1. INTRODUCTION

Sports performance is the end product of sports participation. This sports performance, as the ultimate result, is complex in nature and dependent on various factors of varied nature. Structure of performance is the makeup of sports performance. It indicates the composition of the performance and identifies basic elements with which the sports performance is made of.

To control sports performance it is essential to have the clear understanding of the nature of sports performance. Basic elements of sports performance depends on factors like nature of sport, nature of participants and the nature of participation environment. According to experts nature of sports depends on the techniques, tactics and strategies. Nature of participants includes factors like age, sex, body build, fitness level, psychological makeup etc. Nature of participation environment includes factors like climatic condition, equipment and facilities, rules of games and sports etc. Of all this factors some can be controlled but some other cannot be controlled by the participants. Keeping these things in mind experts have developed general performance structure of sports. They have identified a few groups of factors as the responsible elements of the sports structure. These are a) Endogenic factors like body build, shape and size, b) Fitness including elements like speed, strength, endurance, coordination etc. c) Technique and tactics of sports, d) Psychological makeup of the sports persons, including personality, intelligence, motivation, anxiety. All these factors are used in different proportions in different games and sports for the highest level of sports performance.

Football is specifically known as soccer is also a sports having specific performance structure. Apart from the basic composition the soccer performance structure varies from country to country. Thus, Brazilian football performance structure is not the same as that of Germany or Japan. With the basic composition as same, there are variations. In India Bengalees have recognition as better footballers from the very beginning of the game in the country. But with change of time, situation has changed.
Footballers of the other regions of the country are showing better performances than their Bengal counterparts in recent times.

It is, therefore, an interesting idea to study the performance structure of Bengalee footballers in light of national and international football players. With this basic motive the present research study was planned.

2. REVIEW OF LITERATURE

A critical analysis of review of literature regarding structure of football performance indicates that the performance is very complex in nature with a large number of groups of influencing factors.

A summary of literature review reveals the following:


ii) Performance of football game has been reported to be significantly influenced by motor fitness components like speed, agility, cardio-vascular endurance, leg muscles power, flexibility, balance (McGee; 1979, Das; 1984, Carlson; 1994, Reilly; 1996).

iii) Dribbling, goal scoring ability, correct passing and receiving, heading and tackling has been described as significant determinate techniques in football game performance. (Singh; 1984, Bate; 1988, Gulustian; 1995, Russel; 2010, Williams; 2002).

iv) Personalities of footballers described as more warmth, emotionally stable, rule conscious, socially bold, openness to change and perfectionist. (Loehr; 1982, Chung; 2000, Hiddink; 2001, Jones; 2002, Kim; 2003,)
3. METHODOLOGY

a) The Subject:

Sixty two male footballers, age ranging between 20 years to 25 years volunteered to participate as the subjects of this study. These footballers were represented West Bengal in Inter-State Football Championship and other such tournaments. They were born and brought up in West Bengal and played the game of football from very beginning. The subjects had the experience of competitive football for 9-10 years. They were from different districts of West Bengal and regular players of different Football Clubs of Kolkata.

b) Criterion Measure:

The researcher reviewed literature from various sources available in library and internet to collect information regarding influencing factors of football performance. On the basis of knowledge available from literature, experts’ opinion and the experience of the researcher the measuring criteria of the study of performance structure of the footballers were finalized. Performance Structure of football game is multi-dimensional structure. So, the criteria were selected from different groups of factors.

**Anthropometric Factor**: Standing Height, Body Weight, B. M. I, Leg Length and Arm Length

**Motor Fitness Factor**: Speed, agility, cardio-vascular endurance, leg power, flexibility and balance.

**Technique Factor**: Dribbling, finishing, lofted pass and short pass

**Psychological Factor**: Personality test.

4. INSTRUMENT AND TOOLS USED

For testing the selected parameters to obtain data for research work following instruments and tools were used.
a) **Anthropometric Measurements:**
   i) Stadiometer was used to measure standing height.
   ii) Weighing machine was used to measure body weight.
   iii) Flexible steel tape was used to measure leg length and arm length.

   The reliability of these instruments was guaranteed by their manufactures.

b) **Motor Fitness Components:**
   i) Locomotion speed was measured by 50 m dash test.
   ii) Agility was measured by $4 \times 10$ m shuttle run test.
   iii) Cardiovascular Endurance was measured by 1.61 km. run test.
   iv) Leg power was measured by vertical jump test.
   v) Trunk Flexibility was measured by Bend and Reach test.
   vi) Static Balance was measured by Stork Stand test.

   All these tests were having content validity and establish reliability.

c) **Football Technique:**
   It was measured by Manchester United Soccer skill test battery. This test battery has reported validity and establishes reliability.

d) **Football Game Performance:**
   Football game performance of the subjects was rated out of 100 points by a panel of three qualified coaches during actual competition and the average of three scores was considered as game performance.

e) **Personality Factors:**
   Personality factors were measures by Cattell 16 Personality Factors Questionnaire Form– C.
5. STATISTICAL ANALYTICAL PROCEDURE

The collected data were analyzed for results using statistical procedures. Mean and standard deviation were calculated as the measures of central tendency and variability respectively. Co-efficient of correlation was calculated as the measure of relationship between independent and dependent variables. Finally, regression equation was developed as the tool for prediction of independent variables using dependent variable.

6. RESULTS OF THE STUDY

a) Results Regarding Selected Motor Fitness Parameters
i) Football performance was significantly related to speed, agility, cardiovascular endurance, leg power, flexibility and balance.
ii) Speed, agility, cardiovascular endurance, leg power and flexibility were found the most significant predictor variables to the football game performance.

b) Results Regarding Selected Anthropometric Parameters
i) Football performance was significantly related to standing height, weight, B. M. I and leg length.
ii) Arm length was found to have insignificant relationship with football performance.
iii) Standing height and B. M. I were found the most significant predictor to game performance.

c) Results Regarding Football Technique
i) A significant relationship was found between football performance and the football technique test.
ii) Football techniques were identified as the significant predictor for football performance.
d) Results Regarding Personality Profile

i) Bengalee footballers were found to be within normal range in factors A (Warmth), B (Reasoning), E (Dominance), F (Liveliness), I (Sensitivity), L (Vigilance), M (Abstractness), N (Privateness), O (Apprehension), Q₁ (Openness to change), Q₂ (Self Reliance) and Q₄ (Tension).

ii) In factors C (Emotional Stability), G (Rule Consciousness), H (Social Boldness), Q₃ (Perfectionism) Bengalee footballers were found to be slightly higher value than normal.

iii) Indian International footballers were also found to be higher than normal range in factors C (Emotional Stability), G (Rule Consciousness), H (Social Boldness), Q₃ (Perfectionism).

iv) In factors A (Warmth), C (Emotional Stability), F (Liveliness), G (Rule Consciousness), H (Social Boldness), I (Sensitivity) and Q₃ (Perfectionism) Australian footballers were found to be higher than normal people.

7. CONCLUSION

Within the limitations of the conducting the present study the following conclusions were drawn:

i) Football performance was significantly related to speed, agility, cardiovascular endurance, leg power, trunk flexibility and balance.

ii) Significant relationship was found between football performance and the technique variable.

iii) Heights, weight, B. M. I., leg length were significantly related to football performance whereas, arm length insignificantly related to football playing ability.

iv) Out of six motor fitness variables selected for the study speed, agility, cardiovascular endurance, leg power, trunk flexibility were identified as the most significant predictor variables contributing the football performance.

v) Technique variable was identified as significant relationship to football playing ability and valid predictor to contribute football performance.
vi) Out of five anthropometrical variables chosen for the purpose of the study, the standing height and B. M. I. were found most significant predictor variables contributing to football performance.

vii) Emotional stability, rule consciousness, social boldness and perfectionism traits of personality were found to be higher of the Bengalee footballers.

1. Prof. Sudarsan Bhowmick
   Supervisor

2. Dr. Susanta Sarkar
   Supervisor

Candidate Signature