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## **An application of team officials in the preparation of leading basketball teams: An analytical study**

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### **Abstract**

The main goal of the present study was to identify the role of team officials in the preparation of leading basketball teams in relation to game performance indicators which best determine sports in various competitions. In the present research study there were ninety six (96) basketball players and twenty four (24) team officials (coaches, assistant coaches and managers) from eight leading Indian basketball teams. The selected basketball teams were Indian Railways, Punjab, Tamil Nadu, Uttarakhand, Services, Chhattisgarh, Andhra Pradesh and Karnataka all from different states and organizations of India. Through detailed analysis the variables with high influence on game effectiveness were selected for final procedures. It has been proven that the players as well as coaches/ assistant coaches/team managers of the top successful basketball teams have significantly differed in almost all aspects of team preparation from their not successful counterparts. In practical applications these results connected with top teams and elite players may help coaches to design better training programs.

**Keywords:** Team officials, training programs, elite teams

### **Introduction**

The game of basketball started its journey in India during the first half of the twentieth century and is considered as one of the widely played sports in India. Basketball in India is played in most of the high schools, colleges and universities and especially the younger generation like to play this game. India is one of those first few countries in the history of basketball that adopted the game, within a few years of its inception. India has produced a huge number of talented and bright basketball players and the Indian basketball players have earned high recognition and reputation in the international basketball arena, as well. Basketball has been a popular game in India since its inception and it is mainly played in the high schools, colleges and universities in India. Basketball is regarded as one of the most widely played game in the country. The game started its journey in India several years back and has increased its popularity among the young generation with every passing day. India is recognized as a good basketball team in the world and the India's national basketball team is currently ranked at 46 in the FIBA rankings. The Indian basketball players have shown great performances in several international basketball tournaments, including the Olympic Games. They participated in the 1980 Summer Olympics, held at the Olympics Indoor Stadium and finished at the 12th position. Apart from the Olympic Games, the Indian basketball players also took part in the other prestigious international and regional tournaments like the FIBA Asian Champions Cup. They left mark of their extraordinary talents in all of these tournaments.

When we talk about the performance in basketball, it is the unity of execution and result of sports action or sequence of actions which are evaluated or measured by the norms or criteria made by the society. High performance in basketball can only be achieved by the product of physical and psychological aspects. That is why, it is very important for the coaches, trainers and physical educationists that both the aspects of performance should be given due importance. Most of the times, it is being noticed that when we feel good, we perform better. At the same time when we feel bad, our performance goes down. Emotions are considered as precedence of our behavior. Our behavior is the outcome of interpretation of different impulses which we receive from our surroundings in a particular situation or event. These impulses stimulate amygdale, (an almond shaped structure is the emotional control center situated in limbic system) which originates emotional impulses that trigger physiological responses associated with emotion.

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**Selection of subjects**

The subjects selected for the present study were ninety six (96) basketball players and twenty four (24) team officials (coaches, assistant coaches and managers) from eight leading Indian basketball teams. The selected basketball teams were Indian Railways, Punjab, Tamil Nadu, Uttarakhand, Services, Chhattisgarh, Andhra Pradesh and Karnataka all from different states and organizations of India.

**Purpose of the study**

The main purpose of the study was to evaluate an application of team officials in the preparation of leading basketball teams in relation to their performance in different competitions.

**Collection of data**

The data related to the team preparations of the selected leading basketball teams were collected through two questionnaires (demographic profile of coaches and training related questions) which were recorded

and categorized under different heads according to the area of investigation and purpose of the study for analysis.

**Statistical technique**

The collected data were subjected to mainly percentage technique of every item of questionnaire to analyze team preparations among the leading Indian basketball teams. The significance of the percentage analysis was determined by employing chi-square ( $\chi^2$ ) method. To check out the performance of leading teams, the responses of top (successful) two teams and bottom (Not-successful) two teams have been considered (where as the middle four teams have been left out) and analyze separately with the help of percentage technique.

**Analysis and interpretation of data**

The findings on the responses of the Coaches/ Assistant Coaches/Team Managers for the statement; percentage and chi-square analysis are presented through table- 35 to table- 76.

**Table 1:** Experiences of coaches

ITEMS	Percentage (%)	Frequency observed (fo)	Chi-square $\chi^2$
<b>Responses</b>			
5 to10 years	50.0	12	11.98*
10 to15 years	33.33	08	
15 to20 years	8.33	02	
More than 20 years	8.33	02	

\*Significant  $\chi^2_{0.05} (3) = 7.82$

Table-1 shows that 50.0% coaches had 5-10 years of experiences, whereas 33.33% had 10-15 years of experiences and 8.33% showed more than 20 years experiences in coaching in basketball game.

The chi-square analysis was carried out to check the

divergence of the responses. Table-35 reveals that obtained  $\chi^2$  value of 11.98 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 7.82. This clearly indicates that a significant differences were found in the pattern of responses for the item among the coaches.

**Table 2:** Selection of players by the coaches

Items	Percentage (%)	Frequency observed (fo)	Chi-square $\chi^2$
<b>Responses</b>			
Selection trial	33.33	08	10.98*
Different nationals	45.84	11	
Inter-varsity Competition	20.84	05	
Others	Nil	00	

\*Significant  $\chi^2_{0.05} (3) = 7.82$

Table-2 shows that 33.33% coaches selected players through selection trial, while 45.84% through different nationals and 20.84% through inter-varsity competition.

The chi-square analysis was carried out to check the divergence of the responses. Table-36 also shown that coaches to select the players.

obtained  $\chi^2$  value of 10.98 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 7.82. This clearly indicates that significant difference was found in the pattern of response for the item among

**Table 3:** Training facilities provided by the organizations

Items	Percentage (%)	Frequency observed (fo)	Chi-square $\chi^2$
<b>Responses</b>			
Below satisfactory	16.67	04	17.32*
Satisfactory	58.34	14	
Above satisfactory	25.0	06	
Excellent	Nil	00	

\*Significant  $\chi^2_{0.05} (3) = 7.82$

Table-3 reveals that 16.67% coaches viewed that training facilities were below satisfactory, 58.34% coaches were satisfied with the training facilities, while 25.0% were more than satisfied whereas not a single coach has fully satisfied

with the training facilities provided by their respective State/ Organizations.

The chi-square analysis was carried out to check the divergence of the responses. Table-41 also reveals that

obtained  $\chi^2$  value of 17.32 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 7.82. This revealed that a

significant differences were found in the pattern of responses for the item among the coaches.

**Table 4:** Emphasis on training components by the coaches

Items	Percentage (%)	Frequency observed ( <i>f<sub>o</sub></i> )	Chi-square $\chi^2$
<b>Responses</b>			
Physical fitness	50.0	12	7.98*
Technical ability	16.67	04	
Tactical knowledge	16.67	04	
Match experience	16.67	04	

\*Significant  $\chi^2_{0.05} (3) = 7.82$

Table-4 reveals that 50.0% coaches emphasized more on physical fitness, while 16.67% coaches considered technical ability, tactical knowledge and match experiences for training of their team.

The chi-square analysis was carried out to check the

divergence of the responses. Table-47 also reveals that obtained  $\chi^2$  value of 7.98 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 7.82. This stated that a significant differences were found in the pattern of responses for the item among the coaches

**Table 5:** Game tactics emphasized by the coaches/ managers

Items	Percentage (%)	Frequency observed ( <i>f<sub>o</sub></i> )	Chi-square $\chi^2$
<b>Responses</b>			
Offensive Tactics	66.67	16	17.34*
Defensive tactics	Nil	00	
Both (A&B)	33.33	08	
Others	Nil	00	

\*Significant  $\chi^2_{0.05} (3) = 7.82$

Table-5 shows that 66.67% coaches emphasized more on Offensive tactics and 33.33% caches laid stress on both offensive & defensive tactics.

The chi-square analysis was carried out to check the divergence of the responses. Table-53 also reveals that

obtained  $\chi^2$  value of 17.34 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 7.82. This clearly indicates that a significant differences were found in the pattern of responses for the item among the coaches.

**Table 6:** Evaluation of team success

Items	Percentage (%)	Frequency observed ( <i>f<sub>o</sub></i> )	Chi-square $\chi^2$
<b>Responses</b>			
Win-loss record	70.84	17	32.32*
By your team performance	29.17	07	
By individual performance	Nil	00	
Supporter's appreciation	Nil	00	

\*Significant  $\chi^2_{0.05} (3) = 7.82$

Table-6 show that 70.84% coaches judged the success of their team through win – loss record while 29.17% judged by their team performance.

The chi-square analysis was carried out to check the divergence of the responses. Table-60 also reveals that

obtained  $\chi^2$  value of 32.32 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 7.82. This clearly indicates that a significant differences were found in the pattern of responses for the item among the coaches.

**Table 7:** Preferred training plan/programme

Items	Percentage (%)	Frequency observed ( <i>f<sub>o</sub></i> )	Chi-square $\chi^2$
<b>Responses</b>			
Short Term Plan	100.0	24	24*
Long Term Plan	Nil	00	

Significant  $\chi^2_{0.05} (1) = 3.84$

Table-7 shows that all the coaches preferred short term plan while trained to the teams.

The chi-square analysis was carried out to check the divergence of the responses. Table-61 also reveals that

obtained  $\chi^2$  value of 24 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 3.84. This shows that a significant differences were found in the pattern of responses for the item among the coaches.

**Table 8:** Coaching methods to impart training

Items	Percentage (%)	Frequency observed (fo)	Chi-square $\chi^2$
<b>Responses</b>			
Lecture cum demonstration	Nil	00	72*
Audio-visual aids	Nil	00	
Continuous practice	Nil	00	
All of them	100.0	24	

\*Significant  $\chi^2_{0.05} (3) = 7.82$

Table-8 shows that all coaches preferred Lecture cum demonstration, audio-visual aids and Continuous practice methods to impart training.

The chi-square analysis was carried out to check the divergence of the responses. Table-63 also reveals that

obtained  $\chi^2$  value of 72.0 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 7.82. This clearly indicates that a significant differences were found in the pattern of responses for the item among the coaches.

**Table 9:** Techniques used for physical relaxation of players

Items	Percentage (%)	Frequency observed (fo)	Chi-square $\chi^2$
<b>Responses</b>			
Stretching exercise	33.33	08	1.98
Yogic exercise	25.0	06	
Massage	16.67	04	
Hydrotherapy	16.67	04	

Significant  $\chi^2_{0.05} (3) = 7.82$

Table-9 shows that 33.33% coaches used stretching exercises for the physical relaxation of their players, while 25% used yogic exercises and 16.67 coaches revealed that they used massage and hydrotherapy for physical relaxation of their players.

The chi-square analysis was carried out to check the

divergence of the responses. Table-72 also indicate that obtained  $\chi^2$  value of 1.98 at 0.05 level of significance is less than tabulated  $\chi^2$  value of 7.82. This findings stated that a significant differences were not found in the pattern of responses for the item among the coaches.

**Table 10:** Satisfaction level of coaches/managers about performance

Items	Percentage (%)	Frequency observed (fo)	Chi-square $\chi^2$
<b>Responses</b>			
Not satisfied	Nil	00	29.32*
Moderately satisfied	33.33	08	
Satisfied	66.67	16	
Highly satisfied	Nil	00	

\*Significant  $\chi^2_{0.05} (3) = 7.82$

Table-10 shows that 33.33% coaches were moderately satisfied with the performance of their team, while 66.67% were satisfied whereas not a single coach was highly satisfied with the performance of their team.

The chi-square analysis was carried out to check the divergence of the responses. Table-76 also reveals that obtained  $\chi^2$  value of 29.32 at 0.05 level of significance is greater than tabulated  $\chi^2$  value of 7.82. This clearly indicates that a significant differences were found in the pattern of responses for the item among the coaches.

### Discussions of Findings

The coaches who deal with leading Indian basketball sides mostly were having the experience of ten to fifteen years of coaching and some of them were having even more than twenty years of coaching experience. The coach as prefer the National (Junior/Senior) matches as a stage to select their players. They also have good rapport with their players and frequently taking care of their personal problems. The Coaches/Managers found that most of the players were sincere enough towards the training. Coaches also showed keen interest to win the senior national basketball championship as in the case of their players.

In the opinion of coaches the budget for most of the teams are upto fifty lakh rupees and even though the players were not

provided all the facilities, proper treatment and compensation. It seems to be a drawback that hardly any state/ organizations send their coaches abroad for advance professional coaching and training.

These findings are endorsed by Cox Elaine & *et al.* (2010) <sup>[1]</sup>, expressing that coaching is recognized as a powerful vehicle for increasing performance and also gave statement that experiences, selection, relationship, attitude etc are achieved the goal setting and better performance of team as well as individuals.

These findings are endorsed by Glinski (1968) viewed that through physical fitness, endurance, strength, speed, etc the selected fitness training techniques were developed. Above findings were endorsed by Singh, *et al.* (1991) and Boraczynski *et al.* (2008) <sup>[17]</sup>, those were expressed that plyometric training resulted to improvement in mechanical parameter of the strength-speed abilities of the players. The findings were also supported by Kutty (2007) <sup>[14]</sup>, who stated that the plyometric and weight training program improve the performance in the selected skills of soccer players. These finding was also accepted by Yadav (2009), who found that continuous running method is the most effective training method for the development of endurance. The above finding was agreed with Michael *et al.* (2006), plyometric training can improve an athlete's agility. The above findings are

endorsed by Matveyev (1981), who observed that technical and tactical preparation was playing vital role in improving performance and achieving the goal set or success. The above findings are endorsed by Weber (1980), who stated that stretching exercise play useful role in the physical relaxation. 50.0% coaches had 5-10 years of experiences, whereas, 33.33% had 10-15 years of experiences and 8.33% had more than 20 years experiences in basketball coaching. Whereas 33.33% coaches used to select players through selection trial, while 45.84% through different nationals and 20.84% through inter-varsity competitions. 16.67% coaches had average rapport with their players while 50% and 33.33% coaches revealed that they had good and excellent rapport with their players. Selected coaches had rated the sincerity of their players as average (16.67%), good 45.83% and excellent (37.50%).

On training facilities provided by the State/ Organization including psychological training, 58.34% coaches had shown their satisfaction. However, not a single coach was fully satisfied with the training facilities provided by their State/ Organization. 50.0% coaches had emphasized more on physical fitness, while 16.67% coaches considered technical ability, tactical knowledge and match experiences for training of their teams. While giving fitness training to their team, 45.84% coaches were emphasized more on endurance, while 25% coaches favored strength and Speed, whereas, 4.17% emphasized on Coordinative abilities. All coaches emphasized more on explosive strength, whereas no one emphasized on strength endurance for strength development among their players. For strength development, 70.84% coaches emphasized more on weight training method, while, 16.67% emphasized more on resistance running method and 12.5% emphasized on others methods. For endurance development, 58.34% coaches emphasized on continuous running method, 25.0% on interval method and 16.67% coaches emphasized on training with ball method. All coaches agreed that, agility plays a vital role in basketball. 66.67% coaches emphasized more on offensive tactics while 33.33% laid stress on both offensive and defensive tactics. 16.67% coaches adopted attacking tactics through Pivot players and 3-Point shooting, 54.17% preferred through First break tactics, while 12.5% adopted on overloading attack. 16.67% coaches adopted half court man to man marking as defensive tactics, while 75% coaches adopted zone marking for defensive tactics and 8.33% adopted zone cum man to man marking. 79.17% coaches adopted freelance system of play, while, 20.84% coaches adopted according to designed move of play during the game.

16.67% coaches changed their team formation while they were winning, 58.34% coach changed their formation while they were loosing. There were no change in formation having weaker opponents and 25% coaches changed their formation when they were having stronger opponents. 8.33% coaches generally preferred 1-5 matches, 37.50% prefer 5-10 practice matches, while, 54.17% coaches preferred more than 10 practice matches before the actual tournament. For build-up matches, 79.17% coaches preferred stronger side, while, 20.83% coaches preferred all sides (Strong, Weaker & average side) to play. 70.84% coaches evaluated the success of their team through win – loss record, while 29.17% judged by their team performance.

All the coaches preferred short term plan while training their teams. 25% coaches preferred to give extra responsibilities, while, 75% coaches preferred by praising and no one opted for pep talks and through incentives as motivation technique.

All coaches preferred all coaching methods namely lecture cum demonstration, audio-visual aids and continuous practice to impart training. 33.33% coaches preferred 90-120 minutes for a single training session, while, 66.67% coaches preferred more than 120 minutes for a single training session and no one opted 10-60 minutes session. 45.84% coaches preferred two and three training session in a day, while, 8.33% coaches preferred four training session in a day for training the teams. 25% coaches preferred to prepare training plan on their own experience and knowledge, 41.67% on audio- visual aids, 16.67% used books, journals and periodicals and the help of Internet sources. 66.67% coaches decided the positions of their players according to the ability of the player, while 33.33% coaches decided according to the requirement of the team. 75% coaches emphasized on team efforts for training plan. 33.33% coaches used stretching exercises for the physical relaxation of their players, while 25% used yogic exercises and 16.67 coaches applied massage and hydrotherapy for physical relaxation of players. 25% coaches used the technique of meditation for mental relaxation while 16.67% coaches used light music or watching movies and 50% coaches had used proper rest for mental relaxation, while, 8.33% coaches rarely used others techniques for mental relaxation.

33.33% coaches were moderately satisfied with the performance of their teams, while, 66.67% were satisfied. Not a single coach was highly satisfied with the performance of their teams.

Top successful teams had been giving more emphasis on tactical training, match practice and explosive strength for better performance than their low performer counterparts. The basketball players from the successful teams were being assisted by the coach to overcome their drawbacks and were being counseled by face-to face technique and were provided all the modern facilities well in time with proper treatment and rehabilitation but none of them were satisfied with the salary provided to them by their respective organizations.

The leading coaches did prefer to have two-three sessions of training per day. They had been preparing the modules with the help of audio-visual aids and with their own experiences and knowledge and did motivate the players by praising and giving them extra responsibilities.

Not to carry over the distress of training, top successful teams had been using relaxation exercises through stretching, yogic exercises and meditation at the end of the sessions. The coaches were generally satisfied with their team's performances.

The players as well as coaches/ assistant coaches/team managers of the top successful basketball teams have been significantly differed in almost all aspects of team preparation from their not successful counterparts.

## References

1. Cox Elaine, Bachkirova Tatiana, Clutterbuck David. The Complete Handbook of Coaching. New Delhi: SAGE Publications India Pvt. Ltd. 2010.
2. Garrett, Hanery E. Statistics in Psychology and Education. New Delhi Paragon International Publisher. 2004.
3. Cox Richard. Sports Psychology Concept and Applications. fifth edition. USA: McGraw Hill. 2002.
4. Malonsoki EJ. Sport and Physical Activity: Physiological Characterization of Physical Fitness of Football Players in Field Conditions, Budapest: Prentice Hall International, inc. 1991.

5. Gill Diane L. Psychological Dynamics of Sports, Champaign: Human Kinetics Publisher Inc. 1991.
6. Jacobs Ira. Defense and Civil Institute of Environmental Medicine Nutrition for the Elite Footballers, New York Publisher. 1987.
7. Borrie Andy. Coaching Process, Sports Coach, New York: McGraw Hill. 1987.
8. Frank Tyson. The Cricket Coaching Manual, New Delhi: Rekha Printers (P) Ltd. 1987.
9. Harris Dorothy V, Harris Bette L. Sports Psychology: Mental Skills for Physical people, Champaign: Leisure Press, A division of Human Kinetics publication Inc. 1984.
10. Malcolm Cook, Science of Soccer Management, Soccer Coaching and Team Management, London: A & C black ltd.
11. Bobby Moffat. The Actual Planning for Preparation of Team. California, Anderson World Books, Inc. 1982.
12. Allen wade. preparation of Team. The f a guide to training and coaching. London: William Heinemann Ltd. 1981.
13. Donald Moris. Kentucky High School Basketball, New York: Parker Publishing Co., Inc. 1969.
14. Kutty Suresh. Comparative Effect of Weight Training and Plyometric Training on the Skills of Soccer Players, Indian Journal of Yoga, Exercise and Sports Science and Physical Education. 2007 May;1:12-18.
15. Faigenbaum AD, Kraemer WJ, Cahill B, Chandler J, Dziados J, Elfrink LD, *et al.* Youth Resistance Training: Position Statement Paper and Literature Review, Strength and Conditioning Journal. 2007;18:62-75.
16. Charles A. Maher Case Study Commentary: Addressing the Personal and Performance Needs of a Collegiate Student-Athlete, Table of Contents for. 2007, 1.
17. Boraczynski, Urniaz. The Effect on the Strength-Speed Abilities of Basketball Players, Research Yearbook. 2008;14:14-19.
18. Hans Schellenberger. Cognitive Functions in the Psychological Control of Performance, Psychology of Team Sports, Toronto: Sport Books Publisher. 1994, 16.
19. Brain Frederic Crossman. The effect of three practice techniques on the accuracy of a soccer penalty kicks. Dissertation Abstracts International city of publication, publishers. 1992;53:752.
20. Botterill, Cal. Sport Psychology and Professional Hockey, Journal of sports and exercise psychology. 1990, 14(4).
21. Charles P. Gallmeier Putting on the Game Face: The Staging of Emotions in Professional Hockey, Leeds: Human Kinetics Inc. 1987, 4(4).
22. Gool Van D. The physiological load imposed on soccer players during real match Play. Dissertation Abstracts international. 1976;36(3);2051-a.
23. Earl Jooner. The Influence of Three Training Programs on strength, speed, Power, General Endurance and Speed of Movement. Dissertation Abstracts International. 1968;29(5):1436.
24. John Valentine. A comparative study of Fartlek, Interval and Sprint Training, Dissertation Abstracts International. 1968;28:481.