

# EFFECT OF VARIED TRAINING PROGRAMMES ON DRIBBLING ABILITY OF INTERCOLLEGIATE MEN BASKETBALL PLAYERS

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**Abstract:** The purpose of the study was to assess the effectiveness of basketball specific training and traditional training method of training on dribbling ability of intercollegiate men Basketball players. To achieve the purpose of the study 60 male basketball intercollegiate men players from Mangalore University colleges of Cauveri College Gonikoppa, St. Anne's College, Virajapet and Cauvery College, Virajapet, Karnataka were selected as subjects and the age of the subject were between 18 to 25 years. The present study was mainly concerned with the effects of Basketball Specific Training on dribbling ability as a skill performance variable of Basketball players. The types of training used in the present study were Basketball Specific Training with aerobic and anaerobic training and Traditional Method with plyometric training. The statistical tool used for the present study was ANCOVA along with Scheffe's Post Hoc Analysis. After applying ANCOVA, it was found that there was significant improvement in the Dribbling Ability for Basketball Specific Training Group (BSTG), Traditional Method Training Group (TMTG) when compared with Control Group (CG). Based on the results it was concluded that the BSTG experimental group was significantly improved the ability of dribbling of Basketball players when compared with TMTG. The study suggested that coaches, fitness trainers and physical educationists should give this type of training to enhance the dribbling skill ability among Basketball players.

**Index Terms** - Basketball Specific Training Group, Traditional Method Training Group, Dribbling Ability, Intercollegiate, Basketball Players.

## I. INTRODUCTION

Basketball is possibly one of the most broadly played and patronized team games all over the world. It involves the players of both male and female and all ages. Continuous involvement of any game demands a high degree of fitness and skills. Basketball game has always had considerable popularity in schools, colleges, and university level also. Successful game of basketball needs ability of the players to generate good speed, agility and explosive power during the play situation of this game. Skills like dribbling, shooting and passing are of utmost importance for a player at any level of play of Basketball game (Thani, 1997).

Basketball is considered an intermittent high-intensity sport that requires mainly anaerobic metabolism (Castagna et al., 2009; Hoffman et al., 1999). It is known that the anaerobic contribution in basketball is important for tactical moves (i.e., defensive/offensive transitions) and technical actions such as shooting, jumping, blocking, passing and other technical movements (Delextrat et al., 2008).

Very few studies conducted on Skill Performance of basketball players with Basketball Specific Training in particular for male players. Raja (2014) investigated to know the effect of upper and lower limb plyometric training on performance variables of female college basketball players and they found that upper and lower limb plyometric training group had improved the basketball playing ability significantly when compared with the control group. Parimalam and Pushparajan (2014) assessed to know the effect of basketball specific training and traditional method of training on overall playing ability of inter collegiate women basketball players. Based on the results, the basketball specific training group significantly improved overall playing ability better than the traditional method of training and control group. Parimalam and Pushparajan (2013) studied to assess the effect of specific basketball training programme on skill performance variables of inter collegiate women basketball players and result concluded that the Specific Basketball Training program group was significantly improved the skill performance of female Basketball players. Very few studies conducted on to know the Basketball Specific Training on male Basketball players. Hence, the researcher intention is to assess the effectiveness of Basketball Specific Training and Traditional Method Training on dribbling ability of intercollegiate men Basketball players. In the game of Basketball, a player must play vigorously dribble the ball fast and frequently and change direction abruptly during the play. Higher level of performance of a basketball player depends upon their skills.

## II. OBJECTIVE OF THE STUDY

The objective of the study was to determine the effect of Basketball Specific Training Group and Traditional Method Training Group on Dribbling Ability of intercollegiate men Basketball players.

## III. STATEMENT OF HYPOTHESIS

It was hypothesized that there would be a significant difference in the Dribbling Ability of experimental group by practicing basketball specific training and traditional method training.

## IV. METHODOLOGY

The purpose of the study was to assess the effectiveness of basketball specific training and traditional training method of training on dribbling ability of intercollegiate men Basketball players. To achieve the purpose of the study 60 male basketball intercollegiate men players from Mangalore University colleges of Cauveri College Gonikoppa, St. Anne's College, Virajapet and Cauvery College, Virajapet, Karnataka were selected as subjects and the age of the subject were between 18 to 25 years. The present study concerned with the effects of Basketball Specific Training and Traditional Method Training on dribbling ability as a skill performance variable of Basketball players. The types of training used in the present study were Basketball Specific Training with aerobic and anaerobic training and Traditional Method with plyometric training. The statistical tool used for the present study was ANCOVA along with Scheffe's Post Hoc Analysis.

## V. ANALYSIS OF THE DATA

The findings pertaining to analysis of covariance between experimental groups and control group on Dribbling Ability of intercollegiate male Basketball players for pre-post test respectively.

**Table-1:** ANCOVA for the pre-test and post-test data on Dribbling Ability (In points) of Control Group (CG); Traditional Method Training Group (TMTG) and Basketball Specific Training Group (BSTG).

		CG	TMTG	BSTG	Source of variance	df	Sum of square	Means square	'F' ratio
Pre-test	Mean	12.600	12.400	13.350	B	2	10.033	5.017	1.44 <sup>NS</sup>
	S.D.	1.984	1.095	2.300	W	57	198.150	3.476	
Post-test	Mean	12.450	15.100	19.100	B	2	448.300	224.150	24.17**
	S.D.	1.820	2.489	4.278	W	57	528.550	9.273	
Adjusted Post-test mean		12.564	15.338	18.748	B	2	372.326	186.163	23.06**
					W	56	452.075	8.073	

Note: B- Between Groups; W- Within Groups; S.D.- Standard Deviation

Table value at 0.05=3.15; 0.01=4.98 (df-2, 57/2, 56); \*\*Significant at 0.01 level; <sup>NS</sup>Not Significant

From table-1, the pre-test means value of Dribbling Ability of CG; TMTG and BSTG Groups are 12.600; 12.400 and 13.350 respectively. The obtained 'F' ratio of 1.44 for pre-test means was less than the table value 3.15 for df 2 and 57 required for significance at 0.05 level.

The post-test means value of Dribbling Ability of CG; TMTG and BSTG are 12.450; 15.100 and 19.100 respectively. The obtained 'F' ratio of 24.17 on post-test means was greater than the table value 4.98 for df 2 and 57 required for significance at 0.01 level.

The adjusted post-test means value of Dribbling Ability of CG; TMTG and BSTG are 12.564; 15.338 and 18.748 respectively. The obtained 'F' ratio of 23.06 for adjusted post-test means was higher than the table value 4.98 for df 2 and 56 for significance at 0.01 level. To determine which of the paired means had a significant difference. Scheffe's post-hoc test was applied and the results are presented in the Table-2

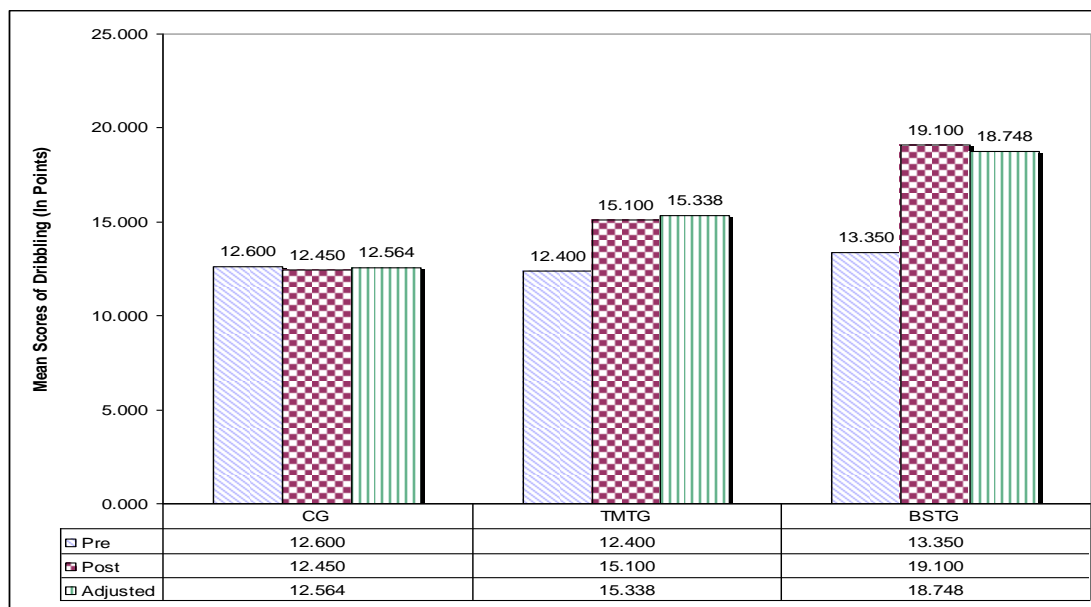
**Table-2:** Scheffe's Post Hoc Test for the differences between the adjusted post-test paired means of Dribbling Ability.

Adjusted post-test mean			Mean difference	Confidence interval
CG	TMTG	BSTG		
12.564	15.338	-	2.774*	2.255
-	15.338	18.748	3.410*	

12.564	-	18.748	6.184*	
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\*Significant at 0.05 of confidence.

The table-2 shows that the adjusted post-test means difference on Dribbling between CG & TMTG was 2.774; TMTG & BSTG was 3.410 and CG & BSTG was 6.184 which are higher than the confidence interval value of 2.255 at 0.05 level of confidence. It was inferred that there was significant difference on Dribbling between CG & TMTG; TMTG & BSTG and CG & BSTG groups. The comparison of pre, post and adjusted post-test mean values on Dribbling Ability between CG; TMTG and BSTG Groups are graphically depicted in Fig.1.



**Fig.1:** Bar Diagram of Pre, Post and Adjusted Post-test Means on Dribbling Ability between Control Group; Traditional Method Training Group and Basketball Specific Training Group.

**VI. DISCUSSION ON RESULTS**

The present study evaluated the values of dribbling ability of Basketball players of experimental and control groups namely BSTG, TMTG and CG. The BSTG and TMTG significantly improved the dribbling from pre test to post test. The dribbling increased in BSTG group from pre test (13.350±2.300) to post test (19.100±4.278); Traditional Method Training Group from pre test (12.400±1.095) to post test (15.100±2.489), the dribbling significantly improved pre test to post test in all the two experimental groups with no change in control group. The present study demonstrated that improvement in dribbling owing to the treatment through BSTG was 43.07%, whereas the improvement of TMTG was 21.77% estimated with Johnson Basketball Test. In case of Control, no significant improvement (1.19%) was observed. Comparison of adjusted post test mean among the groups showed that BSTG (18.748) and TMTG (15.338) had better improvement in dribbling than Control Group (12.564). The result of the present study is in line with previous study Parimalam and Pushparajan (2014) found that the aerobic and anaerobic training with specific basketball skills can improve the athlete’s dribbling.

**VII. CONCLUSION**

It was concluded that dribbling ability is significantly improved by Basketball Specific Training with aerobic and anaerobic training of male Basketball players. The study suggested that coaches, fitness trainers and physical educationists should give this type of training to enhance the dribbling skill ability among Basketball players.

**REFERENCES**

- [1] Castagna C.; Chaouachi A.; Rampinini E.; Chamari K. and Impellizzeri F. (2009). “Aerobic and Explosive Power Performance of Elite Italian Regional-level Basketball Players.” J Strength Cond Res. , 23: 1982-1987.
- [2] Delextrat A. and Cohen D. (2008). “Physiological Testing of Basketball Players: Toward a Standard Evaluation of Anaerobic Fitness.” J Strength Cond Res., 22: 1066-1072.
- [3] Hoffman J.R.; Epstein S.; Einbinder M. and Weinstein Y. (1999). “The Influence of Aerobic Capacity on Anaerobic Performance and Recovery Indices in Basketball Players.” J Strength Cond Res., 13: 407-411.
- [4] Parimalam, S. and Pushparajan, A. (2013). “Effect of Specific Basketball Training Program on Physical Fitness and Skill Performance Variables of Intercollegiate Women Basketball Players.” International Journal of Advanced Life Sciences, Vol.(6)(1): 33-35.

- [5] Parimalam, S. and Pushparajan, A. (2014). "Effect of Basketball Specific Training and Traditional Method of Training on Agility, Explosive Power and Passing Ability of Inter Collegiate Women Basketball Players." International Journal of Innovative Research & Development, Vol.3(3): 15-21.
- [6] Parimalam, S. and Pushparajan, A. (2014). "Effect of Basketball Specific and Traditional Method of Training on Muscular Strength, Speed and Overall Playing Ability of Inter Collegiate Women Basketball Players." International Journal for Life Sciences and Educational Research, Vol.2(1):1-7.
- [7] Raja, S. Chidambara (2014). "Effect of Upper and Lower Limb Plyometric Training on Performance Variables of Basketball Players." Asian Journal of Physical Education and Computer Science in Sports, Vol.11(1): 41-43.
- [8] Thani, Yograj (1997). "Teaching and Coaching Basketball." Sports Publication. New Delhi.

