Design and Development of Position wise Specific Skill Training and Its Impact on Selected Performance Variables among Basketball Players

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Abstract

The purpose of this study was to explore the design and development of position wise specific skill training and its impact on selected performance variables among basketball players. To achieve this purpose to the study thirty school level boys basketball players from national sports academy, Coimbatore, Tamilnadu, India were randomly selected as subjects. Their age ranged in between 13 and 16 years. In which thirty basketball players were randomly selected and they were divided into three groups namely guard position group, forward position group and centre position group. The selected subject (N=30) was divided into three groups (n=10) of which guard position group I, forward position group II and centre position group III underwent position wise specific skill training. The position wise specific skill training consists of dribbling, passing, and shooting drills in the evening session for a period of twelve weeks. After Pre-test guard position group I, forward position group II and centre position group III was treated with dribbling, passing, shooting drills are given for weekly three alternative days selected as dependent variable. The statistical technique Analysis of Covariance (ANCOVA) was used to analyze the pre-test and post-test data of experimental group. The result of the present study showed that the guard position, forward position and centre position, specific skill training has significant improvement on dribbling, passing, and shooting drills basketball players improvement ($P \leq 0.05$) in the level of the selected criterion variables such as dribbling, Passing and shooting compared to the control group.

***Keywords**: Guard Position, Forward Position, Centre Position*

Introduction

Basketball is one of the fastest games in which high level conditioning and coordinative abilities with technical and tactical potentials are essential to perform every skill

at desired or required level (James Naismith, 1897). In basketball is a same agile. Guard Position specific skill training is a program includes performance and fitness training designed specifically for skill performance enhancement. Training programs for game performance enhancement could include dribbling and other than to developing in strength, speed, power, endurance, flexibility, mobility, agility, mental preparedness (including goal setting), sleep, recovery/regeneration techniques and strategies, nutrition, rehabilitation, and injury risk reduction. A general program should include all of these components and a more specific program may only include a few, depending upon the athlete's specific needs (based on strengths, weaknesses and/or imbalances) and the demands of the sport they participate in. Sports performance training is exercising with the specific goal of improving your effectiveness as an athlete in particular sport. A traditional type of fitness training might include some cardio work, strength training and some stretching for flexibility. Guard position specific skill training might get someone in general shape and have them improve as an athlete somewhat. In sport, the team training refers the set of specific drills used to develop both performance and physical or motor fitness aspects of a player. When the training for players at higher level or above the basic level, they have to trained with specific objectives in sport, the training program should designed specifically based on the components that are needed for the particular skill or technique in sport. Thus such type of guard position specific skill training program is a need for the player to excellent in sport. Thus the present study has been carried out to study the impact of guard position specific skill training on dribbling among basketball players.

Statement of the Problem

The purpose of the present study was to find out the design and development of position wise specific skill training and its impact on selected performance variables among basketball players.

Hypotheses

The formulated hypothesis in the present study is as follows

1. It is hypothesized that there would be a significant improvement on selected skill performance variables among basketball players due to position wise specific skill training.

2. It is hypothesized that in developing the skill performance variables, the performance of players pertain to position wise specific skill training would perform better than the players practicing traditional play.

Delimitation

The present study was confined to the following aspects.

1. The subject age ranged between 13 and 16 years old.
2. Thirty basketball players will be selected for this study, they will be divided into three group first one is guard position group, second one is forward position group and third one is centre position group.
3. The selected subject (N=30) was divided into three groups (n=10)
4. The study will be delimited to the school level boys basketball players only.
5. The study will be delimited the following skill performance variable, such as (dribbling, passing, shooting).
6. The total training period was fixed as twelve weeks.

Limitation

The following factors are considered as limitations for the study.

1. Rational habits are not to be considered.
2. Nature of work is not to be considered.
3. Life style and daily routine work is not to be considered.
4. A daily health and food condition is not considered.

Methodology

The purpose of this study was to explore the impact of position wise specific skill training on selected performance variables among basketball players. To achieve this purpose the study thirty school level boys basketball players from national sports academy, Coimbatore, Tamilnadu, India. were randomly selected as subjects 10. Their age ranged in between 13 and 16 years. The subjects were divided into three groups namely the guard position, forward position and centre position, specific skill training has significant improvement on dribbling, passing, and shooting drills basketball players. The guard position, forward position and centre position, specific skill training (for weekly three days

monday, wednesday, friday) at evening session for twelve weeks. Dribbling passing, and shooting was selected as dependent variable. After the collection of appropriate data, it was statistically analyzed by using paired Covariance (ANCOVA). The level of significance was set at 0.05.

Analysis and Interpretation of Data

The purpose of the present study was to find out the impact of position wise specific skill training on selected performance variables among basketball players. For this data subjects are collected from national sports academy, Coimbatore both guard position group, forward position group and centre group before and after treatment on variables used in the study using standardized and instrument. For analysis purpose, the collected data were systematically processed, assemble around subject to tabulation on completion of analysis covariance results derived from analysis of variance that was used to find out the impact of position wise specific skill training on dribbling, passing and shooting variables are discussed theoretic construct and presented in this chapter.

Results of Analysis Covariance

Testing the pre-test and post-test mean difference on variables is the preliminary process of analysis of covariance following this to nullify the variance due to extraneous factors the difference in the pre-test means adjusted with difference in the post-test means and tested the adjusted means between the group on variable used in the study the results of the analysis of covariance are as follows.

Table-I: Analysis of Covariances On Dribbling

	GPG	FPG	CPG	Sources	Sum of Squares	df	Mean Squares	F
Pre Test	32.60	25.60	19.90	Between Groups	809.26	2	404.63	67.56
				Within Groups	161.70	27	5.98	
Post Test	38.60	29.90	23.80	Between Groups	1106.46	2	553.23	72.90
				Within Groups	204.90	27	7.58	
Adjusted Post Test	31.54	30.36	30.39	Between Groups	3.13	2	1.56	2.25
				Within Groups	18.09	26	.69	

*Significant at 0.05 level of confident.

Table-I reveals that the F-values for pre-test (67.56), post-test (72.90) and adjusted post-test (2.25). The obtained F-values on pre-test means and post-test means between the guard position group, forward position group and centre group on fundamental are compared with required table value for df 2, 27 (3.35). By this is was observed that significant mean difference was observed before and after the treatment of twelve weeks period on dribbling, position wise specific skill training. Further when testing the F-value on adjusted post- test means, it was found the obtained F-value was significant at 0.05 level for df 2, 26 as it do reach the table value of 3.37 From this results it was inferred that the F-value on adjusted post-test means to confirm the efficiency of position wise specific skill training for three days a week for about twelve week was sufficient to produced significant changes on dribbling.

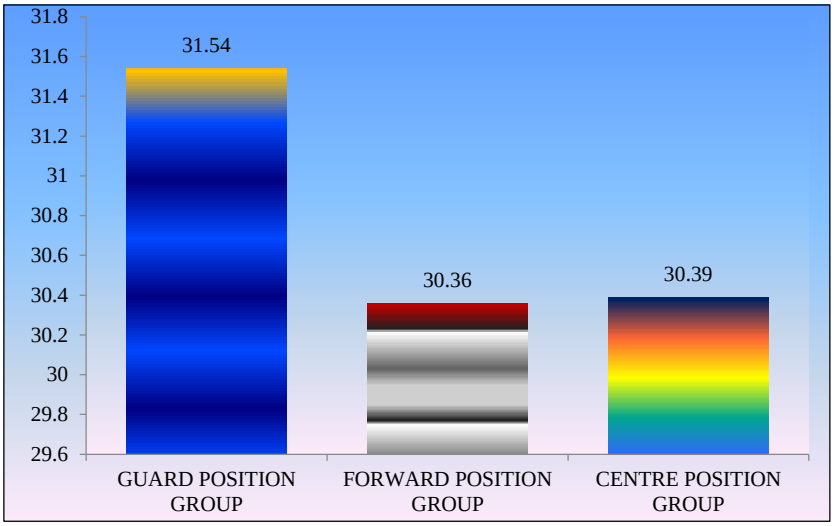

Figure-1: Bar Diagram Showing Adjusted Means on Dribbling of Guard Position Group, Forward Position Group and Centre Position Group

Table-II: Analysis of Covariances on Passing

	GPG	FPG	CPG	Sources	Sum of Squares	df	Mean Squares	F
Pre Test	21	21.60	13.90	Between Groups	366.86	2	183.43	24.60
				Within Groups	201.30	27	7.45	
Post Test	24.90	26.50	17.60	Between Groups	450.20	2	225.10	29.82
				Within Groups	203.80	27	7.54	
Adjusted Post Test	22.88	23.92	22.19	Between Groups	8.19	2	4.10	3.68
				Within Groups	28.96	26	1.11	

*Significant at 0.05 level of confident.

Table-II reveals that the F-values for pre-test (24.60), post-test (29.82) and adjusted post-test (3.68). The obtained F-values on pre-test means and post-test means between the guard position group, forward position group and centre group on fundamental are compared with required table value for df 2, 27 (3.35). By this is was observed that significant mean difference was observed before and after the treatment of twelve weeks period on dribbling, position wise specific skill training. Further when testing the F-value on adjusted post- test means, it was found the obtained F-value was significant at 0.05 level for df 2, 26 as it do reach the table value of 3.37 From this results it was inferred that the F-value on adjusted post-test means to confirm the efficiency of position wise specific skill training for three days a week for about twelve week was sufficient to produced significant changes on passing.

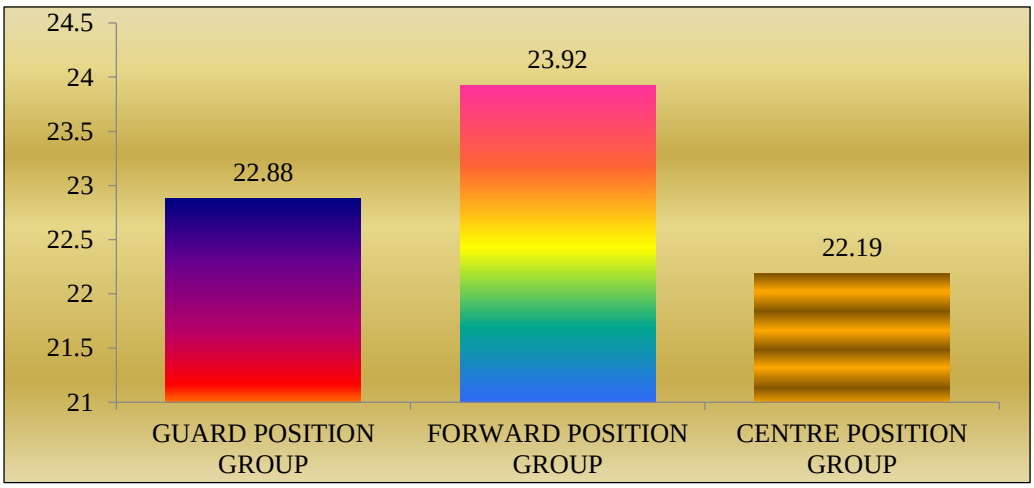

Figure-2: Bar Diagram Showing Adjusted Means on Passing of Guard Position Group, Forward Position Group and Centre Position Group

Table-III: Analysis of Covariances on Shooting

	GPG	FPG	CPG	Sources	Sum of Squares	df	Mean Squares	F
Pre Test	13.40	16.30	15.80	Between Groups	48.06	2	24.03	3.03
				Within Groups	214.10	27	7.93	
Post Test	16.70	21.20	21.60	Between Groups	148.06	2	225.10	9.33
				Within Groups	214.10	27	7.93	
Adjusted Post Test	18.39	20.11	20.99	Between Groups	29.87	2	14.93	23.85
				Within Groups	16.27	26	.62	

*Significant at 0.05 level of confident.

Table-III reveals that the F-values for pre-test (3.03), post-test (9.33) and adjusted post-test (23.85). The obtained F-values on pre-test means and post-test means between the guard position group, forward position group and centre group on fundamental are compared with required table value for df 2, 27 (3.35). By this is was observed that significant mean difference was observed before and after the treatment of twelve weeks period on dribbling, position wise specific skill training. Further when testing the F-value on adjusted post- test means, it was found the obtained F-value was significant at 0.05 level for df 2, 26 as it do reach the table value of 3.37 From this results it was inferred that the F-value on adjusted post-test means to confirm the efficiency of position wise specific skill training for three days a week for about twelve week was sufficient to produced significant changes on shooting.

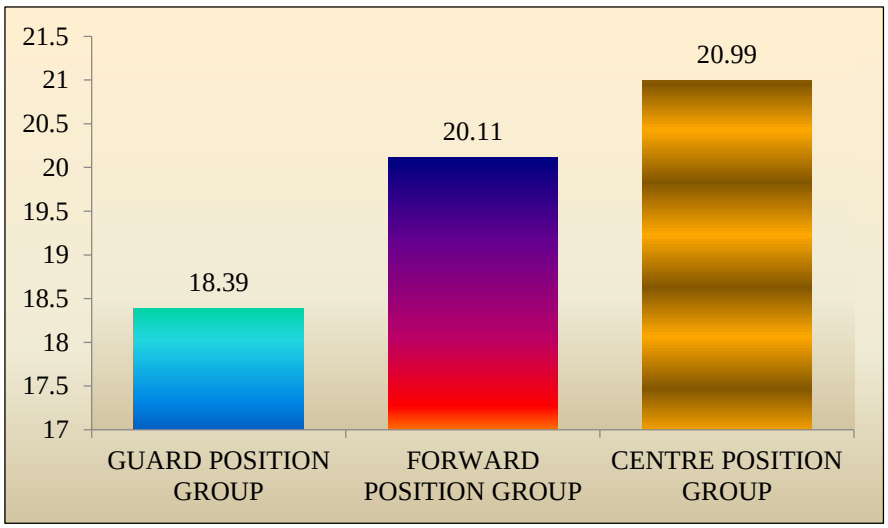

Figure-3: Bar Diagram Showing Adjusted Means on Shooting of Guard Position Group, Forward Position Group and Centre Position Group

Discussions on Finding

The position wise specific skill training is a fantastic training which has been found to be beneficial or the basketball players. To study the position wise specific skill training on selected performance variables of basketball players at school level, it was tested under to difference between guard position group, forward position group and centre position group. The position wise specific skill training includes on dribbling, passing and shooting. The position wise specific dribbling drills are namely ball roll, one low/high dribble, crossover dribble, wrap (around the world), scissors, dribble figure8, double pound, triples and power dribble. It also improves the dribbling ability, game tactics, anaerobic capacity, quickness, and eye hand coordination and other than some physical fitness components are namely

speed, agility, and power. The passing drills are namely chest pass, double hand pass, head pass, double hand bounce pass, five varied position pass, and triangle pass. It also improves the hand strength, eye hand coordination and control. The shooting drills are namely jump shot, drive in, layup, step shot, move shooting, three line base shooting, pressure jump shot, three point around the world and low & high post series. It also improves the hand strength, eye hand coordination and control. The obtained result proved positively the position wise specific skill training group significantly improved. The result of the present study showed that the position wise specific skill training has significant improvement on basketball players. The present study had similarity with the findings of MindaugaBalciunas*et al.*, (2009), Jaszcanin*et al.*, (2015) and Parimalam, Puspharajan (2013). The result of the present study showed that improved position wise specific skill training on performance variables such as dribbling, passing and shooting of school level basketball players.

Conclusions

Based on the findings and within the limitation of the study it is noticed that practice of position wise specific skill training helped to improve dribbling, passing and shooting ability of basketball players at school level. It was also seen that there is progressive improvement in the selected criterion variables of guard position group,forward position group and centre position group of basketball players after twelve weeks of position wise specific skill training programme. Further, it also helps to improve dribbling, passing and shooting skills.

1. It was concluded that individualized impact of guard position, forward position and centre position groups showed a statistically significant positive sign over the course of the treatment period on selected skill performance variables of school level basketball players.
2. The results of comparative effects lead to conclude that guard position group significant improvement on dribbling of school level basketball players as compared to their performance with forward position and centre position groups.
3. The results of comparative effects lead to conclude that forward position group significant improvement on passing of school level basketball players as compared to their performance with guard position and centre position groups.

4. The results of comparative effects lead to conclude that centre position group significant improvement on shooting of school level basketball players as compared to their performance with guard position and forward position groups.

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