RELATIONSHIP OF SELECTED PHYSICAL FITNESS AND PSYCHOLOGICAL VARIABLES WITH THE PERFORMANCE OF UNIVERSITY FOOTBALL PLAYERS

V. Ravikumar* and Dr. R. Srinivasa**

ABSTRACT

An attempt has been made to study the relationship of physical fitness such as speed, agility, flexibility, endurance, leg power and psychological factors such as sports achievement motivation, aggression and self-confidence with performance of interuniversity football players. The subjects were 60 university football players of Bangalore University, Tumkur University, Davangere University and University of Mysore who have represented at South Zone Inter-University Football Championship. 2011-12 were selected. The measures of all the selected variables were recorded at the ground of respective universities. Sports Achievement Motivation Test (Kramaha 1983), Aggression subscore Questionnaire (Smith 1973), Self Confidence Inventory (Agnihotri, 1987) were administered to assess sports achievement motivation, aggression and self-confidence, respectively. The performance of football players was assessed by using coaches rating scale for football players. Pearson’s coefficient of Correlation was employed to find out the relationship among variables. Significant relationships were found between agility, with performance of football players. Sports Achievement Motivation was positively significant relationship with performance whereas Aggression negatively impact on the performance. The speed, endurance, leg power and self confidence were insignificant relationship with performance of football players.

INTRODUCTION:

Performance in physical activity of sports not only demands systematic training to develop physical and physiological variables but also demands training and consideration of psychological characteristics for success in this field. The success or failure of an individual athlete depends on the blending of physical ability, conditioning, training mental preparation and the ability to perform well under pressure (Williams F. Straub, 1972). Football is the most popular and most attended spectacular game in the world. It is a vigorous, fast and skilled game for the well conditioned sportsperson, who must possess strength, speed, agility, balance, flexibility, endurance, coordination and many other undefined qualities for dribbling, kicking, passing and shooting at the goal. For playing better football, physical fitness is needed, but there is need for good strength in respect of good height and weight. Football is a fast moving field game involving players of varying body types. It requires a unique mix of physical, mental and technical skills.

Speed and agility have already been seen as two of the most important and differentiating performance related physical fitness components for soccer play, but it is ball control however, that is the most defining characteristic. The ability of top-level teams to manipulate the ball at high speeds is crucial to success as a team and is the most obvious differentiator tool. Flexibility is often said to be one of the most crucial components of physical fitness, as a sufficient degree of flexibility is required to prevent injury, as tight muscles may predispose an athlete to muscle sprains and tendon injuries (Maud and Foster, 2006). On the other hand it has also been said that highly extensible muscles, which do not possess the necessary coordination and stability, may lead to joint dislocations and ligamentous sprains (Eldstrand and Gillquist, 1983). The existing literature in the field of football shows that endurance, speed, agility, maximum leg strength, upper body strength, leg power, muscular endurance, flexibility, coordination, reaction time are important prerequisites for efficient football performance, whereas excess body fat proves to be a hindrance. (Uppal and Roy, 1985).

Sport psychology focuses on the mental and behavioral processes of human within the socio-cultural context of competitive sport. Within this lies social behavior such as achievement or competition and associated thoughts and feelings: anxiety, self-esteem, and motivation. Sport psychology, the youngest of the sport sciences, became

* Research Scholar, University College of Physical Education, Bangalore University, Bangalore-56. Email ID: ravikumar04051980@yahoo.co.in; ravf1980@gmail.com; Cell: 99729 73281.
** Associate Professor, University College of Physical Education, Bangalore University, Bangalore-56.
recognized as an academic field of study in the 1970s. Sport psychology, as the systematic study of human thought, emotion, and behavior in sport contexts, consists of four main areas: personality and sport participation, motivational processes, interpersonal and group processes, and intervention techniques to enhance sport performance and personal development. In modern competitive sports, psychological preparation of an athlete or a team is as much important as technique of the different skills of the game on a specific line.

Motivation is a complex process that influences individuals to begin, pursue, and persist in an activity. In football, nothing can affect performance as dramatically as a sudden loss of motivation. Without the motivation to succeed a player cannot survive the challenges soccer can throw up. If the team or player is going through a bad patch then motivating the players becomes especially important. However, an excessively motivated player may be nervous and take risks.

Aggression is as old as the human race. Aggression is the frequency and intensity of feeling angry, combined with the violence one exhibits when angry. Literal meaning of aggression is to move towards with intention to hurt or harm. Aggressive behavior is an overt verbal or physical act that can psychologically or physically injure another person or oneself. Aggressive behavior has been associated with destructive acts, prejudice, speech, drug and alcohol addiction, sports and exercise and so forth.

The most important elements in successful football performance is the level of self-confidence. When players are confident they can perform at their best level and it is rare for successful players to have a persistent lack of confidence. Developing a good general state of confidence is vital for withstanding and recovering from setbacks such as a defeat or a poor performance. There are many characteristics which reflect a player’s confidence and these can be observed during training and games through body language and verbal comments. Players must always look at the positive side of things, be correctly prepared, committed, see situations as challenges not problems and trust themselves. Making sure of a correct lifestyle will also help maintain confidence. A coach can heavily influence player confidence through a positive philosophy as well as providing demanding yet attainable goals in training and competition. For this reason, it is important to understand the relationship of physical and psychological variables with performance of football players.

**METHODS**

**Sample**: Sixty male football players representing university players of Bangalore University, Tumkur University, Davanagere University and University of Mysore constituted the sample of the study. Study was also being delimited to selected physical fitness components that is Speed tested by 30 Mtrs. run with standing start; Agility tested by 4 x 10 Mtrs. Shuttle Run; Flexibility tested by Sit and Reach Test; Endurance tested by 1000 Mtrs. Run/Walk and Leg Power tested by Standing Broad Jump. The selected psychological variables were Sports Achievement Motivation, Aggression and Self Confidence. Sports Achievement Motivation Test SAMT (Kamalish 1983), Sports Aggressiveness Inventory SAI (Smith 1973), Self Confidence Inventory SCI (Agnihotri, 1987) were administered to assess sports achievement motivation, aggression and self confidence, respectively. The performance of football players was assessed by using coaches rating scale for football players. The tests used are SAMT, SAI and SCI whose reliability are 0.70, 0.78, and 0.89 respectively. The coaches and subjects were contacted personally and their sincere cooperation was solicited. Respondents were called to a common place where they are not busy. Necessary instructions were giving to the subject before the administration of each test. Confidentiality of responses was guaranteed so that the subject would not camouflage their real feelings.

**Statistical Procedure**: To find out the relationship between selected physical fitness and psychological variables of football players with their performance, Pearson’s Coefficient of Correlation (r value) was used. The level of significance was set at 0.05 and 0.01 levels in order to check the significance of calculated r value with tabulated value.

**RESULTS**: Pearson’s coefficient of correlation of football players’ scores on performance and selected physical fitness and psychological variables are presented in the following tables.
Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>df</th>
<th>'r' Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>60</td>
<td>58</td>
<td>0.131</td>
<td>NS</td>
</tr>
<tr>
<td>Agility</td>
<td>60</td>
<td>58</td>
<td>-0.317</td>
<td>*</td>
</tr>
<tr>
<td>Flexibility</td>
<td>60</td>
<td>58</td>
<td>0.220</td>
<td>NS</td>
</tr>
<tr>
<td>Endurance</td>
<td>60</td>
<td>58</td>
<td>0.217</td>
<td>NS</td>
</tr>
<tr>
<td>Leg Power</td>
<td>60</td>
<td>58</td>
<td>0.200</td>
<td>NS</td>
</tr>
</tbody>
</table>

NS = Not Significant; * = Significant at 0.05 level.

Results revealed that agility (r = -0.317 P < 0.01) was significantly and negatively related to the performance of university football players. The speed, flexibility, endurance and leg power of football players showed insignificant relationship with their performance.

Table 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>df</th>
<th>'r' Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports Achievement Motivation</td>
<td>60</td>
<td>58</td>
<td>0.601</td>
<td>**</td>
</tr>
<tr>
<td>Aggression</td>
<td>60</td>
<td>58</td>
<td>-0.782</td>
<td>**</td>
</tr>
<tr>
<td>Self Confidence</td>
<td>60</td>
<td>58</td>
<td>-0.034</td>
<td>NS</td>
</tr>
</tbody>
</table>

NS = Not Significant; ** = Significant at 0.01 level.

Results revealed that sports achievement motivation (r = 0.601 P < 0.01) was significantly and positively related to the performance and aggression (r = -0.782 P < 0.01) was significantly and negatively related to the performance of university football players and self confidence of football players showed insignificant relationship with their performance.

DISCUSSION:

The aim of the present study was to examine the relationship of selected physical and psychological variables of university football players with their performance level. It was hypothesized that there will be a significant relationship between selected physical and psychological variables of football players with their performance level. The selected physical fitness that is agility with performance of football players showed significant relationship. The same result of this study are supported by Chalenborty (1986) who conducted a study on relationship of selected motor components and physique characteristics to performance in Soccer, the calf speed and agility showed significant relationship to the performance in soccer. The selected psychological variables i.e. sports achievement motivation and aggression with performance of football players showed significant relationship. The same result of this study are supported by Bujarke, Halayal and Singh (1991) who conducted a study on relationship of achievement motivation and attribution to performance outcome in competitive athletics. The investigation highlights the achievement motivation is a contributory factor for the performance in events like 10 mts and 800 mts run. Reddy, Reddy and Samiullah (2000) who conducted a study on the impact of level of participation on psychological factors such as Aggressions, Anxiety,
Achievement Motivation and performance. The research found that Aggression is found to have negative impact on the performance.

CONCLUSION:
Findings of the present study revealed that the relationship of selected physical fitness namely agility and psychological variables, sports achievement motivation and aggression were shows significant relationship with performance of football players. Speed, flexibility, endurance, leg power and self confidence with performance of football players were insignificant relationship.

REFERENCES: