whereas the tabulated 't' value is 2.78 at 0.01 level of significance and 24 is degree of freedom, hence the hypothesis is proved that there is there is positive significant effect of

plyometric exercise training on SAI Basketball skill testing evaluation standards of players

Conclusion:-

The investigation establishes that the Calculated 't' values of Wall pass test i.e. 4.63, Dribbling test is 6.85 and Jumping and turning in the air is 4.00 respectively, whereas the tabulated 't' value is 2.78 at 0.01 level of significance and 24 is degree of freedom, hence the hypothesis is proved that there is positive significant effect of plyometric exercise training on SAI Basketball skill testing evaluation standards of players

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