COLLATING FLEXIBILITY AND SPEED AMONG BHUTANESE NATIONAL CLUB FOOTBALLERS IN RELATION TO THEIR PLAYING POSITION

[1]Dr. Aruna Rani
Assistant Professor,
Lovely Institute of Education,
Lovely Professional University,
Phagwara, Punjab, India

[2]Puspalal Sharma
Technical Director and Head Coach,
Paro Football Club,
Woochu Sports Arena,
Paro, Bhutan

Abstract

Playing football requires huge amount of motor abilities attributes in addition to proficiency, understanding and intellect (Wade, 1979; Sheldon et al., 1954). The aim of the present study is to describe the motor abilities of Bhutanese National Club Footballers and to examine their relationship selected motor abilities among different playing positions of the players. The sample frame comprised of 108 (6 teams of 18 players each) players from six top Football Clubs (FC) namely Yeedzin FC, Thimphu City FC, Drukpol FC, Ugyen Academy FC, Phuntsholing FC and Dzongrig FC taking part in the Coca Cola Football League; highest level of football tournament in Bhutan. Flexibility test by sit and reach method (Davis et al., 2000). Speed test- 10mts and 30mts using electronic timing equipment (used for FIFA referees sprint test were held to collect the desired data. A trial version of Software, SPSS (Ver.16) was utilized to do the analysis of the measured data. Mean, standard deviation and one-way ANOVA was utilized to see whether any significant difference is there among footballers according to their playing positions. Results displayed no significant difference was identified in the flexibility and speed of Bhutanese national club footballers in relation to their playing position.

Keywords: Footballers, Flexibility, Speed, Playing Positions, Bhutanese, Club.

Introduction

Football is a game that is played as a team and it is obvious that team games are those sports in which body dimension, form, body composition and status of fitness, each have a significant role to provide distinctive benefit for particular playing positions specifically at the maximum level of performance of highly specific degree of player specialization (Bale, 1986). Particular role related to a position have a different requirement within each

area exclusive related to body functioning attributes (Reilley et al., 1990). These are visible in the fitness of bodily and related to body functioning of the Football players (Reeves et al., 1999). According to research by (Bradley et al., 2009) it indicates that the demands on elite soccer players have increased in recent years. Thus, soccer player profiles and the developmental process towards becoming an elite performer have both become subjects of decisive interest. Therefore, scientists and practitioners are continuously seeking key factors and characteristics that can identify potentially successful soccer players (Nevill et al., 2009).

Like other qualities the speed ability also plays an important role in football. A faster speed of the game requires rapid performance of typical movements by every member in a team. In many circumstances, successful implementation of certain technical or tactical maneuvers by different team members is tied up with the degree of velocity with which the players cumulatively move. Positional differences may also demand varied levels of speed abilities but lack of literature and adequate information compelled the researcher to interpret to a narrow degree. Agility is the physical ability, which enables an individual to rapidly change the body position and direction in precise manner (Johnson & Nelson, 1988).

Football is a game that is played as a team and it is obvious that team games are sports where body size, shape, body composition and level of fitness, all play an important part in providing distinct advantages for specific playing positions particularly at the highest levels of performance where there is a high degree of player specialization (Bale, 1986). Specific positional roles within each code may demand unique physiological attributes (Reilly et al., 1990). These are reflected in the physical and physiological fitness of the soccer players (Reeves et al., 1999).

II. SIGNIFICANCE OF THE STUDY

It is also because the study is a maiden voyage in the history of sports in Bhutan; this study hopes to elucidate contentious areas in a body of knowledge by providing new conceptual insights into strategic plans of player development in Bhutan. The study would specifically enable the Bhutan Football Federation (BFF) in creating a broad baseline data to be used for any relevant research in the near future pertaining to the scientific variables adopted in the current study. This study would help to establish scientific and pragmatic roles within talent detection, identification and development program because of the datum that best footballers need to become accustomed to the body fitness expectations of sport, which are different. Sportspersons should not include a phenomenal limit inside any of the territories of physical execution however should hold a sensibly significant level inside all regions.

Objective of the Study

- To find out the difference in flexibility among Bhutanese national club footballers in relation to their playing position.
- To check the dominance in speed among Bhutanese national club footballers in relation to their playing position.

Hypotheses

- There would be a significant difference existent in the flexibility of Bhutanese national club footballers in relation to their playing position.
- There would be a significant difference existent in the speed of Bhutanese national club footballers in relation to their playing position.

Delimitations of the Study

a) The study was delimited to the players verified and registered legally with the BFF in the Bhutanese 'A' Division Club.

b) The study was delimited by gender; only male players were considered for the study.

c) The study was delimited by nationality; only Bhutanese national players were considered for the study.

Review of Related literature

Dey (2010) having conducted study on one hundred fifty (150) male Indian footballers of six different national clubs of India including three from Kolkata (East Bengal, Mohan Bagan & Mohammedan Sporting) and other three from Goanese clubs (Salgaokar, Vasco & Dempo) Comparing anthropometric, motor ability and physiological profiles of Indian national club have reported that the players were also sub- divided according to their specific field positions, Physical and physiological profiles including height, weight, percentage body fat (%BF), flexibility, agility, explosive power, and VO_2 max were measured by standard procedures. Results revealed, it was concluded by the researchers that the differences among the footballers of their study with their international counterparts and specific playing position was probably the cause of hereditary factors and differences in activity in the game.

Design of the Study

The descriptive method was adopted for carrying out the current research work The sample frame comprised of 108 (6 teams of 18 players each) players from six top Football Clubs (FC) namely Yeedzin FC, Thimphu City FC, Drukpol FC, Ugyen Academy FC, Phuntsholing FC and Dzongrig FC taking part in the Coca Cola Football League; highest level of football tournament in Bhutan. They were grouped in accordance with their positional area of playing in playfield. Before undergoing the test, all the players were informed about the testing procedures, including possible risks involved, and be given informed written consent in accordance with the specific resolution of BFF by laws.

Data Analysis and Results

Software, SPSS (Ver.16) was utilized to make analysis of measured data. Mean, standard deviation and one-way ANOVA was performed to see whether any significant differences exist among footballers according to their playing positions.

Table 1: Level of significant difference in flexibility among Bhutanese national club footballers in relation to their playing position.

Flexibility

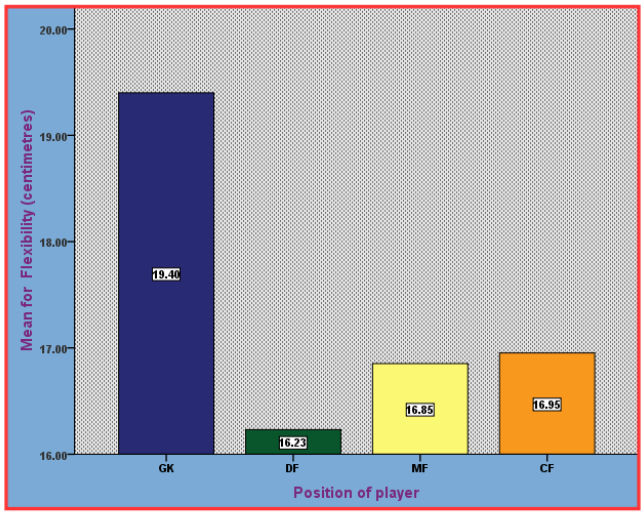
	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	107.860	3	35.953	1.207	.311
Within Groups	3098.833	104	29.796		
Total	3206.692	107			

Level of significance at 0.05

Table 1 portrays the findings in a tabular form on regard to the level of significant difference in flexibility among Bhutanese national club footballers in relation to their playing position. Statistical deduction stated no

significant difference when the level of significance was determined by one-way ANOVA (F (3,104) = 1.207, p = .311). It has been observed that the significance level is .311 (p = .311), which is above 0.05.This result denotes that there is statistically no significant difference in the flexibility among Bhutanese national club footballers in relation to their playing position. As per the hypothesis it was stated that there would be a significant difference existent in the flexibility of Bhutanese national club footballers in relation to their playing position. However, the results concluded insignificant relationship in flexibility and standard playing position of players. Thus, hypothesis stands rejected.

Graph- 4.1.2.1 Representing mean of flexibility among goalkeeper, defender, midfielder and centerforward



(GK-Goal Keeper, DF-Defender, MF-Midfielder & CF-Centerforward)

Table 2:Level of significant difference in speed (10 metres standing start) among Bhutanese national club footballers in relation to their playing position.

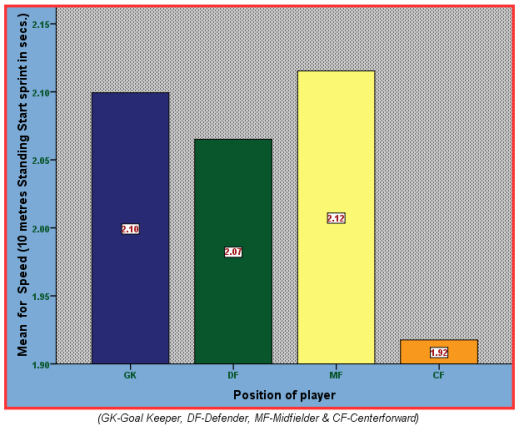
10 metres Sprint (Standing Start)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.563	3	.188	1.589	.196
Within Groups	12.283	104	.118		
Total	12.846	107			

Level of significance at 0.05

The above table 2 determined by one-way ANOVA reveals the analysis of dominance in speed (10 mts. standing start) among Bhutanese national club footballers in relation to their playing position. Statistical analysis determines no significant difference between groups (F (3,104) = 1.589, p = .196). We hence interpret that the significance level which is 0.196 (p = .196), is above 0.05 significance level this, no significant difference in the speed (10 mts. standing start) among Bhutanese national club footballers in relation to their playing position exists. Hypothesis of the current study stated that, a significant difference in the speed of Bhutanese national club footballers in relation to their playing position would be evident. With the statistical computation the hypothesis stands rejected.

Graph - 4.1.2.2.1 Denoting mean of Speed (10 mts. standing start) among goalkeeper, defender, midfielder and centerforward



(GK-Goal Keeper, DF-Defender, MF-Midfielder & CF-Centerforward)

Table 3:Level of significant difference in speed (30 metres flying start) among Bhutanese national club footballers in relation to their playing position.

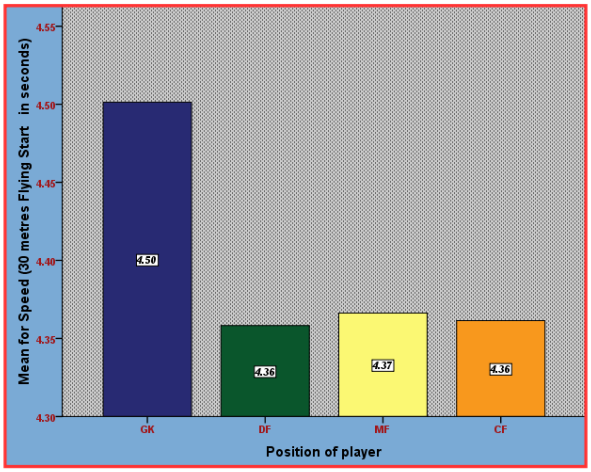
30 metres Sprint (Flying Start)

	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	.251	3	.084	1.884	.137
Within Groups	4.626	104	.044		
Total	4.877	107			

Level of significance taken at 0.05 level

Table 3 computed through one-way ANOVA can be discussed on regard to the analysis of dominance in speed (30 mts. flying start) among Bhutanese national club footballers in relation to their playing position. As per statistical analysis it has been determined that no significant difference between groups (F (3,104) = 1.884, p = .137) is evident. It clearly depicts the significance level which is 0.137 (p = .137), is above 0.05 significance. Hence, no significant difference in the speed (30 mts. flying start) among Bhutanese national club footballers in relation to their playing position exists. Hypothesis of the current study stated that, a significant difference in the speed of Bhutanese national club footballers in relation to their playing position would be evident. With the statistical analysis and findings the hypothesis stands rejected.

Graph - 4.1.2.2.2 Signifying mean of Speed (30 mts. flying start) among goalkeeper, defender, midfielder and centerforward



(GK-Goal Keeper, DF-Defender, MF-Midfielder & CF-Centerforward)

Discussion and Conclusions

Reporting on the findings in aspect to motor abilities, level of significant difference in flexibility among Bhutanese national club footballers in relation to their playing position revealed (F (3,104) = 1.207, p = .311) with significance level of .311 (p = .311), which is above 0.05.This result reflected that there exists no significant difference. Analysis of dominance in speed (10 mts. standing start) among Bhutanese national club footballers in relation to their playing position revealed ANOVA scores of (F (3,104) = 1.589, p = .196). Significance level stood at 0.196 (p = .196) which is above 0.05 significance level thus concluding that, no significant difference in the speed (10 mts. standing start) among Bhutanese national club footballers in relation to their playing position exists. Similarly, dominance in speed (30 mts. flying start) among Bhutanese national club footballers in relation to their playing position reflected data from ANOVA between groups of (F (3,104) = 1.884, p = .137 clearly depicting the significance level at 0.137 (p = .137), which is above 0.05 significance. Hence, no significant difference in the speed (30 mts. flying start) among Bhutanese national club footballers in relation to their playing position was concluded.

Recommendations

The findings of this study suggest that the conclusions from anthropometric parameters, motor ability and physiological capacity profiling can generate a useful database against which talented players may be compared in order to identify strengths and weaknesses. These measures can also be helpful to the National Federations (NF's) in general and coaches in specific in confirming their initial perceptions of a player's strengths and weaknesses thereby enabling them to allocate their positions based on the technical demands of the game. The systematic collection of such measures, particularly, from the initial inception of training, would ensure that coaches and others are better informed about how physical motor and physiological factors affect the positional allocation of players in relation to the position of play. Besides it can also be suggested that these parameters are important implications for team selection and highlight the necessity for individualized training programmes and fitness attainment targets.

Works Cited

Adnan, Rahmat and Sharifudin, Suzana and Tumijan, Wahidah and Sulaiman, Norasrudin. (2011). The VO2max differences based on The Position Roles amongst Malaysia Leagues Soccer Athletes. 2011 IEEE Colloquium on Humanities, Science and Engineering, CHUSER 2011. 10.1109/CHUSER.2011.6163736.

Armstrong, N. and Weisman, J.R. (1994). Assessment and interpretation of aerobic fitness in children and adolescents. In J.E. Holloszy (Ed.), *Exercise and Sport Science Review* (435-476). Philadelphia, PA: Williams and Wilkins Publications.

Bale, P. (1986). A review of the physique and performance qualities, characteristics of game players in specific positions on the field of play. *Journal of Sports Medicine and Physical Fitness,* 20:109-121

Bouchard, C., Shephard, R.J. and Stephens, T. (1994). *Physical activity, fitness, and health.* Champaign, IL: Human Kinetics.

Bradley, P. S., Sheldon, W., Wooster, B., Olsen, P., Boanas, P., and Krustrup, P. (2009). High-intensity running in English FA Premier League soccer matches. *Journal of Sports Sciences*, 27, 159-168.

Duthie, G., Pyne, D., and Hooper, S. (2003). Applied physiology and game analysis of rugby. *Union Sports Medicine, 33*, 973-991

Mcgee, K. J., and Burkett, L. N. (2003). The national football league combine: A reliable predictor of draft status. *Journal of Strength and Conditioning Research, 17*, 6-11.

Mcintyre, M. C., and Hall, M. (2005). Physiological profile in relation to playing position of elite college Gaelic footballers. *British Journal of Sports Medicine, 39*, 264-266.

Reeves, S.L., Poh, B.K., Brown, M., Tizzard, N.H. and Ismail, M.N. (1999). Anthropometric measurements and body composition of English and Malaysian footballers. *Malaysian Journal of Nutrition*, 5: 79-86.

Reilley, T.; Sechei, N.; Snell, P. and Williams, C. (1990). *Physiology of sports.* London.

Rienzi, E., Drust, B., Reilly, T., Carter, J. E., and Martin, A. (2000). Investigation of anthropometric and work-rate profiles of elite South American international soccer players. *Journal of Sports Medicine and Physical Fitness, 40,* 162-169.

Reilly, T., Bangsbo, J., and Franks, A. (2000). Anthropometric and physiological predispositions for elite soccer. *Journal of Sports Sciences, 18,* 669-683.

Sheldon W.H., Dupertius, C.W., Dermotte, E. (1954). *Atlas of men*, New York Harper and Row, p 178.

Young, W.B., Newton, R.U., Doyle, T.L., Chapman, D., Cormack, S., Stewart, G. and Dawson, B. (2005). Physiological and anthropometric characteristics of starters and non-starters and playing positions in elite Australian Rules football: A case study. *Journal of Science and Medicine in Sport, 8,* 333-345.

Wade A (1979). *The FA, Guide to Training and Coaching*, Heinemann