A COMPARISON OF COMPETITIVE STATE ANXIETY BETWEEN MALE AND FEMALE VOLLEYBALL PLAYERS

Dr. R. K. Sharma* and Prof. R. K. Yadav**

ABSTRACT

The purpose of the study was to investigate the feeling of anxiety by male and female volleyball players before and during the competition. The Competitive State Anxiety Inventory – 2 (CSAI-2) by Martens, et al, (1990) was used to assess and compare the anxiety level of male and female volleyball players before and during competition. Forty-two (20 female and 22 male) volleyball players, between the age of 19 and 30 years, who were participating in Chhattisgarh State Volleyball Championships at Rajnandgaon, were taken as subjects for this study. Descriptive statistics and Two way factorial ANOVA (2X2: gender x stage of competition) were computed to compare gender, and anxiety level before and during competition. The results indicated that there was no statistical significant difference, at .05 level between gender and anxiety level did not change throughout the competition.

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INTRODUCTION

Anxiety is a natural reaction to threats in the environment and part of the fight or flight response. Sporting competitions promote similar psychological and bodily responses because there is often a threat posed towards the ego; one’s self-esteem. Essentially, when the demand of training and competition exceeds one’s perceived ability, anxiety is inevitable outcome (Levitt, 1967).

The anxiety that are closely related to fear. These are threat to self-esteem as a result of failure; threat to personal harm; unpredictability or fear of the unknown; fear of disruption of daily habits; and; fear of being negatively evaluated by others (Cox, 1994).

It is thought that as the importance of the situation increases, cognitive anxiety will be influenced (Sewell & Edmondson, 1996; Alexander & Krane, 1996) whilst somatic anxiety will decrease with the onset of competition (Alexander & Krane, 1996). It is also expected that before competition, anxiety in females will be higher in both the cognitive and somatic components and lower in self-confidence than their male counterparts, as indicated by several previous studies (Martens et al., 1990; Krane & Williams, 1994; Madden & Kirby, 1995; Sewell & Edmondson, 1996).

Amu (2005) described that there was no gender difference in pre-competitive somatic anxiety among university Badminton Players, however, gender difference was found with male players experienced higher than female players in pre-competitive cognitive anxiety. Humara (1999) indicates that although anxiety has a considerable impact on performance, it is important to consider other components of an athlete’s functioning as well. Bekiari et.al. (2006) described that male volleyball players rated somatic anxiety higher and were more affected by the verbal aggressiveness of their coaches than female volleyball players. Russell, Robb, & Cox(1998) revealed a significant interaction of sport by sex and a significant main effect for sport. The basketball players scored higher somatic and cognitive state anxiety than volleyball players. Any or all of these factors may have serious consequences.

The purpose of study was to investigate the feeling of anxiety by male and female volleyball players before and during the competition. as measured by the CSAI-2 (Martens, et al., 1990). It was also hypothesized that there would be no significant difference between genders in their competitive anxiety

METHODOLOGY

Sample:

Forty-two Volleyball players (20 females and 22 males) amongst the volleyball players participating in Chhattisgarh Senior State Volleyball Competition held at Rajnandgaon, were selected as subjects for this study. The age of subjects ranged from 19 to 30 years.

Instrument:

In order to measure the state anxiety (cognitive-somatic anxiety, self-confidence) of Volleyball players Competitive State Anxiety Inventory (CSAI-2) developed by Martens et al., (1990) was used to assess state anxiety level of players before and during competition.
CSAI-2 is regarded as one of the most reliable and valid tools for measuring state anxiety. The internal consistency alphas were .79, .81 and .84 for the cognitive anxiety, somatic anxiety, and self-confidence subscales respectively. The CSAI-2 consisted of 27 items, 9 for each of the 3 subscales (cognitive and somatic anxiety and self-confidence). Each item was rated on a 4-point Likert scale, producing a score range from a low of 9 to a high of 36 for each sub scale.

**Procedure:**
Players completed the CSAI-2 10 minutes prior to the onset of warm-up and competition. The game lasted for one hour and consisted of three sets. Players were given sufficient time to complete the questionnaire; however the questionnaire was completed within 5 minutes.

The CSAI-2 was then administered for a second time to measure competitive state anxiety during the match. The second questionnaire was given after the first of the three sets and the same procedure occurred as before the match.

**RESULTS AND DISCUSSION**
Mean, standard deviation and Two Way factorial ANOVA (2X2: gender x stage of competition) were computed to compare gender, and anxiety scores before and during competition and data pertaining to this have been presented in Table 1&3.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>DESCRIPTIVE STATISTICS OF COMPETITIVE ANXIETY OF MALE AND FEMALE VOLLEYBALL PLAYERS BEFORE COMPETITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Cognitive</td>
</tr>
<tr>
<td>Male</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>15.05</td>
</tr>
<tr>
<td>Female</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>14.30</td>
</tr>
</tbody>
</table>

Mean score of cognitive, somatic and self confidence anxiety of male and female volleyball players before competition depicted in figure 1

![Figure 1: Mean Scores of different Anxiety Levels of Male and Female Volleyball Players Before Competition.](image-url)
TABLE 2
DESCRIPTIVE STATISTICS OF COMPETITIVE ANXIETY OF MALE AND FEMALE VOLLEYBALL PLAYERS DURING COMPETITION

<table>
<thead>
<tr>
<th>Gender</th>
<th>Cognitive M</th>
<th>Somatic M</th>
<th>Self Confidence M</th>
<th>Total M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>15.10</td>
<td>13.77</td>
<td>27.72</td>
<td>57.09</td>
</tr>
<tr>
<td>SD</td>
<td>2.61</td>
<td>4.80</td>
<td>4.07</td>
<td>5.93</td>
</tr>
<tr>
<td>Female</td>
<td>13.10</td>
<td>12.60</td>
<td>27.35</td>
<td>53.03</td>
</tr>
<tr>
<td>SD</td>
<td>2.25</td>
<td>2.54</td>
<td>4.68</td>
<td>4.63</td>
</tr>
</tbody>
</table>

Mean score of cognitive, somatic and self confidence anxiety of male and female volleyball players during competition depicted in figure 2.

Figure 2: Mean Scores of different Anxiety Levels of Male and Female Volleyball Players During Competition.

TABLE 3
TWO WAY FACTORIAL ANOVA (2X2: GENDER X STAGE OF COMPETITION) VOLLEYBALL PLAYERS AND COMPETITIVE ANXIETY LEVELS

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1</td>
<td>66.182</td>
<td>2.059</td>
<td>0.389</td>
</tr>
<tr>
<td>Stag of Competition</td>
<td>1</td>
<td>24.107</td>
<td>0.750</td>
<td>0.155</td>
</tr>
<tr>
<td>Error</td>
<td>81</td>
<td>32.139</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F.05 (1, 81) = 4.08.

It is clearly evident from Table 3, that significant differences did not exist among male and female volleyball players in their competitive anxiety levels and competitive anxiety did not change significantly during the game i.e. before and during competition, as the obtained
F-values of 0.389 and 0.115 for gender and stage of competition were less than the required F value (4.080 to be significant at .05 level.

**DISCUSSION**

Purpose of the study was to compare the state competition anxiety differences between genders and before and during competition. Results of the study indicated insignificant anxiety differences between gender and stage of competition i.e. before and during competition, at .05 levels.

A slight change in somatic anxiety of male and female players was observed from pre-competition to during competition. The results indicated a slight increase in somatic anxiety during competition, this is contrary to previous research, which states that somatic anxiety peaks prior to competition and then dissipates with the onset of competition (Sewell & Edmondson, 1996).

This finding could be due to the non-specificity of the questions in the CSAI-2. The cues somatic anxiety is characterized by (rapid heart rate and muscle tension) are also associated with the onset of exercise. Therefore, when subjects are asked to rate 'my heart is racing', the male subjects could not interpret this question as exercise induced rather than anxiety induced.

Insignificant changes in competitive anxiety may also be attributed to non-threatening environment because of unchallenging competitive situation due to huge difference in the playing ability of teams/players.

**CONCLUSIONS**

1. There was no significant difference existed among male and female volleyball players on competitive anxiety.
2. Competitive anxiety levels did not change throughout the game.

**BIBLIOGRAPHY**


COMPARATIVE STUDY ON ANXIETY IN RAMADAN BETWEEN FASTING AND NON-FASTING FEMALE ISLAMIC PHYSICAL EDUCATION STUDENTS
Khairuzzaman Mallick*, Biswabandhu Nayek** & Dr. Debaprasad Sahu***

ABSTRACT
The present investigation has been conducted with the aim to compare Anxiety in Ramadan between fasting and non-fasting female Islamic Physical Education college students. The study was conducted on 60 female Islamic Physical Education College students (30 fasting female Islamic Physical Education College students, 30 Non-fasting female Islamic Physical Education College students) selected from Sree Chaitanya Mahavidyalaya and Netaji Satabarshiki Mahavidyalaya in Ramadan month during 29th June 2014 to 28th July 2014. Anxiety was observed by the GAD-7 Anxiety questionnaire, developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues. To analyze the data for the Anxiety, t’ test was applied to calculate the collected data at 0.05 level of significance. The age ranging of the subjects was between 18-22 years. The result showed that there was significant difference between fasting female Islamic Physical Education College students and Non-fasting female Islamic Physical Education College students. The Non-fasting female Islamic Physical Education College students had less anxiety than the fasting female Islamic Physical Education College students.

Key words: - Anxiety, Ramadan, Fasting, Islamic Physical Education College students

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INTRODUCTION

Ramadan represents one of the widest celebrated religious traditions in the world. As one of the “five pillars” of Islam, Ramadan corresponds to the ninth month of the Islamic lunar calendar during which Muslims fast. Literally, Ramadan fasting (sawm in Arabic) means self-refraining: It involves not only abstinence from eating, drinking, during the daylight hours, but also a high control level of one’s thoughts, attitudes, and behaviors. Concretely, Muslims have to develop a closer relationship with Allah, strengthen ties with siblings, parents, friends, and restrain from touching, listening, saying, or looking at unlawful things, or going to evil places. From a spiritual standpoint, Ramadan can be considered as a time of self-reflection, because Muslims evaluate themselves in light of Islamic guidance, and a self-reformation time during which Muslims develop patience, humility, compassion, empathy, and generosity. Religion, defined as “…cognition, affect, and behavior that arise from awareness of, or perceived interaction with, supernatural entities that are presumed to play an important role in human affairs” is a psychosocial force capable of modifying human lives trajectories.

The month of Ramadan comes every year according to Islamic calendar. It is considered to be holy month by the Muslims. During this month, it is obligatory for all healthy Muslims to pray and keep fast. During this month, the Muslims do not eat or drink anything from dawn to dusk. The fasting period varies between 12-14 hours. Islamic calendar is lunar, and hence, Ramadan is not fixed to any season or month. With each year it advances by 11 days. The duration of fast may vary form 12 -18 hrs depending upon the season and location of a country. Ramadan fasting is different from starvation. During starvation one does not eat or drink for more than 24 hours. Ramadan fasting, unlike starvation, can be considered to be a type of intermittent fasting, in which there are periods of fasting and feasting. Lot of studies have been done on starvation but there are very few studies on intermittent fasting. Intermittent fasting has been to be beneficial in previous studies done by Aksungar F B (2005). A lot of physiological, psychological and spiritual changes take place in the human body in people who fast during Ramadan month.

Anxiety refers to a sort of nervous and fear emotion formed by frustration of self-esteem and self-confidence, or increasing of the sense of failure and guilty, which is resulted by the threat from being unable to achieve goals or to overcome obstacles (Akbar et al., 2011). Anxiety can have a devastating effect on the performance of an athlete. No matter how much talent or skill one may have, he will never perform at his or her best if he or she lives in fear before every event. Among the psychological disorders, anxiety, stress, and depression have unfortunately been highly prevalent and widespread. According to World Health Organization, almost 500 million people worldwide are suffering from mental disorders, among who half are developing mood disorders such as depression and anxiety. Anxiety disorders are the most common psychiatric disorders in the general population, and presently about 30 million people in America are suffering from this disorder. It is estimated that at least 7 million of Iranian population suffer from one or more of psychiatric disorders.

Although fasting in the holy month of Ramadan is influential on physical and mental health based on religion of Islam, and several studies have described the effect of fasting on physical health, few investigations have addressed to the relationship between fasting and
mental health, in which fasting has been concluded to be effective on diminishing anxiety and paranoid ideation and augmenting mental health and self-esteem.

Ramadan fasting, as an Islamic ritual, is of particular importance for Muslims. During this month, Muslims avoid eating, drinking, and smoking from dawn to sunset. Since lunar months coincide with different times of the year, fasting may extend to more than 18 hours. Prolonged fasting causes inhibition of hypothalamic-pituitary-thyroid axis in perfectly healthy individuals

The purpose of the study was to analyze the anxiety in Ramadan between fasting and non fasting female Islamic Physical Education college students.

METHODOLOGY
Sample:
For the purpose of the study 30 Fasting female Islamic Physical Education college students and 30 non- Fasting female Islamic Physical Education college students, in Ramadan month during 29th June 2014 to 28th July 2014 (Last week of Ramadan at 2pm-3pm) from Sree Chaitanya Mahavidyalaya and Netaji Satabarshiki Mahavidyalaya were selected randomly for the purpose of this study. The age of the subjects were ranged between 18-22 years.

Instrument:
To compare the anxiety between Fasting Islamic Physical Education college students and non- Fasting Islamic Physical Education college students in Ramadan month, data were collected by using GAD-7 Anxiety questionnaire, developed by Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues.

RESULTS AND DISCUSSION
Student’s ‘t’ test at 0.05 level of significance was applied to calculate the significance of difference between fasting and non fasting Islamic Physical Education college students and data pertaining to this have been presented in Table1 and depicted in Figure 1

<p>| TABLE 1 |
| SIGNIFICANCE OF DIFFERENCE IN ANXIETY BETWEEN FASTING AND NON FASTING FEMALE ISLAMIC PHYSICAL EDUCATION COLLEGE STUDENTS IN RAMADAN |</p>
<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting students</td>
<td>7.166</td>
<td>1.69</td>
<td></td>
</tr>
<tr>
<td>Non -Fasting Students</td>
<td>4.8</td>
<td>1.57</td>
<td>5.10*</td>
</tr>
</tbody>
</table>

*Significant at .05 level, \( t_{0.05 (58)} = 2.00 \)

From the above table, it was found that the mean and standard deviation of Fasting female Islamic Physical Education college students in Ramadan on anxiety is 7.166±1.69 and
the mean and standard deviation of Non–Fasting female Islamic Physical Education college students in Ramadan on anxiety is 4.8±1.57 and the ‘t’ value of anxiety is 5.10 that is significant at 0.05 level of significance.

**Figure 1:** Mean Scores of Anxiety of Fasting and Non-fasting Female Islamic Physical Education College Students in Ramadan.

**DISCUSSION**

From the finding of this study it has been observed that there was significant difference in Anxiety in Ramadan between fasting and non fasting female Islamic Physical Education college students. Because prolonged fasting is generally not conducive to a healthy lifestyle. Depriving the body of water and essential nutrients by dividing and postponing meals to irregular intervals does nothing to limit consumption. In fact it causes a host of health, performance and mood disorders. Numerous studies have reported significant weight loss during Ramadan (Adlouni, Ghailm, Benslimane, Lecerf, & Saile, 1997; Adlouni et al., 1998; Fedail, Murphy, Salih, Bolton, & Harvey, 1982; Kayikcioglu, Erkin, & Erakgun, 1999; Ramadan, Telahoun, Al-Zaid, & Barac-Nieto, 1999; Schmahl & Metzler, 1991; Sweileh, Schnitzler, Hunter, & Davis, 1992). The declines may result from water loss early in Ramadan and loss of body fat during the later period (Sweileh et al., 1992). Loss of body fat would indicate the use of fat for energy production during Ramadan (Husain, Duncan, Cheah, & Ch'ng, 1987; Ramadan et al., 1999; Sweileh et al., 1992). In addition, researchers have found decrease heart rate and oxygen consumption during Ramadan (Husain et al., 1987; Ramadan et al., 1999; Sweileh et al., 1992). These findings suggest a metabolic adaptation to fasting. It seems that during the Ramadan daylight hours - when no food or water is taken in - to conserve stored energy, the metabolism slows down (Sweileh et al., 1992).

During Ramadan change of meal schedule is accompanied with changes in sleep habits, such as delayed and shortened sleep periods, which may affect endocrine and Neuroendocrine circadian patterns. Several cardiovascular parameters (i.e., heart rate, blood pressure, vascular tone, and coagulation-fibrinolysis) show circadian pattern. Several studies
reported that autonomic activity and melatonin rhythm city may be responsible for circadian patterns of cardiovascular parameters. Changes of sleep habit in Ramadan affect autonomic activity and melatonin rhythm city. Result of this study also reflects same.

BIBLIOGRAPHY


Robert, L.. Spitzer, Janet, B.W., Williams, Kurt Kroenke and colleagues. GAD-7 Anxiety Questionnaire Pfizer Inc. Copyright© 1999


SHOOTING SKILLS OF FEMALE TRIBAL AND NON-TRIBAL ARCHERS FROM 20 YARD : WITH REFERENCE TO PHYSICAL FITNESS

Dr. Vivek Mishra* & Dr. R. N. Mishra**

ABSTRACT

The aim of the present study is to find out the effect of physical fitness on shooting skills of tribal and non-tribal female archers. To conduct the study, 33 state level tribal female archers (Ave. age 19.23 yrs.) were selected as sample. Another set of 33 state level non-tribal female archers (Ave. age 18.23 years) were also selected for the present study. Rogers Fitness test was used to evaluate physical fitness of selected subjects with the help of linear transformation method. To measure shooting ability from 20 yard distance of selected archers, AAHPER Archery Test was used. Q₁ and Q₃ cutting points were adopted to bifurcate cases into high and low levels of physical fitness. Results reveal main effects of physical fitness as well as tribal- non tribal belongingness on basic shooting skills of female archers from 20 yard. The interaction effect of physical fitness and tribal-non tribal belongingness was not observed on shooting skills of female archers from 20 yards. It was concluded that physical fitness and tribal-non tribal belongingness emerged as potential enough variables that alone but not in interaction with each other, influence shooting skills of female archers from 20 yards.

Keywords: Tribal, Non-tribal, Archery, Shooting Skills, Females

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INTRODUCTION

There is a misconception that archery do not require high level of physical fitness. Contrary to this archery requires certain fitness components to shoot accurately and without physical fatigue. To draw the bow upper back and shoulder strength, to control the draw arm upper and shoulder muscles and to extend the bow arm, arm muscles are required. The finger muscles are used to hold the string. Apart from this flexibility also plays a major role in archery performance. In addition to this a certain level of physical fitness is also required in order to control fatigue during continuous shooting in archery.

Although research in field of archery performance contains studies which deals with so many factors such as biomechanical, psychological, physiological, hemodynamics etc. [Dey (1997), Erton (2004), Koji, T. et al. (2006), Kentaro, K. et al (2007), Ertana, A. (2008), Simsek and Ertan (2014), Dabas et al. (2014)]. Surprisingly studies on shooting skills of Indian female archers are far and few. It is even more surprising because female archers from India come from tribal and non-tribal communities. Hence in the present study effect of physical fitness and tribal-non tribal belongingness on shooting skills of female archers from 20 yards has been assessed.

It was hypothesised that physical fitness and tribal-non tribal belongingness alone and in interaction with each other will influence shooting skills of female archers from 20 yards.

METHODOLOGY

Sample:

To conduct the study, 33 state level tribal female archers (Ave. age 19.23 yrs.) were selected as sample. Another set of 33 state level non-tribal female archers (Ave. age 18.23 years) were also selected for the present study. Random sampling method was used for the selection of subjects.

Tools:

Rogers physical fitness test which consists of test items namely Lung capacity, Grip strength, Back strength, Leg Strength Pull up and Push-up, was used to assess the physical fitness of the selected subjects.

To measure shooting ability from 20 yard distance of selected archers, AAHPER Archery Test was used. In this test 9 points were given if the subject hits the gold area, 07 points for red area, 05 points for blue area, 03 points for black area and 01 point was given when the archer hits the white target area. In all 6 attempts are given to each subject.

Administration of Test:

Physical fitness of the selected subjects was ascertained by Roger’s physical fitness test as per availability and suitability of the subjects.

Linear transformation method (i.e. ranking) was used for each item to assess the physical fitness of the selected subjects. Lower the ranking higher the physical fitness is the key used to analyse physical fitness.

To gather score on shooting skills, scores on target zone for each subject was computed by adding the number of arrows in the specified coloured target zone. This is done by instructions provided in the Manual of Archery Skill Test.
Q₁ and Q₃ cutting points were adopted to bifurcate cases into High and Low physical fitness i.e. scores on physical fitness lie below 25th percentile were termed as high and above 75th percentile were termed and grouped as subjects with lower level of physical fitness.

RESULTS AND DISCUSSION

To find out the effect of physical fitness (High-Low) and tribal - non tribal belongingness on archery shooting skills of female archers from 20 yards, 2x2 ANOVA techniques was adopted. Results shown in Table 1 - 2

**TABLE 1**

EFFECT OF PHYSICAL FITNESS ON SHOOTING ACCURACY OF TRIBAL (A) AND NON TRIBAL (B) FEMALE ARCHERS

<table>
<thead>
<tr>
<th>Physical Fitness (A)</th>
<th>Marginal Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribal Female Archers (N=33)</td>
<td>Non Tribal Female Archers (N=33)</td>
</tr>
<tr>
<td><strong>Good(a₁)</strong></td>
<td><strong>Poor (a₂)</strong></td>
</tr>
<tr>
<td>N=16</td>
<td>N=16</td>
</tr>
<tr>
<td>N=17</td>
<td>N=17</td>
</tr>
<tr>
<td>Marginal Mean</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 2**

ANOVA SUMMARY

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>558.706</td>
<td>558.706</td>
<td>16.01*</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>448.338</td>
<td>448.338</td>
<td>12.85*</td>
</tr>
<tr>
<td>AB</td>
<td>1</td>
<td>0.156</td>
<td>0.156</td>
<td>0.004</td>
</tr>
<tr>
<td>Within Treatment (Error)</td>
<td>62</td>
<td>2162.835</td>
<td>34.884</td>
<td>* Significant at .01 level</td>
</tr>
</tbody>
</table>

A perusal of statistical entries reported in table 1 and 2 gives following inferences:

The main effect of physical fitness was observed on shooting skills of female archers from 20 yards. Female archers with good physical fitness (M=16.96) showed superior shooting skills from 20 yards as compared to female archers with poor physical fitness (M=11.14) at .01 level of statistical significance [F=16.01, p<.01].

The main effect of tribal-non tribal belongingness was also observed on shooting skills of female archers from 20 yards. Tribal female archers (M=16.66) showed superior shooting skills from 20 yards as compared to non tribal female archers (M=11.45) at .01 level of statistical significance [F=12.85, p<.01].

The two factor joint action effect of physical fitness and tribal-non tribal belongingness was not observed on shooting skills of female archers from 20 yards. [F=0.004, p>.05]
DISCUSSION

Results clearly indicate that physical fitness has significant role as far as shooting skills of female archers from 20 yards is concerned. It highlights the importance of certain level of physical fitness to execute archery tasks efficiently. Previously Debnath (2000) also found a significant and positive correlation between flexibility and archery performance.

As far as tribal female archers performance is concerned, it may be due to the fact they are used to archery since childhood that reflects in their better shooting skills than non tribal archers.

The non significant interaction between physical fitness and tribal-non tribal belongingness on shooting skills of female archers is not surprising because the main effect of both these independent variables are statistically significant.

CONCLUSION

On the basis of results, it was concluded that physical fitness and tribal-non tribal belongingness did not effect the female archer’s shooting skills from 20 yard distance.

BIBLIOGRAPHY


COMPARISON OF PSYCHO-PHYSIOLOGICAL VARIABLES AMONG BADMINTON, TABLE-TENNIS AND TENNIS PLAYERS

Khairuzzaman Mallick*

ABSTRACT

The purpose of the present study was to investigate the significant difference in selected Psycho-Physiological variables among the players of Badminton, Table-tennis and Tennis of S.G.B. Amravati University. For the purpose of the study 10 Players from each selected game were purposively selected, the age of the subjects were ranged between 18 and 28 years. The data pertaining to this study were collected by administering Nelson’s hand and foot reaction test for co-ordination, modified bass balance test for dynamic balance, and 50 yard Dash for speed of movement. To determine the significant difference among the players of three selected games one way analysis of variance and LSD post hoc test were employed. The result showed significant difference among the three groups in foot reaction time (F=8.163), eye-hand co-ordination (F=11.285) and speed of movement (F=7.731). The result also showed that the Badminton players’ foot reaction time and eye-hand co-ordination are significantly better than the Table-Tennis and Tennis players, where as in speed of movement Tennis players exhibited better than the Badminton and Table-Tennis players.

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INTRODUCTION

Sports are a highly specialized activity, the participation in sports warrants a fundamental desire to compete and surpass others in performance, and since any sports activity involves competition. However, winning in a competition surely depends on performance. Better the performance, greater the chance of winning. Nevertheless, the quality of performance displayed by the athletes in competitive events is determined by the several aspects.

Table tennis competitors play one of the fastest ball games in the world and their performance is the result of a complex myriad of factors. Changes in the rules, techniques and table tennis equipment have seen ball spin and speed increase substantially compared to the past, shortening point rallies. Badminton is very popular in south east Asia and Indonesia. Which have produce many top players. Fitness has become increasing important past of Badminton both physical and mental fitness are required in Badminton players required arm and shoulder strength of maintain the smash and overhead clear for Badminton. Tennis is a racket sport in which two players or teams of two players, send a ball over a net in such a way that it is difficult to return legally. Modern tennis has its roots in the old French game of pause, for which the rules were written in Paris in 1592. Tennis was part of the first Olympic Games of the modern ear, in 1896; it was withdrawn from the Olympic after 1924 and reinstated in 1988.

Reaction times is the intermission between the onset of a stimulus and the commencement of a movement response. Reaction time can be further broken down into three parts. The first part is perception time the-time for the application and perception of the stimulus and giving the essential reaction to it. The second part is decision time, which signifies the time for giving a suitable response to the stimulus. The third part is motor time, which is the time for compliance to the order received.

In the same year Johnson and Leach (1968) modified the Bass test of Dynamic balance which has been commonly used to measure one’s ability to land accurately and to balance while in various unstable, less stable and other precarious positions.

Co-ordination is the ability to integrate muscles movement into efficient patterns of movement” co-ordination make the difference between good performance and poor performance. The efficiency of skill patterns depends upon the interrelation of speed, agility, balance and muscle movements to be performed and see the relationship of each movement to the total pattern. Development of kinesthetic perception usually allows movement’s to become rhythmical and efficient.

The purpose of this study was to find out the differences in Psycho-Physiological variables among the Badminton, Table-Tennis and Tennis Players.

METHODOLOGY

Selection of the Subjects:

Thirty male Inter-collegiate players from Badminton, Table-Tennis and Tennis Sports of S.G.B. Amravati University were selected as the subjects for the purpose of the study. The age of the subjects was ranged between 18 to 28 years. Ten players were selected in each sport.
Sampling Procedure:

Purposive sampling technique was adopted for the selection of subjects for the present study.

Selection of Tests and Criterion Measures:

The criterion measures chosen to test the hypothesis were: 1. Reaction time was measured by using Nelson’s hand reaction time test and Nelson’s foot reaction time test. 2. Dynamic Balance was measured by using Modified Bass Test. 3. Co-ordination was measured by using Eye-Hand Co-ordination Test (Ball Transfer) and Eye-Foot Co-ordination Test 4. Speed of movement was measured by using 50 Yard Dash.

Collection of Data:

The data pertaining to the study were collected on the selected subjects by administering the aforesaid tests. Before collection of data, the scholars explained the purpose of the study to the subjects, so as to they could put their best.

Statistical Treatment:

One way Analysis of Variance statistical technique (F-Ratio) and LSD post-hoc test were employed to determine the difference among the players of selected games for each variable independently.

RESULTS AND DISCUSSION

The data collected on 10 subjects from each of sport on reaction time, co-ordination, balance and speed of movement were computed by using one-way Analysis of Variance (F-ratio) statistical technique. The result pertaining to the data have been presented in the following Tables:

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>ANOVA ON SELECTED PSYCHO-PHYSIOLOGICAL VARIABLES FOR BADMINTON, TABLE-TENNIS AND TENNIS PLAYERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>Source of Variance</td>
</tr>
<tr>
<td>Hand Reaction Time</td>
<td>Between .Groups Within Groups</td>
</tr>
<tr>
<td>Foot Reaction Time</td>
<td>Between .Groups Within Groups</td>
</tr>
<tr>
<td>Eye-hand Co-ordination</td>
<td>Between .Groups Within Groups</td>
</tr>
<tr>
<td>Eye foot Coordination</td>
<td>Between .Groups Within Groups</td>
</tr>
<tr>
<td>Balance</td>
<td>Between .Groups Within Groups</td>
</tr>
<tr>
<td>Speed of Movement</td>
<td>Between .Groups Within Groups</td>
</tr>
</tbody>
</table>

The findings of Table 1 reveals that foot reaction time (F = 8.163), eye-hand co-ordination (F = 11.285) and speed of movement (F = 7.731) showed significant
difference among the Badminton, Table-Tennis and Tennis players, whereas insignificant differences were found in hand reaction time ($F = 0.752$), eye-foot coordination ($F = 0.861$) and balance ($F = 0.291$) among the above mention selected sports players.

**TABLE 2**

**SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF FOOT REACTION TIME AMONG BADMINTON, TABLE-TENNIS AND TENNIS PLAYERS**

<table>
<thead>
<tr>
<th></th>
<th>Badminton</th>
<th>Table-Tennis</th>
<th>Tennis</th>
<th>Mean Difference</th>
<th>Critical Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.1846</td>
<td>0.1904</td>
<td>0.2002</td>
<td>0.0098*</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>0.1846</td>
<td>0.1904</td>
<td>0.2002</td>
<td>0.0156*</td>
<td>0.008</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level.

It is evident from the above table 2 that there was significant difference in Foot reaction time between Badminton - Tennis players (MD = 0.0156> 0.008) and between Table-Tennis- Tennis players (MD = 0.0098> 0.008). The table also revealed that the mean of Foot reaction time did not differ significantly in between Badminton - Table-Tennis players (MD = 0.0058< 0.008). The mean differences have been depicted in Figure 1.

![Figure 1](image-url)

**Figure 1**

*Difference of Means of Foot Reaction Time among the Badminton, Table-Tennis and Tennis Player.*
TABLE 3

SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF EYE-HAND CO-ORDINATION AMONG BADMINTON, TABLE-TENNIS AND TENNIS PLAYERS

<table>
<thead>
<tr>
<th></th>
<th>Mean Difference</th>
<th>Critical Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badminton</td>
<td>15.391</td>
<td>16.207</td>
</tr>
<tr>
<td>TABLE-Tennis</td>
<td>0.816</td>
<td>1.13</td>
</tr>
<tr>
<td>Tennis</td>
<td>15.391</td>
<td>17.946</td>
</tr>
<tr>
<td>Table-Tennis</td>
<td>2.555*</td>
<td>1.13</td>
</tr>
<tr>
<td>Tennis</td>
<td>16.207</td>
<td>17.946</td>
</tr>
<tr>
<td>Table-Tennis</td>
<td>1.739*</td>
<td>1.13</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level.

Table 3 indicates that there is significant difference in Foot reaction time between Badminton and Tennis players (MD=2.555>1.13) and Table-Tennis and Tennis players (MD=1.739>1.13) whereas in between Badminton and Table-Tennis players (MD=0.816<1.13) does not show significant difference. The mean differences have been depicted in Figure 2.

Figure 2
Mean Difference of Eye-Hand Co-ordination Among the Players of Badminton, Table-Tennis and Tennis.
**TABLE 4**

SIGNIFICANCE OF DIFFERENCES BETWEEN ORDERED PAIRED MEANS OF SPEED OF MOVEMENT AMONG BADMINTON, TABLE-TENNIS AND TENNIS PLAYERS

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Critical Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badminton</td>
<td>7.204</td>
<td>7.193</td>
<td>0.011</td>
</tr>
<tr>
<td>Table-Tennis</td>
<td>7.204</td>
<td>6.484</td>
<td>0.72*</td>
</tr>
<tr>
<td>Tennis</td>
<td>7.193</td>
<td>6.484</td>
<td>0.709*</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level.

Table 4 shows that there is significant difference in Foot reaction time between Badminton - Tennis players (MD=0.72>0.43) and between Table-Tennis - Tennis players (MD=0.70>0.43), whereas Badminton and Table-Tennis players (MD=0.011>0.43) did not shown he significant difference.

**DISCUSSION**

The analysis of data using to determine the significant difference among the players of three selected games one way analysis of variance and LSD post hoc test were employed. The result showed significant difference among the three groups in reaction time (F=8.163), eye-hand co-ordination (F=11.285) and speed of movement (F=7.731). An analysis of the above mentioned Table revealed that the Badminton players’ foot reaction time and eye-hand co-ordination are significantly better than the Table-Tennis and Tennis players, whereas in speed of movement Tennis players exhibited better than the Badminton and Table-Tennis players.

**CONCLUSIONS**

Within the limitations of the present study and on the basis of findings, the following conclusions are drawn.

1. The findings of the study revealed that there were significant differences in foot reaction time, eye-hand co-ordination and speed of movement among the Badminton, Table-Tennis and Tennis players.
2. There was no significant mean difference in hand reaction time, eye-foot coordination and dynamic balance among the Badminton, Table-Tennis and Tennis players.
3. Best performance in foot reaction time was shown by the Badminton players followed by Table-Tennis players and least performance was shown by the Tennis players.
4. Best performance in eye-hand co-ordination was shown by the Badminton players followed by Table-Tennis players and least performance was shown by the Tennis players.
5. Tennis players’ speed of movement recorded best performance followed by Table-Tennis players whereas Badminton players’ speed of movement performance recorded higher timing compared to Table-Tennis and Tennis players.
REFFERENCES


Uppal, A.K; Kumar, U; Lawrence, Gray; Pande, M.M. Bio-Mechanics in Physical Education and Exercise, (New Delhi, Friends publication, 2004), P- 14.


FOOTBALL IN INDIA: REVIEW LITERATURE BASED

Dr. Kaushal Kumar Agarwal*

ABSTRACT

There is a great favour in India for rapid promotion of various sports. Consequently many schemes are proposed and a few of them implemented by the Government, educationist and voluntary agencies. A sound meaning for development is to be based on a critical account of development with current time. This review reveals the promotion of football, statutory laws or absence of laws. In general, this review based study provide that how football introduced in India. In the beginning, FIFA and AIFF was formed in 1913 and 1937 respectively. After that AIFF was affiliated to FIFA in 1948. For the development of Football in India, National policy was framed. Development programme was prepared by the experts of Game. To fulfill the aim of development of Football in India, Many Football Clubs were formed in different corners of India. Reputed firms, companies and private organization have begins to organize the tournament in the form of tournaments, shields, trophies, cups in India. From here, fast development of Football began in India.

Keywords: Soccer, Football, Tournament, Development, Association, Federation, India

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INTRODUCTION

The essence of soccer is its simplicity, known as "Football" in much of the world, it is still a game of the masses, speaking a language that knows no international barriers. The object of the game is to get the ball, by any means except using the hands, into the rectangular goals at each end of the field. The team scoring the most goals in the winner, Often the game ends in ties.

The earliest evidence of soccer dates from about 200 B.C. in China, where a form of the game was played that emphasized the ability of players to dribble a leather ball. The Greeks and Romans also participated in a variation of soccer that permitted ball carrying.

The modern-day outgrowth of soccer is known to have started in England, and the first ball reportedly was the head of a dead Danish brigand. Although King Edward III prohibited soccer in 1365 because of its excessive violence and for military reasons - playing took time away from archery practice - the game had become too popular to be curtailed.

The earliest organized games were massive confrontations between teams consisting of two or three parishes each, with goals as many as 3 or 4 miles (5-6.5 km) a part. By 1801 the game had been refined, requiring a limited and equal number of participants on each side and confining the playing area to between 80 and 100 yards (73-91 meters), with a goal at each end. The goal was usually made of two sticks a few feet apart. The first crossbars were merely lengths of tape stretched between the two goal-posts. In 1875 the Football Association made the bar mandatory.

In the 1850's the rules still varied from place to place, and consequently the number of players on a side ranged from 15 to 20. The current 11-player teams were formally established in 1870, with 9 forwards and 2 defenders-the most common formation. Not until the 1880's was the goalkeeper formally distinguished from the other players, and at that time he was designated as the only player allowed to touching the ball with his hands.

In 1857 the first soccer club was formed in Sheffield, England. This set the stage for one of the most significant dates in soccer history. Oct. 26, 1863. On this date 11 clubs met in London to form the Football Association, which laid the foundations for the nearly 140 modern national associations.
With the advent of a national association in England, any soccer played under its jurisdiction was called "association football". As time passed the word association was abbreviated to "assoc", which eventually gave way to the word "Soccer," which is the common name for the game in North America.

**FORMATION OF FIFA**

In 1913 world governing body, the Federation of International Football Associations (FIFA) was created to coordinate all of the national associations in the world. The result has been the development of spectacular international competitions such as the World Cup. Which have sparked soccer's growth into the world's most popular sports?

Professional football had its beginnings in small towns of western Pennsylvania toward the end of the 19th century the local teams were made up of former college stars eager to continue playing the game. All teams were loosely organized. Over a period of 50 years the game matured slowly. But in the 1950's it became of age and began to compete with college football for headlines and for crowds. With television providing its thrust, the professional game rivaled the college game in popularity in the 1960's and seriously challenged baseball as the most popular sport in the United States.

Football, foosball, futbal, calcio, whatever this game with the round leather ball may be called in various languages, it now is the game with the widest International following football us now played all over the world and the sun never sets on the game of soccer.

Contrary to common opinion football is the popular game in India. Cricket remains the game of the urban elite, whereas football, by its varying nature simple and inexpensive, has managed to permeate more layers of society.

**FORMATION OF AIFF**

All India football federation was formed in 1937 at Calcutta and affiliated to FIFA in 1948. Mr. Pankaj Gupta and Mr. M. Dutta Ray were elected as president and secretary of the AIFF respectively. At present Mr. Priya Ranjan Das Munsi and Mr. Albert Colaco were the president and secretary of the AIFF respectively. AIFF has its branches in each state. Each state has its own state association which is affiliated to AIFF. The federation gave a strong foothold to the game and played major role in the promotion and development of football in the country. The credit of popularizing and promoting this game also goes to west Bengal state Association and affiliated clubs to AIFF in our country.
FOOTBALL IN INDIA

Football was introduced in India by the British in the last century and the first recorded game took place in 1854 in Calcutta. Indian clubs were first admitted into organized competitions towards the latter part of the 19th century.

In 1893 the Indian Football Association was formed. The IFA is still active, however, although it retains the name Indian Football Association it is in effect only representative of the Indian state of Bengal from where it originated. Overall control of Indian football is in the hands of the All Indian Football Federation.

First National Championship:

The All India football federation took the initiative in organizing the National Football championship as an annual feature for both men and women. In 1941 men section was introduced in National football championship Santosh Trophy. This first National Championship was held at Calcutta. Bengal and Delhi were the winner and Runner of this championship respectively, AIFF also started Junior National Football Championship in 1962. AIFF has been holding annual National championship regularly. The game of Football was also introduced by AIFF for men in 1934 and women in 1975. AIFF has been holding Dutta Ray Trophy (U-21), National Football League, 1st and 2nd Division National football league, Rajiv Gandhi Invitational football tournament, super cup and federation cup from 1992, 1996, 1997, 1992, 1997 and 1977 respectively in India. AIFF also introduced senior National championship in 1975 for women and Football championship for women in National games. The AIFF is affiliated to Indian Olympic association, Asian Football Confederation and to the FIFA.

National Football Policy:

The Draft National football policy was proposed by the president of AIFF in 2001 and suggestions were asked from the state unit to discuss the matter in executive committee meeting and for the approval in General body of the All India Football federation. According to this policy, whole country was divided into East zone, North-East-Zone, North Zone, South Zone, West Zone and Railway & Services by AIFF to superior the football functioning activities in a more decentralized manner. The zonal secretary of the each-zone was appointed by the AIFF for the grass root implementation of the activities of the zone.
Development Programme:

AIFF proposed youth development programme for India football players U/17 years at schools level. To compel a proposal on a project for National football Academy and to ensure support to Regional football Academies and private House sponsored football academies. The academy project and its coordination shall also be left in one technical hand with uniform curriculum and syllable including entry and passing out cut off age of the competition of work of each trainee.

The All India School game federation and AIFF must have an integrated approach for a Zonal school cup and National school cup restricted within age of U-14 to get the real talents for the Academy and our youth Development Desk.

A nursery project of U-11 could be considered in a few selected states where soccer is socially and otherwise extremely popular and part of the social culture. It could be in selected 10-15 places of India where this nursery concept could gain momentum from the junior school to secondary level.

AIFF, Therefore, shall decisively plan The comprehensive development programme call it A, B, C, D project - A for nursery, B of School, C for U-16, and youth Development promotional project called YDP as U-21. The purpose of this youth programme was to develop the strength of National and International player scientifically.

The Santosh Trophy National Championship must include a new provision amending the statute That a player's origin or a state shall play for the particular state during National championship and certainly not to the state as which club he was requested for a period, the National Championship should always be held before the National league to provide enough Justice to the sponsors and to the state for their preparation.

The coaches of the 1st Division, 2nd Division and 3rd Division clubs all over India should be trained licensed coach, having license to work with an affiliated club which will be awarded by AIFF Licensing committee on its ability, conation and capacity.

The super league coaches of the club and state Association coaches every year compulsorily shall attend either a Co-ordination camp for 7 days of a workshop to be conducted by the National coached and Director of AIFF to understand over preparation of the National team and youth Development programme.
The women football Development plan should select a few states as state of women Excellence for the first two years including a few college s and universities and secondary schools to be chosen by a few state Association where AIFF shall render support through its women Football Committee, U-14 and U-17, women programmed should be our prime task front this year is our youth Development programme.

A definite co-ordination camp of senior probable for 7 days at the behest of our National coach after every 2 months shall be regular feature of our programme. This is our object in which we are much behind. Besides this, the training schedule of the youth Development programme and senior team should be drawn in such a manner that much precious on athlete in not done to make him more injury prove in his club game and in our Training.

In the early 40’s of the last century, football was introduced in India, Burma and Straits settlement. Through football was played on the Indian soil in 1840, the Indian lookup football earnestly not before 1878. The Indian football Association in the oldest football Association in East Japan.

In the 1947 Annual General Meeting of the AIFF held on March30 at the Rotary Club Room of the Great Eastern Hotel, Calcutta, It was decided that India should enter a team in the Olympic Football tournament at XIV Olympiad to be held at London in 1948. This decision was confirmed on March 28, 1948, at the city of Y.M.C.A. Hall at Bangalore unanimously. They car 1948 was an epoch making year for Indian Football as for the first time Indian moved across the Suez west ward and participated in Olympic games held in London - a dream and aspiration of Indian footballers came true. Mr. M.Dutta Ray (Bengal) and Mr. Ramasway Alyar (Madras) were the manager and joint manager of the India team respectively.

In the 1951, with the special permission of the FIFA, Football was included in the Programme of Asian game held at New Delhi from, March 4, 11, 1951. Six National participated in the first competition and it was played in direct knock-out system. These necessitated two teams to be given bye to the semifinals lots were drawn. India and Iran were winner and Runner respectively in the first Asian games.
Formation of Football Clubs in different corners of India:

1911 marked an historic sporting and colonial occasion for India, following the triumph of Mohan Bagan club in Indian Football Association Shield. This was the first time an Indian club had won India's most prestigious football competition.

For almost a century Indian football have run a number of major cup competitions: these forming the domestic season. This structure has now largely been overhauled.

The state of Bengal (pop. 60 mn) to be specific its Calcutta, has been at the heart of Indian football. Although still powerful Calcutta has strong competition from other locations Goa, Kerala, Bombay and Punjab.

India's most historic & Successful Club. Mohun Bagan was founded in 1889 and presently situated in Calcutta. It is currently Shanker Maitra started as team coach for the 2000-01 season but was replaced by the veteran Amal Dutta midway through the season. Both coaches have opted for a flexible 4-4-2 or 4-3-3 system.

Air India was founded in 1952 situated in Mumbai. The only team that has never used a single foreign player because of company policy. Players either have jobs with Air India, the premier international airline of the country, or are on a contract basis. The team is traditionally a defensive, hard tackling unit that relies on the counter attack and strong team spirit. The Wimbledon of Indian football, the club achieves success with a low budget and strong motivation. Wily coach Bimal Ghosh has a reputation as a great motivator and was chosen as best coach of the 1997-98 Philips League.

Salgaocar Sports Club was founded in 1956 situated in Goa. This is the football team of a major corporate house in Goa that has interests in shipping, mining and iron ore. Its president Shivanand Salgaocar in committed to football and has consistently invested money to make his team one of the best in India. The players are hired on an annual or biennial contract basis. Salgaocar is noted for its strong defense and employs India's goalkeeper Juje Siddi who started his career as a boxer. Previously coached by former international skipper Shabbir Ali, the club plays in a 3-5-2 formation and other uses a sweeper back. It was the first team from Goa to win the National League in the 1998-99 seasons.

Vasco S C was founded in 1956 situated in Goa. Vasco were the first club team from Goa to participate in tournament outside their state. Their first entry in an outstation
tournament was in the 1963 DCM tournament at Delhi. For the 2000-2001 seasons, Vasco is sponsored by the Chowgule group. Coached by former international Derek Pereira, in his second season with this club, Vasco maintains three age-group teams. Their main squad has been strengthened this season by the inclusion of three Brazilian and two experienced Uzbek players. They play in either the 4-4-2 or 4-1-4-1 system.

Indian Telephone Industries (ITI) was founded in 1956 Situated in Bangalore. This is the football team of a public sector undertaking. Since the 1970s, ITI has dominated football in Bangalore. Its greatest triumph was winning the inaugural Federation Cup in 1977 when the team beat favourites Mohun Bagan 1-0 in the final. For many decades it recruited players by offering them jobs and through this method produced several international stars including India's finest winger of the 1970s, N. Ulaganathan. Now it has begun hiring players on contract and has set a budget for football.

It has recruited players from Nigeria, Krygistan and Kazakhstan. The club qualified for the National League in 1999 by finishing second in the second division. ITI just managed to avoid relegation in the 1999-2000 seasons. For the 2000-01 seasons it has hired the dynamic Mohammed Habib, a former Tata Football Academy and India junior player as coach. Habib is using either a 4-5-1 or a 4-4-2 system for ITI.

Dempo Sports Club was founded in 1961 Situated in Goa, Another team supported by a family that has shipping and mining interests in Goa. It was the first club to bring a Brazilian coach, Gonsalves, and three Brazilian players for the 1997-98 seasons. The team uses a slow, passing game and has maintained a tradition of trying to play skilful football with one touch, short passing build-ups. The club has also imported talented players from Nigeria and Sudan. The team usually plays in a 5-4-1 system or a conventional 4-4-2 formation.

Mahindra Ltd was pass Founded in 1962 Situated in Mumbai, Another company team from Mumbai, this club is promoted by Mahindras and Mahindras which manufactures jeeps and other machinery. The club relied on young talent and a few imports from Nigeria and Nepal but finished last in both editions of the Philips League. It frequently changes its coaches (there have been four coaches in three seasons). Traditionally, Mahindras play in the 4-4-2 formation, however the current coach Shabbir Ali has also experimented with the
3-5-2 system.

JCT Phagwara was pass Founded in 1971 Situated in Punjab. JCT (formerly known as JCT Mills) is a leading industrial house dealing in fabrics and electronics. Its young managing director Samir Thapar, who also takes part in national level motor rallies and supports bodybuilding, is extremely keen on football.

He funds this successful football team, which is also a successful marketing ploy to spread the image of the company. It is the only successful team from the northern regions of India where football is not so popular. In the recent past, the club has not been able to develop much talent from the Punjab region and relied on Nigerian imports in the first two seasons of the National League. However since the 1998-99 seasons, they have opted only for players from their region in order to develop football in Punjab. The team is coached by former internationals Sukhwinder Singh (who is also the current national coach) and Parminder Singh and plays in either the 4-4-2 or 4-3-3 formation.

Zee-Churchill was founded as Churchill Brothers in 1988 Situated in Goa, A new club formed just over a decade ago, they were initially entirely funded by the football loving Alemao brothers who have made their fortune through restaurants, agriculture and the shipping business. Two of the brothers, Churchill and Joaquin/m have been successful In politer Churchill Airmans was twice elected as Member of the Lower House of the Indian Parliament (Lok Sabha). Joaquin Alemao was a member of the Goa Legislative Council. The club roped in a major sponsor ZEE TV in the summer of 2000. Churchill Bros was the first to get players from outside Goa to play in the state. The brothers increased payments to players in the early 1900s, thereby breaking the cartel-like monopoly in Goa of the clubs Dempo and Salgaocar. The club has imported talent from Zimbabwe, Nigeria, Sudan and Iraq. The departure of Scottish coach Danny McLennan just before the Philips League 1997-98 seasons and the departure _of an Indian coach after two matches put the team in disarray. Runners up in the inaugural Philips League, the club was relegated in the next season in March 1998 but is now back in the top division. The team plays in either the 4-3-3 or 4-4-2 system, and has employed Grigory Schietsen, an Uzbek coach, for the 2000-01 seasons.
FC Kochin was founded in 1997. Situated in Kerala, FC Kochin is the first fully professional club in Indian football. It was formed in April 1997 but in just one year achieved remarkable success and now receives massive support from Keralians residing all over India and in the Gulf region. The team was trained by Scottish coach George Blues and has recruited players from Ghana and Nigeria including goalkeeper Abubacker who played for the former the Junior World Cup in 1997. For the 1998-99 seasons, it recruited the entire group of trainees from the Tata Football Academy (TFA). Live in attack but vulnerable in defense, the club plays in a 4-4-2 or 4-3-3 formation. For the current season, they have recruited five players from Liberia.

Tournament, Shields, Trophy and Cups in India:

The Durand football tournament the 3rd oldest football tournament in the world, after the English FA-CUP and the Scottish FA-CUP was started by sir Mortimer Durand at Shimla in 1888. In 1940 the Venue was shifted to New-Delhi.

The Rovers cup is the second oldest of one of the three big tournament in the country, was started by some British football enthusiasts at Bombay in 1891. Bangalore Muslims was the first Indian team to win this tournament 1937.

The IFA-Shield is Calcutta's oldest football tournament. In 1911 Mohun Bagan was the first Indian team to win the IFA-Shield Trophy, a beginning for Indian teams in the Trophy and in mainstream football.

The DCM Football Tournament started in Delhi in 1945. DCM was the first tournament in the country which invited foreign club teams to participate along with the Indian teams.

The federation cup was instituted as a tournament for champion clubs in 1977.

Jawahar Lal Nehru Gold cup was started in 1982. This cup was originally played annually but due to financial restraints it is now carried out every two years.

The Dutta Ray Trophy (Under-2) was instituted in 1992 by the AIFF for the juniors. The trophy was presented by the Indian football Association (Bengal) in honour of their late president M. Dutta Ray.
The National Football league in India was started in 1996 by the "All India Football Federation" to promote the development of football in the Indian subcontinent. The main aim of the league is to bring professionalism to Indian football.

The 2nd Division National Football League was started in 1997 by the "All India Football Federation" as a supplement to the premier Division of the league, which was started a year earlier.

**BIBLIOGRAPHY**


GUIDELINES FOR AUTHOR

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