SUMMARY

Cognitive style is a term used in cognitive psychology to describe the way individuals think, perceive and remember information, or their preferred approach to using such information to solve problems. Cognitive style differs from cognitive ability (or level), the latter being measured by aptitude tests or so-called intelligence tests. Controversy exists over the exact meaning of the term cognitive style and also as to whether it is a single or multiple dimension of human personality. However, it remains a key concept in the areas of physical education and sports management. If a pupil has a similar cognitive style to his/her teacher, the chances that the pupil will have a more positive learning experience is said to be improved. Likewise, team members with similar cognitive styles will probably feel more positive about their participation in the team. While the matching of cognitive styles may make participants feel more comfortable when working with one another, this alone cannot guarantee the success of the outcome because these styles are related to one’s personality characteristics as reflected through his or her abilities and capabilities. Each athlete has a multiplicity of abilities and the athletes with different abilities learn differently. Therefore, the abilities that are strongest should be tapped when difficult strategies are to met. Research on this topic indicates that infact, the relationship between affective and cognitive aspect of behavior is very much like to two way street; our feelings and moods exert strong effects on several aspects of cognition, and cognition in turn exerts strong effects on our feelings and moods.

Performance – one of the most interesting emotional consequences in sport – is not easy to predict, because it partly depends on the competition and is thus beyond one’s complete control. But prediction of performance is important both theoretically and practically. From a theoretical standpoint, research should allow us to identify the emotional processes responsible for optimal performance and thus improve our knowledge of the consequences of emotional processes. From a practical standpoint, a better understanding of the determinant of performance will allow sport psychologists to help athletes in their quest for self-improvement.
Emotions are present in all aspects of human life, including sport and exercise. Athletes may be anxious before the game, coaches may be disgusted at an athlete for blowing an easy play, fans may be sad following the loss of the local team, or participants may feel embarrassed or incompetent during an exercise routine in a group setting. But such emotions are not merely interesting phenomena; they may also have important consequences that go beyond mere emotional experience. Athletes who are too anxious may not perform at an optimal level; the angry coach may scream at a clumsy player, making him more clumsy than ever, and the embarrassed exercise participants may stop going to exercise class altogether. Hence, emotional phenomena play an important part in sport and exercise from both an intra and an interpersonal perspective.

Sports is a highly organized form of social institution, which helps in the socialization process through games and sports. This is one of the best means of helping an individual to gain his identity, self-image and formulate the ideal self. It is sports which help in the development of desirable personality traits such as leadership, sociability, maturity, co-operation, personal, social and emotional satisfaction. A satisfied individual is one who meets demands of society and his own drives. When an athlete feels in control and doing something intrinsically satisfying, he feel positive, self-directed, and competent. The implications are that living according to one’s values is important and that one should find interest and satisfaction in his / her role in the sports arena.

Researchers have found that intrinsic satisfaction in performing meaningful, important tasks is not only related to how much we achieve, but also to having high self-esteem and to self-efficacy or believing we are competent to handle work and problems, and to thinking of ourselves as being self-directed in control of our lives. How an athlete thinks, how he feels and how he reacts not only involve his cognitive style patterns but it also, influenced by his emotional maturity and his self-satisfaction in life. This has prompted the investigator to undertake the present study with multi dimensional perspective.

STATEMENT OF THE PROBLEM

Cognitive Style, Emotional Maturity and Self Satisfaction are three such psychobiosocial variables which have profound influence on the performance of an athlete in competition arena. It is through indepth study of these variables that we
can comprehend the dynamics of cognitive style, understand the concept of emotional maturity for self understanding, and promote the feeling of self satisfaction among the athletes. Theodorakis and Bebetsos (2003) observed that even though athletes are probably the most important component of every sport program or activity, the concept of athlete satisfaction has received very little attention by the researchers.

The investigator had, therefore, undertaken the present study to explore these three indispensible psychological constructs in relation to the participants participating at varying performance levels in three very popular sports disciplines. The focus of this study was to examine the differences between three performance groups and two gender groups as well as to compare the participants of three specific sports disciplines on the selected variables. Efforts were also made to probe the interrelationship and interaction between these psychobiosocial variables. The problem undertaken for exploration in the present study has been titled as: *An Analysis of Selected Psychobiosocial Variables Among Athlete’s Performance at Varying Levels.*

**OBJECTIVE OF THE STUDY**

The objectives of the present study were:

1. To study the differences between three performance level groups and two gender groups as well as their interaction effect on all the selected variables within each of the three sports disciplines i.e. Handball, Hockey, and Basketball.

2. To find out and compare the differences among the participants of three selected sports disciplines within the three performance level groups i.e. State, Interstate and International groups on all the selected variables.

3. To find out the differences among male as well as female players belonging to three performance levels participating in three different sports disciplines i.e. Handball, Hockey, Basketball on the selected variables.

4. To find out the differences with regard to the three overall sports disciplines i.e. Handball Hockey and Basketball on all the selected variables.
5. To find out and highlight the differences among overall male and overall female participants as well as among the overall three performance level groups on the selected psychobiosocial variables.

6. To explore the interrelationship between the selected psychobiosocial variables in relation to the three overall performance groups and the two overall gender groups.

7. To make appropriate suggestions and recommendations on the basis of research findings obtained through the present study.

HYPOTHESES

The study had the following hypotheses:-

1. It was hypothesized that there would be significant differences among Handball players performing at three varying levels on the selected psychobiosocial variables that is:
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its sub-scales)
   c) Self Satisfaction (including all its sub-scales)

2. There would be significant gender differences among the Handball Players performing at different levels on the selected variables
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its sub-scales)
   c) Self Satisfaction (including all its sub-scales)

3. There would be significant interaction effect between performance and gender within Handball Sports group on all the selected psychobiosocial variables:
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its sub-scales)
   c) Self Satisfaction (including all its sub-scales)

4. It was hypothesized that there would be significant differences among Hockey players performing at three varying levels on the selected psychobiosocial variables that is:
5. There would be significant gender differences among the Hockey Players performing at different levels on the selected variables:
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its sub-scales)
   c) Self Satisfaction (including all its sub-scales)

6. There would be significant interaction effect between performance and gender within Hockey Sports group on all the selected psychobiosocial variables:
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its sub-scales)
   c) Self Satisfaction (including all its sub-scales)

7. It was hypothesized that there would be significant differences among Basketball players performing at three varying levels on the selected psychobiosocial variables that is:
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its sub-scales)
   c) Self Satisfaction (including all its sub-scales)

8. There would be significant gender differences among the Basketball Players performing at different levels on the selected variables:
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its sub-scales)
   c) Self Satisfaction (including all its sub-scales)

9. There would be significant interaction effect between performance and gender within Basketball Sports group on all the selected psychobiosocial variables:
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its sub-scales)
   c) Self Satisfaction (including all its sub-scales)
10. It was hypothesized that the players belonging to the three sports groups within state performance level will differ significantly on the selected psychobiosocial variables:

a) Cognitive Style (Intuitive and Systematic)
b) Emotional Maturity (including all its subscales)
c) Self Satisfaction (including all its subscales)

11. It was hypothesized that the players belonging to the three sports groups within Interstate performance level will differ significantly on the selected psychobiosocial variables:

a) Cognitive Style (Intuitive and Systematic)
b) Emotional Maturity (including all its subscales)
c) Self Satisfaction (including all its subscales)

12. It was hypothesized that the players belonging to the three sports groups within International performance level will differ significantly on the selected psychobiosocial variables:

a) Cognitive Style (Intuitive and Systematic)
b) Emotional Maturity (including all its subscales)
c) Self Satisfaction (including all its subscales)

13. There would be significant differences among Handball male players participating at three varying performance levels on the variables

a) Cognitive Style (Intuitive and Systematic)
b) Overall Emotional Maturity
c) Overall Self Satisfaction

14. There would be significant differences among Hockey male players participating at three varying performance levels on the variables

a) Cognitive Style (Intuitive and Systematic)
b) Overall Emotional Maturity
c) Overall Self Satisfaction
15. There would be significant differences among Basketball male players participating at three varying performance levels on the variables
   a) Cognitive Style (Intuitive and Systematic)
   b) Overall Emotional Maturity
   c) Overall Self Satisfaction

16. There would be significant differences among Handball female players participating at three varying performance levels on the variables
   a) Cognitive style (Intuitive and Systematic)
   b) Overall Emotional Maturity
   c) Overall Self Satisfaction

17. There would be significant differences among Hockey female players participating at three varying performance levels on the variables
   a) Cognitive Style (Intuitive and Systematic)
   b) Overall Emotional Maturity
   c) Overall Self Satisfaction

18. There would be significant differences among Basketball female players participating at three varying performance levels on the variables
   a) Cognitive Style (Intuitive and Systematic)
   b) Overall Emotional Maturity
   c) Overall Self Satisfaction

19. The players from three overall sports disciplines (i.e. Handball, Hockey and Basketball) would differ significantly from each other on all the selected psychobiosocial variables:
   a) Cognitive Style (Intuitive and Systematic)
   b) Emotional Maturity (including all its subscales)
   c) Self Satisfaction (including all its subscales)

20. There will be significant gender differences among overall male and overall female players on the selected psychobiosocial variables i.e.
There will be significant differences among overall three performance level groups on the selected psychobiosocial variables i.e. 

a) Cognitive Style (Intuitive and Systematic)  
b) Overall Emotional Maturity  
c) Overall Self Satisfaction

There would be significant interrelationship between the selected psychobiosocial variables with regard to 

a) State level performance group  
b) Interstate level performance group  
c) International level performance group  
d) Overall male participants  
e) Overall female participants

SELECTION OF SUBJECTS

For the present study, the sample was drawn through random purposive sampling technique from sports participants participating at three different performance levels i.e. State level, Interstate Level and International Level in three sports disciplines i.e. Handball, Hockey and Basketball. In total, the sample for the present study comprised 360 subjects. Specific endeavours were made to have subjects in equal proportion from the two gender groups.

SELECTION OF VARIABLES

For the present study, the following psychological variables had been selected:

1. Cognitive Style, including its two types i.e.

a) Institutive  
b) Systematic
2. Emotional Maturity, including its following five sub-scales.
   a) Emotional instability.
   b) Emotion Regression
   c) Social Maladjustment
   d) Personality Disintegration, and
   e) Lack of Independence.

3. Self Satisfaction, including its fifteen sub-scales as mentioned below:
   a) Individual Performance
   b) Team Performance
   c) Ability Utilization
   d) Strategy
   e) Personal Treatment
   f) Training and Instruction
   g) Team Task Contribution
   h) Team Social Contribution
   i) Ethics
   j) Team Integration
   k) Personal Dedication
   l) Budget
   m) Medical Personnel
   n) Academic Support Services
   o) External Agents
   q) Overall Self Satisfaction

**SELECTION OF TESTS**

The following tests were selected to obtain data with regard to the variables selected for the present study:

a) To explore the cognitive style among the subjects, the Cognitive Style Inventory constructed by Jha (2001) was used.

b) The Emotional Maturity Scale constructed by Singh and Bhargava (1988) was used to measure the levels of emotional maturity among the subjects.
c) For evaluating the self-satisfaction among the sports participants selected as subjects for the present study, Athlete Satisfaction Questionnaire developed by Riemer and Chelladurai (2000) was employed.

STATISTICAL DESIGN

The collected data was subjected to statistical treatment on computer. Analysis of variance (3x2 factorial design) was used to compare the three performance levels and two gender groups pertaining to each of the three selected sports disciplines, their interaction effect was also found out regarding all the selected psychobiosocial variables. Descriptive statistics such as mean and SD values were calculated and post-hoc test was also applied to find out the direction of differences among these performance and gender groups. One-way ANOVA was employed on the selected variables: (i) to find out differences among the three sports disciplines within each of the three performance levels i.e. State, Interstate and International, (ii) to find out the differences within both the gender groups of each sports discipline and (iii) to find out the differences regarding overall three sports disciplines. Arithmetic mean and SD values were also worked out to supplement as well as to find out the direction of differences with regard to the results of these one-way analysis of variance. Further, mean, SD and t-values were also worked out to find out overall inter-performance level differences as well as overall gender differences. Finally, Pearson's Product Moment coefficient of correlation was employed to explore the inter-relationship among the selected psychobiosocial variables. For the purposes of this study, the level of significance was set at 0.05 level.

FINDING

FINDING REGARDING 3X2 ANALYSIS OF VARIANCE RELATING TO HANDBALL GROUP

COGNITIVE STYLE (INTUITIVE)

The results of 3x2 ANOVA on the variable *Cognitive Style (Intuitive)* have revealed significant differences among the three performance groups of Handball discipline ($p<0.01$, $F=14.597$, Table 1a). The International level players were found to be having significantly higher level of Intuitive Cognitive Style as compared to the Handball State and Interstate level players.
The differences between two gender groups have been found to be significant (p<0.01, F=11.335, Table 1a). The female players having scored significantly higher mean score were found to be significantly more intuitive in their cognitive style than their male counterparts.

The interaction between performance and gender on this variable was not been found to be significant.

The results with regard to the variable **Cognitive Style (Systematic)** have demonstrated significant differences among the three performance groups (p<0.01, F=22.192, Table 1a). The International group was found to be having significantly higher level of cognitive style (systematic) as compared to the other two performance groups.

The results relating to gender differences on this variable have revealed no significant differences between the two gender groups.

The interaction between the performance and gender groups on this variable has also not been found to be significant.

**EMOTIONAL MATURITY**

With regard to the variable **Emotional Unstability**, the results of analysis of variance have revealed significant differences (p<0.05, F=4.171, Table 2a) among the selected three performance groups. International level performance group was found to be more stable emotionally as compared to the other two groups.

The ANOVA results on this variable have brought out significant differences (p<0.05, F Value = 4.782). Male subjects were found to be significantly better than their female counterparts on this variable.

The interaction between performance and the gender has not produced any significant results.

On the variable **Emotional Regression** significant differences have been found between the three performance groups (F-value being 21.244, p<0.01). International group was significantly more mature emotionally on this sub-scale as compared to the other two groups.
The results pertaining to gender differences on this variable i.e. Emotional Regression have shown no significant differences among these two groups.

The performance x gender interaction has not brought out any significant differences.

Concerning the variable **Social Maladjustment**, there were significant differences among the three performance groups i.e. State, Interstate and International (p<0.01, F=7.330, Table 2a). International group having scored the lowest mean score was found to be exhibiting significantly better level of emotional maturity as compared to the other two groups on this variable.

On this variable of Social Maladjustment, the gender differences have not been found to be significant. Both the group were having same level of emotional maturity with regard to social maladjustment sub-scale.

The results of interaction between the three performance groups and the two gender groups have been found to be significant (p<0.05, F=3.316).

The 3x2 ANOVA results relating to variable **Personality Disintegration** concerning the three performance level groups have brought out significant differences among these groups (p<0.01, F-value being 14.205, Table 3a). The International group was found to be significantly better on this sub-scale of emotional maturity as compared to the other two groups.

The ANOVA results regarding differences between the two gender groups on this variable have not been found to be significant. Both the gender groups were placed in almost similar position so far as this sub-scale of emotional maturity is concerned.

The interaction between the performance and gender groups was been found to be significant (p<0.05, F-value = 3.508, Table 3a).

On the variable **Lack of Independence**, the 3x2 analysis of variance results have revealed significant differences between three performance level groups, (p<0.01,F-value being 17.277, Table 3a). The players of International level were found to be significantly better on this sub-scale of emotional maturity as compared to the other two performance groups.
The gender differences on this variable have been found to be significant (p<0.05, F-value being 6.139, Table 3a). The female subjects were exhibiting significantly lower level of emotional maturity on this sub-scale as compared to their male counterparts.

The performance x gender interaction had produced significant results (p<0.01, F=9.488, Table 3a).

The results of 3x2 analysis of variance with regard to the variable Overall Emotional Maturity have revealed significant differences among the three performance groups (p<0.01, F-value being 30.573, Table 3a). The State group was having significantly lower level of overall emotional maturity as compared to the International group. The Interstate group was also found to be having significantly lower level of overall emotional maturity as compared to the International group.

On this variable i.e. Overall Emotional Maturity, there were significant differences between male and female participants (p<0.05, F-value = 6.716, Table 3a). The female group was thus found to be having significantly lower level of overall emotional maturity.

The results pertaining to the interaction between performance and gender in have also been found to be significant (p<0.01, F=6.337, Table 3a).

SELF SATISFACTION

The 3x2 ANOVA results on the variable Individual Performance, have brought out significant differences among the three performance level groups (p<0.01, F-value = 9.099, Table 4a). The International group was found to be having significantly higher level of self satisfaction as compared to the other two groups.

On the variable Individual performance, the results in Table 4(a) have also demonstrated significant gender difference (p<0.01, F=14.794, Table 4a). The male players were found to be significant more satisfied with their individual performance as compared to their female counterparts.

The results relating to interaction between performance and gender was not found to be significant results.
On the variable **Team Performance**, significant differences were found (p<0.01, F=12.255, Table 4a) among the three performance level groups. The International group was found to be significantly more satisfied regarding their team’s performance as compared to the Interstate and State level groups.

The gender differences on the variables were not been found to be significant.

The interaction between performance and gender on this variable was not found to be significant.

With regard to the variable **Ability Utilization**, the results have revealed significant inter-performance group differences (p<0.01, F-Value being 10.993, Table 4a). The International group was found to be having significantly better ability utilization as compared to the other two groups.

On this variable significant gender differences (p<0.01, F=25.495, Table 4a) have been found. The female subjects were found to be significantly less satisfied regarding their ability utilization as compared to their male counterparts.

The performance x gender interaction on this variable was not been found to be significant.

On the variable **Strategy**, the results have revealed significant differences among the State, Interstate and International performance level groups (p<0.05, F=3.394, Table 4a). The International group was found to be having significantly better satisfaction with regard to strategy being employed by the team and team management, as compared to the Interstate performance group.

On this variable of Strategy gender differences have not been found to be significant.

Interaction between performance and gender groups on this variable was also not been found to be significant.

Concerning the variable **Personal Treatment** significant differences (p<0.05, F=4.697, Table 5a) were found among the State, Interstate and International level performance groups. The International group was found to be more satisfied with their personal treatment as compared to the other performance groups.
The gender differences on this variable i.e. Personal Treatment were not found to be significant.

The interaction between performance and gender on this variable was also not found to be significant.

With regard to the variable *Training and Instruction*, there were significant differences among the three performance groups \( p<0.01, F=8.724, \text{ Table 5a} \). The International group was found to be significantly more satisfied as compared to other two groups on this variable of Training and Instructions were concerned.

On this variable, the gender difference were not found to be significant.

The interaction between performance groups and the gender group on the variable was not found to be significant.

The results pertaining to the variable *Team Task Contribution* have revealed significant differences among the three performance level groups \( p<0.05, F=3.209, \text{ Table 5a} \). The International group was significantly more satisfied as compared to the Interstate groups so far as team task contribution was concerned.

On this variable, the results have revealed significant gender differences \( p<0.01, F=9.198 \). The male players were found to be having significantly better feeling of self satisfaction with regard to team task contribution as compared to their female counterparts.

The performance x gender interaction on this variable has not been found to be significant.

On the variable *Team Social Contribution* significant differences were found among the three performance level groups i.e. State, Interstate and International groups \( p<0.01, F\text{-value being } 4.868 \). The International group was significantly much better than other two groups on team social contribution.

On this variable i.e. Team Social Contribution, the gender differences have been found to be significant \( p<0.01, F\text{-value } 9.410, \text{ Table 5a} \). The male subjects were found to be significantly better than female subjects with regard to the team's social contribution.
The results in this regarding interaction between performance and gender was not been found to be significant.

On the variable **Ethics**, the difference between State, Interstate and International groups were found to be significant (p<0.01, F=5.130, Table 6a). The International group was found to be significantly better than the other two groups on this variable of Ethics.

On this variable the gender differences have revealed significant difference (p<0.05, F-Value being 6.781, Table 6a). The male subjects were found to be significantly better on the variable Ethics than their female counterparts.

On this variable the performance x gender interaction was not found to be significant.

On the variable **Team Integration** there were significant differences among the three performance level groups (p<0.01, F=9.721, Table 6a). The International level group was found to be having significantly better team integration as compared to the other two groups.

The gender differences on this variable have also been found to be significant (p<0.01, F-Value = 9.302, Table 6a). The male subjects were found to be having significantly better feeling of team integration as compared to the female subjects.

The 3x2 interaction on this variable of Team Integration has not been found to be significant.

Regarding the variable **Personal Dedication**, no significant differences were found among the three performance level groups.

With regard to this variable i.e. Personal Dedication, significant gender differences have been found among the two gender groups. The male subjects were found to be significant better on this variable.

On this variable the interaction between performance and gender has not been found to be significant.
On the variable **Budget**, significant differences have been found among the three performances level groups i.e. State, Interstate and International Level groups (p<0.01, F=5.417, Table 6a) The International and Interstate groups were found to be having significantly higher level of satisfaction as far as the budget allocated for them was concerned.

The gender differences on this variable of Budget have also been found to be significant (p<0.01, F-value being 17.352, Table 6a). The male subjects were found to be having significantly higher level of satisfaction with regard to the budget.

The interaction between performance and gender was not found to be significant.

With regard to the variable **Medical Personnel** significant differences (p<0.01, F-value being 13.532, Table 7a) were found among the three performance levels i.e. State, Interstate and International. Both the Interstate and International groups were found to have significantly higher self satisfaction with regard to services of medical personnel as compared to the state level performance group.

On this variable, the differences between two gender groups were not found to be significant.

The results of interaction between performance and gender on this variable have revealed significant results (p<0.05, F=3.715, Table 7a).

Concerning the variable **Academic Support Service** significant differences (p<0.01, F-value=9.722, Table 7a) were found among State, Interstate and International level performance groups. The International Group was found to be significantly better than both the State and the Interstate level performance groups with regard to the academic support services.

The differences among the two gender groups on this variable have been found to be significant (p<0.05, F=5.990, Table 7a). The female participants which pointed out that the male players were found to be significantly more satisfied with the academic support services as compared to the female players.

On this variable, the performance x gender interaction was not found to be significant.
With regard to the variable *External Agents*, the State, Interstate and International performance groups had differed from each other significantly ($p<0.01$, $F=6.235$, Table 7a). The International group was found to be significantly better than the State group on this variable of external factors.

On this variable no significant gender differences were noticed.

The results pertaining to interaction between performance and gender on this group have also not been found to be significant.

With regard to the *Overall Self Satisfaction*, significant differences have been found between the three performance level groups i.e. State, Interstate and International. ($p<0.01$, $F=12.433$, Table 7(a)). The International sports group was found to be significantly better and overall more self satisfied as compared to the other two groups.

On this variable i.e. Overall Self Satisfaction, the differences between the two gender groups had been found to be significant ($p<0.01$, $F=10.798$). The male subjects were found to be significantly more satisfied with overall facilities regarding their training coaching environment than their female counterpart.

The performance x gender interaction on this variable had not been found to be significant.

**FINDINGS REGARDING 3X2 ANALYSIS OF VARIANCE RELATING TO HOCKEY GROUP**

**COGNITIVE STYLE**

From the results 8(a) on the variable *Cognitive Style (Intuitive)* significant differences were noticed among the three performance groups of Hockey discipline i.e. State, Interstate, and International ($p<0.01$, $F=22.548$). The International level players having obtained highest mean scores, were found to be having significantly higher level of Intuitive Cognitive Style as compared to the State and Interstate level players.
The differences between two gender groups, on this variable have been found to be significant \( (p<0.05, F=5.794, \text{Table 8a}) \). These results indicate that the female players were found to be significantly less intuitive in their Cognitive Style.

The performance x gender interaction was not found to be significant.

With regard to the variable \textbf{Cognitive Style (Systematic)} significant differences have been found among the three performance groups \( (p<0.01, F=9.544, \text{Table 8a}) \). The International group was found to be having significantly higher level of cognitive style (systematic) as compared to the other two performance groups.

The results relating to gender differences on this variable have revealed no significant differences between the two gender groups.

The interaction between the three performance groups and the two gender groups on this variable have not been found to be significant.

\textbf{EMOTIONAL MATURITY}

With regard to the variable \textbf{Emotional Unstability}, the results of analysis of variance have revealed significant differences \( (p<0.01, F=19.979, \text{Table 9a}) \) among the selected three performance groups. These results demonstrated that the International level performance group was more stable emotionally as compared to the other two groups on this sub-scale.

The gender differences on this variable Emotional Unstability the results have brought out significant differences among them \( (p<0.05, \text{F-Value} = 5.957) \). Since as per the instruction in the Manual of the Test, the lesser the score, lesser the emotional unstability, the female subjects were found to be significantly better than their counterparts on this variable.

The interaction between performance and the gender on this variable was not found to be significant.

On the variable \textbf{Emotional Regression} significant differences were noticed between the three performance groups \( (\text{F-value being 35.726, } p<0.01) \). The International group had been found to be significantly better than the other two groups, and even the Interstate group was found to be significantly better than the State group.
The results pertaining to the differences between the two gender groups on this variable have shown significant differences among these two groups (p<0.05, F-value being 10.507, Table 9(a)). The female sports group was found to be significantly better than male subjects on this variable of emotional regression.

The performance x gender interaction had not brought out any significant differences on this variable.

Concerning the variable *Social Maladjustment*, there were significant differences among the three performance groups i.e. State, Interstate and International (p<0.01, F=13.945, Table 9a). The International group having scored the lowest mean score was found to lesser socially maladjustment i.e. having significantly better emotional maturity as compared to the other two groups.

On this variable of Social Maladjustment, the gender differences have been found to be significant (p<0.01, F-value being 12.799, Table 9c). The mean scores indicated that the female group was significantly better than their male counterparts with regard to social maladjustment sub-scale of emotional maturity.

The results of interaction between the 3 performance groups and the 2 gender groups have not been found to be significant.

The results relating to variable *Personality Disintegration* concerning the three performance level groups have brought out significant differences among these groups (p<0.01, F-value being 35.963, Table 10a). From the mean scores obtained by these three groups, the International group was found to be significantly better on this sub-scale of emotional maturity as compared to the other two groups (lesser the score, better emotional maturity).

The results regarding differences between the two gender groups have been found to be significant (p<0.01, F-value= 25.621, Table 10a) and the female group was found to be significantly better than their male counterparts on this variable.

The interaction between the performance and gender groups has been found to be significant (p<0.01, F-value = 11.384, Table 10a).
On the variable **Lack of Independence**, the results have revealed that these existed significant differences between three performance level groups, (p<0.01, F-Value being 34.961, Table 10a). The players of International level were found to be significantly better on this sub-scale of emotional maturity as compared to the other two performance groups.

The gender differences on this variable i.e. Lack of Independence has been found to be significant (p<0.01, F-value being 31.192, Table 10a). The male subjects were found to be exhibiting significantly lower level of emotional maturity on this sub-scale as compared to their female counterparts.

The performance x gender interaction on this variable has produced significant results (p<0.01, F=13.474, Table 10a)

With regard to the variable **Overall Emotional Maturity** there existed significant differences among the three performance groups (p<0.01, F-value being 45.975, Table 10a). These results have demonstrated that the State group was having significantly lower level of overall emotional maturity as compared to both the Interstate and International groups. Even the Interstate group was found to be having significantly lower level of overall emotional maturity as compared to the International group.

It was observed that on the variable Overall Emotional Maturity, there were significant differences between male and female participants (p<0.01, F-value=34.852, Table 10a). The male group was found to have differed from their female counterparts and thus found to be having significantly lower level of overall emotional maturity.

The results pertaining to the interaction between performance and gender in Table 10(a) have also been found to be significant (p<0.01, F=11.013) on this variable of Overall Emotional Maturity.

**SELF SATISFACTION**

With regard to the variable **Individual Performance**, results have brought out significant differences among the three performance level groups (p<0.01, F-value = 43.968, Table 11a). The International group players were experiencing self-
satisfaction regarding their individual performance at significantly higher level as compared to the other two groups.

On this variable of Individual performance, the results in Table 11(a) have demonstrated no significant gender difference.

The results relating to interaction between performance and gender on this variable have produced significant results (p<0.05, F=5.167, Table 11a).

Pertaining to the variable Team Performance, there were significant differences (p<0.01, F=30.453, Table 11a) among the three performance level groups. The International group was found to be significantly more satisfied regarding their team performance as compared to the Interstate and State level groups.

The gender differences on this variable have also been found to be significant (p<0.05, F=5.152, Table 11a). The female players were found to be significantly more satisfied with their team performance as compared to the male players.

The results on this variable did not reveal any significant results with regard to interaction between performance and gender.

With regard to the variable Ability Utilization, the results have revealed significant inter-performance group differences (p<0.01, F-Value being 60.754, Table 11(a). Both the Interstate and International groups have demonstrated significantly better ability utilization as compared to the State group. Even as compared to Interstate group, the International group had expressed their satisfaction at significant level on this variable.

On this variable no significant gender differences have been found. Both the gender groups were found to be equally satisfied regarding their ability utilization.

The performance x gender interaction on this variable had been found to be significant (p<0.01, F=8.295, Table 11a)

On the variable Strategy, the results have revealed significant differences among the State, Interstate and International performance groups (p<0.05, F=18.553, Table 11a). The mean scores demonstrated that the International group
was having significantly better satisfaction with regard to strategy being employed by the team and team management, as compared to the Interstate level performance groups.

On this variable of Strategy, the results have not demonstrated any significant gender differences.

The results regarding interaction between performance and gender groups have been found to be significant on this variable (p<0.05, F=4.328, Table 11a)

Regarding the variable Personal Treatment it can be seen that there existed significant differences (p<0.01, F=28.841, Table 12a) among the State, Interstate and International level performance groups. The international players were found to be significantly more satisfied with the personal treatment being metted out to them as compared to the other two performance groups.

The gender differences on this variable of Personal Treatment have not been found to be significant.

The interaction between performance and gender on this variable has also not been found to be significant.

With regard to the variable Training and Instruction, the results have revealed significant differences among the three performance level sports groups (p<0.01, F=36.166, Table 12a). The International group was significantly more satisfied as compared to other two performance level groups so far as their training and instructions were concerned.

With regard to this variable, the gender difference have not been found to be significant.

The results relating to interaction between performance level groups and the two gender groups have not yielded any significant results.

Pertaining to the variable Team Task Contribution significant differences have been found among the three performance level group (p<0.01, F=28.594, Table 12a). The International group was found to be significantly more satisfied as compared to other two performance level groups so far as team task contribution was concerned.
The gender differences on this variable have revealed significant differences among them (p<0.05, F=4.713). The female players were having significantly better feeling of self satisfaction with regard to team task contribution as compared to their male counterparts.

The results of performance x gender interaction regarding this variables have not been found to be significant.

So far as the variable **Team Social Contribution** is concerned, the results in Table 12(a) have revealed significant differences among the State, Interstate and International groups (p<0.01, F=60.878, Table 12a). The International group was found to be significantly much better than other two groups with regard to their Team's social contribution.

On this variable the gender differences have also been found to be significant (p<0.05, F-Value 6.037, Table 12a). The female subjects were significantly better satisfied than male subjects on this variable.

The interaction between performance and gender has also been found to be significant (p<0.05, F=5.394) on the dependent variable.

Relating to the variable **Ethics**, it was observed that the difference between State, Interstate and International groups were found to be significant (p<0.01, F=41.390, Table 13a). The International group was found to be significantly better than the other two groups on this variable. Even the Interstate group was significantly better than State group on this variable.

The gender differences on this variable have not revealed any significant results.

On this variable the performance x gender interaction has produce significant effects on the dependent variable (p<0.05, F=3.448, Table 13a).

On the variable **Team Integration** the results have revealed that there were significant differences among the three performance level groups (p<0.01, F=39.675, Table 13a). It was found that the International level group was having significantly better feeling of team integration as compared to the other two groups.
The gender differences on this variable have not been found to be significant.

The results regarding 3x2 interaction on this variable of Team Integration have not produced significant interaction effect.

On the variable **Personal Dedication**, the results have revealed significant differences among the three performance level groups (p<0.01, \(F=46.968\), Table 13a). These results point out that the International players were significantly better on this variable of Personal Dedication as compared to the others two groups.

With regard to this variable no significant gender differences have been found.

The interaction between performance and genders have been found to be significant (p<0.01, \(F=14.387\)).

On the variable **Budget**, significant differences were noticed among the three performances level groups i.e. State, Interstate and International Level groups. (p<0.01, \(F=31.142\), Table 13a). The International group was found to be having significantly higher level of satisfaction as compared to other two groups so far as the budget allocation for them was concerned. Even the Interstate group had exhibited significantly better satisfaction regarding the budget as compared to the State group.

The gender differences on this variable of Budget have not been found to be significant.

The interaction results have been found to be significant on this variable (p<0.05, \(F=-4.460\), Table 13a).

With regard to the variable **Medical Personnel** the ANOVA results in Table 14(a) have revealed significant differences (p<0.01, F-value being 78.594) among the groups from three performance levels i.e. State, Interstate and International. Both the Interstate and International level groups expressed their satisfaction with regard to medical personnel at significant level as compared to the State level performance group. Even the International level players were found to be significantly more satisfied on this aspect as compared to the Interstate group.
On this variable with regard to the differences between two gender groups, no significant differences have been noticed.

The results of interaction between performance and gender have not revealed any significant effects on this variable.

The results concerning the variable **Academic Support Service** have brought out significant differences \( p<0.01, F=99.022, \text{Table 14a} \) among State, Interstate and International level performance groups. The International group was found to be significantly better than both the State and Interstate performance groups with regard to the academic support services. Even the Interstate group was found to be significantly better than the State group on this variable.

The differences among the two gender groups on this variable of Academic Support Services were not found to be significant.

On this variable, the performance x gender interaction has been found to be significant \( p<0.05, F=4.164 \).

With regard to the variable **External Agents** Table the State, Interstate and International performance level groups had differed from each other significantly \( p<0.01, F=79.037, \text{Table 14(a)} \). The International group was significantly better than both the State and Interstate groups on this variable of external factors. The Interstate group was also found to be significantly better than the State group on this variable.

Concerning this variable no significant gender differences were noticed.

The results pertaining to interaction between performance and gender on this variable have also not been found to be significant.

With regard to the **Overall Self Satisfaction**, the results have revealed significant differences between the three performance level groups i.e. State, Interstate and International. \( p<0.01, F=122.088, \text{Table 14a} \). The International sports group was found to be significantly better and overall more self satisfied as compared to the other two groups.
On this variable the results have exhibited no significant differences between the two gender groups.

The performance x gender interaction on this variable, however, had produced significant results (p<0.01, F=7.077).

**FINDINGS REGARDING 3X2 ANALYSIS OF VARIANCE RELATING TO BASKETBALL GROUP**

**COGNITIVE STYLE (INTUITIVE)**

The results with regard to the variable *Cognitive Style (Intuitive)* have revealed no significant differences among the three performance groups of Basketball game (i.e. State, Interstate, and International) These results demonstrate that all the three level players were having almost similar level of Intuitive Cognitive Style. As per the Inventory classification both the State and International groups fell in "Medium High" category whereas the Interstate group was placed in "High category".

The differences between two gender groups, have also not been found to be significant.

The results relating to interaction between performance and gender groups have also not been found in the significant.

The results with regard to the variable *Cognitive Style (Systematic)* have demonstrated significant differences among the three performance groups (p<0.01, F=10.153, Table 15a). The International group was found to be having significantly higher level of cognitive style (systematic) as compared to the other two performance groups.

The results relating to gender differences on this variable have revealed no significant differences between the two gender groups.

The interaction between the three performance and the two gender groups on this variable have not been found to be significant.
EMOTIONAL MATURITY

With regard to the variable *Emotional Unstability*, the results have revealed significant differences (p<0.01, F=16.755, Table 16(a)) among the selected three performance groups. The results demonstrate that the International level performance group was more stable emotionally as compared to the other two groups on this sub-scale.

Regarding the gender differences on this variable Emotional Unstability the results have brought out no significant differences among them.

The interaction between performance and the gender has not produced any significant results.

The results on the variable *Emotional Regression* have brought out significant differences between the three performance groups (F-value being 12.277, p<0.01). The International group found to be was significantly better than the other two performance level groups on this sub-scale of emotional maturity.

The results pertaining to the differences between the two gender groups on this variable i.e. Emotional Regression have shown no significant differences among these two gender groups.

The performance x gender interaction has not brought out any significant differences on this variable.

The results concerning the variable *Social Maladjustment*, have revealed that there were significant differences among the three performance groups i.e. State, Interstate and International (p<0.01, F=18.272, Table 16a). The International group having scored the lowest mean score was found to lesser socially maladjusted i.e. found to be significantly better on this sub-scale emotional maturity as compared to the other two groups. The State group was also found to significantly better than Interstate group.

On this variable of Social Maladjustment, the gender differences have not been found to be significant.

The results of interaction between the three performance groups and the two gender groups on this variable have also not been found to be significant.
The results relating to variable *Personality Disintegration* concerning the three performance level groups have brought out significant differences among these groups (p<0.01, F-value being 16.820, Table 17a). These results demonstrate that the International group was significantly better on this sub-scale of emotional maturity as compared to the other two groups.

The results regarding differences between the two gender groups have not been found to be significant.

On this variable the interaction between the performance and gender groups has not been found to be significant.

On the variable *Lack of Independence*, results have revealed that there existed significant differences between three performance level groups, (p<0.01, F-value being 27.485, Table 3a). The players of International level were found to be significantly better on this sub-scale of emotional maturity as compared to the other two performance groups.

The gender differences on this variable i.e. Lack of Independence have been found to be significant (p<0.01, F-value being 8.174, Table 17a). The female subjects were exhibiting significantly higher level of emotional maturity on its this sub-scale as compared to their male counterparts.

The performance x gender interaction on this variable has not produced significant results.

The results with regard to the variable *Overall Emotional Maturity* have revealed that there existed significant differences among the three performance groups (p<0.01, F-value being 40.711, Table 17a). The state group was found to be having significantly lower level of overall emotional maturity as compared to the International group. Even the Interstate group was found to be having significantly lower level of overall emotional maturity as compared to the International group.

On the variable i.e. Overall Emotional Maturity, there were no significant differences between male and female participants.

The results pertaining to the interaction between performance and gender have also not been found to be significant with regard to Overall Emotional Maturity.
SELF SATISFACTION

With regard to the variable Individual Performance, the results have brought out significant differences among the three performance level groups (p<0.05, F-value = 4.491, Table 18a). The subjects of International group were experiencing self-satisfaction on this sub scale at significantly higher level as compared to the State group.

On this variable of Individual performance, the results have not demonstrated any significant gender difference.

The results relating to interaction between performance and gender have not produced any significant results.

Pertaining to the variable Team Performance, no significant differences have been found among the three performance level groups.

The gender differences on this variable have also not been found to be significant.

The results also did not reveal any significant interaction effects with regard to interaction between performance and gender on this variable.

With regard to the variable Ability Utilization, the results have revealed significant inter-performance group differences (p<0.01, F-Value being 14.909, Table 18a). The International group had demonstrated significantly better ability utilization as compared to the other two groups.

On this variable there were no significant gender differences and both the gender groups were satisfied regarding their ability utilization at almost similar level.

The performance x gender interaction on this variable has not been found to be significant.

On the variable Strategy, the results have revealed significant differences among the State, Interstate and International performance groups (p<0.01, F=12.042, Table 18a). The International group was found to be having significantly better satisfaction with regard to strategy being employed by the team and team management, as compared to the State and Interstate performance groups.
On this variable of Strategy, the results have demonstrated significant gender differences ($p<0.01, F=7.092$). The female group was found to be significantly better than their male counterparts.

The effects of interaction between performance and gender groups have not been found to be significant.

The results concerning the variable **Personal Treatment** have demonstrated that there existed significant differences ($p<0.01, F=9.224$, Table 19a) among the State, Interstate and International level performance groups. The International group subjects were found to be significantly more satisfied with their personal treatment as compared to the other two performance groups.

The gender differences on this variable i.e. Personal Treatment have not been found to be significant.

The interaction between performance and gender on this variable have also not been found to be significant.

With regard to the variable **Training and Instruction**, the results have revealed no significant differences among the three performance groups. These results demonstrate that all the three performance level groups were equally satisfied so far as their training and instructions were concerned.

With regard to this variable, the gender difference have been found to be significant ($p<0.01, F=9.809$, Table 19a). The male subjects were found to be significantly better than their female counterparts on this variable.

Interaction between performance groups and the gender groups have yielded significant results ($p<0.05, F=3.276$).

The results pertaining to the variables **Team Task Contribution** have not brought out any significant differences among the three performance level groups. The mean scores for the three groups were almost identical on both these variables.

So far as gender differences on this variable were concerned, the results have revealed no significant differences among them.
The results of performance x gender interaction regarding this variable has not been found to be significant.

The results pertaining to the variables *Team Social Contribution* have not brought out any significant differences among the three performance level groups. The mean scores for the three groups were almost identical on both these variables.

So far as gender differences on this variable were concerned, the results have revealed no significant differences among them.

The results of performance x gender interaction regarding this variable has not been found to be significant.

The differences between State, Interstate and International groups were also not been found to be significant. All the three groups were similarly situated so far as this variable of Ethics was concerned.

With regard to the gender differences, the results on this variable have also not revealed any significant differences among them.

The results on this variable regarding performance x gender interaction did not produce any significant result.

On the variable *Team Integration* the results have not revealed any significant differences among the three performance level groups.

With regard variable Team Integration no significant gender difference have been noticed.

The interaction between performance and genders have not been found to be significant on this variable.

On the variables *Personal Dedication* and *Budget* the results have not revealed any significant differences among the three performance level groups.

With regard variables Personal Dedication and Budget no significant gender difference have been noticed.
The interaction between performance and genders have not been found to be significant on these variables.

With regard to the variable Medical Personnel, the results have revealed significant differences (p<0.01, F-value being 5.061, Table 21a). The results demonstrate that the International group had expressed its satisfaction at significant level with regard to medical personnel as compared to the State level performance group.

On this variable with regard to the gender differences, no significant results have been noted.

The results of interaction between performance and gender on this variable have not revealed any significant results.

The results concerning the variable Academic Support Service have not brought out any significant differences among State, Interstate and International level performance groups.

The differences among the two gender groups on this variable of Academic Support Services have been found to be significant (p<0.05, F=5.877, Table 21a). The male players were found to be significantly more satisfied with the academic support services as compared to the female players.

On this variable, the performance x gender interaction has not been found to be significant.

The results of with regard to the variable External Agents have revealed that State, Interstate and International performances differed from each other significantly (p<0.01, F=5.567, Table 21(a). Both the Interstate and International groups were found to be significantly better than the State group on this variable of external factors.

On this variable no significant gender differences were noticed. Both the gender groups were quite similar with regard to this variable.

The results pertaining to interaction between performance and gender on this group have also not been found to be significant.
With regard to the **Overall Self Satisfaction**, the results have revealed significant differences between the three performance level groups i.e. State, Interstate and International (p<0.01, F=9.498, Table 21a). The International sports group was found to be significantly better and thus overall more self satisfied on various issues concerning their sports environment and facilities as compared to the other two groups.

On this variable i.e. Overall Self Satisfaction, the results have not revealed any significant differences between the two gender groups.

The performance x gender interaction on this variable, had not revealed any significant results

**FINDING REGARDING ONEWAY ANOVA AMONG THREE SPORTS GROUPS WITHIN STATE PERFORMANCE LEVEL.**

**COGNITIVE STYLE**

With regard to the variable **Cognitive Style (Intuitive)**, the results have not revealed any significant differences between the three sports groups of State level.

The results regarding the variable **Cognitive Style (Systematic)** among three sports groups have not demonstrated any significant differences.

**EMOTIONAL MATURITY**

The results pertaining to the subjects from three Sports groups on the variable **Emotional Unstability** indicated that significant differences were not among these groups.

Regarding the variable **Emotional Regression**, the results have demonstrated significant differences (p<0.01, F=14.219) among the participants from three different sports groups. The players from Basketball group were significantly better on the variable as compared to the other two groups (low scores indicated better emotional maturity).
The results regarding the variable *Social Maladjustment* among the players from three sports groups have revealed that the differences among them were significant (p<0.05, F=3.693). The Basketball players were significantly better than the players from other two Sports disciplines on this variable.

With regard to the variable *Personality Disintegration* the results have demonstrated significant differences (p<0.01, F=4.918) among three sports groups. The Basketball group was found to be significantly better than the other two groups on this variable.

Pertaining to the participants from three different sports discipline on the variable *Lack of Independence*, the difference between them were not found to be significant (F=2.947).

Regarding the three sports groups on the variable *Overall Emotional Maturity* significant differences were found between them (p<0.01, F=7.945, Table 23a). The Basketball group was found to be having significantly better overall emotional maturity compared to the other two sports group.

**SELF SATISFACTION**

The results concerning the variable *Individual Performance* did not reveal any significant differences among the three Sports groups.

The results with regard to the variable *Team Performance* among the three sports groups have demonstrated significant differences (p<0.05, F=4.332) among these three groups. The Basketball group were found to be having significantly higher level of team satisfaction as compared to the players belonging to the other two groups.

With regard to the variable *Ability Utilization* the results demonstrated that the differences among three Sports groups were significant (p<0.01, F=6.483, table 24a). Basketball group was found to be having significantly higher level of self satisfaction regarding their ability utilization as compared to the other two groups.

On the variable *Strategy* that the differences among the three Sports groups were found to be significant (p<0.01, F=6.570, Table 24a). The Basketball group having scored higher mean scores, was found to be significantly better on this variable as compared to the other two sports groups.
The results regarding the three sports groups did not reveal any significant differences among them on the variable *Personal Treatment*.

Concerning the variable *Training and Instructions* the differences between the three Sports groups were found to be significant (p<0.01, F=7.758, Table 24a). The Basketball group was found to be having significantly higher level of self satisfaction on this sub-scale.

On the variable *Team Task Contribution*, interse difference between the three groups were not found significant.

The results regarding the variable *Team Social Contribution* among the male three Sports groups have revealed significant differences (p<0.05, F=3.493) among them. The Basketball group was found to be having comparatively higher level of satisfaction on this variable.

On the variable *Ethics* regarding the three Sports groups the results have demonstrated that the differences among them were found to be significant (F-value being 3.205,p<0.05). The Basketball group had higher level of self satisfaction on this sub-scale as compared to the other two groups.

With regard to three Sports groups on the variable *Team Integration* no significant differences were found among them.

On the variable *Personal Dedication*, significant differences were found among the three sports groups (p<0.01, F=9.591). The participants of Basketball group were found to be having higher level of personal dedication as compared to the other two groups.

On the variable *Budget*, the differences between the three Sports groups have been found to be significant (p<0.01, F=9.984). The Basketball players were found to have higher level of self-satisfaction on this sub-scale.

The results with regard to the variable *Medical Personnel* among three Sports groups also demonstrated that interse differences were significant (p<0.01, F=9.552). The players of Basketball were found to be having significantly higher self satisfaction on this sub-scale as compared to the other two Sports groups.
On the variable *Academic Support Services* significant differences were noticed among the three Sports groups ($p<0.01$, $F=16.795$). The Basketball group was found to be significantly better than other two groups on this variable.

With regard to the variable *External Agents*, the results as depicted in Table-25(a) have not brought out any significant differences among the three Sports groups i.e. Handball, Hockey and Basketball groups.

Regarding the *Overall Self-Satisfaction* the results have revealed that there existed significant differences among the three Sports groups ($p<0.01$, $F=11.486$). The third group i.e. Basketball group was followed by Hockey and Handball groups respectively in their levels of overall self-satisfaction.

**FINDINGS REGARDING ONEWAY ANOVA RESULTS AMONG THREE SPORTS GROUPS WITHIN INTERSTATE PERFORMANCE LEVEL**

**COGNITIVE STYLE**

With regard to the variable *Cognitive Style (Intuitive)*, no significant differences have been between the three sports groups.

The results regarding the variable *Cognitive Style (Systematic)* within Interstate performance level group have also not demonstrated any significant differences.

**EMOTIONAL MATURITY**

Regarding the variable *Emotional Unstability*, no significant differences were found among the participants from three different sports groups.

On the variable *Emotional Regression* no significant differences have been found among these three sports groups.

The results regarding the variable *Social Maladjustment* among players from three sports groups presented have revealed that the differences between these groups were not found to be significant.

Concerning the variable *Personality Disintegration*, no significant differences were found among three sports groups.
The differences between three sports groups on the variable *Lack of Independence* were not found to be significant.

Regarding the variable *Overall Emotional Maturity* the difference have not been found to be significant.

**SELF SATISFACTION**

The results concerning the variable *Individual Performance* have revealed significant differences among the three sports groups (p<0.05, F=4.412). The subjects of Handball and Basketball groups were found to be having a higher level self satisfaction on this sub-scale as compared to the Hockey sports group.

With regard to the variable *Team Performance* among the three sports groups no significant differences were noticed among these three groups.

With regard to the variable *Ability Utilization* the differences among three sports groups were not found to be significant.

On the variable *Strategy* the difference among the three sports groups were not found to be significant.

The results regarding the three sports groups on the variable *Personal Treatment* did not reveal any significant differences among them.

On the variable *Training and Instructions* the differences between the three sports groups were found to be significantly (p<0.01, F=8.339).

On the variable *Team Task Contribution*, the interse difference between the three sports groups were not found to be significant. The Basketball group was found to be significantly better on this variable.

Regarding the variable *Team Social Contribution* among the three sports groups the results have revealed that the differences among them were not found to be significant.

On the variable *Ethics* regarding the three sports groups within Interstate level performance group, the differences were not found to be significant.
The results with regard to three sports groups within Interstate performance group on the variable **Team Integration** had demonstrated no significant differences among them.

With regard to the variable **Personal Dedication**, the results have revealed significant differences (p<0.05, F=4.271) among the three sports groups. The participants of Hockey group were found to be having significantly lower level of personal dedication as compared to the other two groups.

On the variable **Budget**, the results have demonstrated that the differences between the three sports groups were not significant.

With regard to the variable **Medical Personnel** interse difference among three sports groups were not found to be significant.

The results pertaining to variable **Academic Support Services** have demonstrated significant differences among the three sports groups (p<0.05, F=3.472). The Basketball group was found to be having significantly higher level of self-satisfaction on this variable as compared to the other two sports groups.

With regard to the variable **External Agents**, the results have not brought out any significant differences among the three sports group i.e. Handball, Hockey and Basketball groups.

Regarding the **Overall Self-Satisfaction** no significant differences were noticed among the three sports groups of Interstate performance level group.

**FINDINGS REGARDING ONEWAY ANOVA RESULTS CONCERNING THREE SPORTS GROUPS WITHIN INTERNATIONAL PERFORMANCE LEVEL**

**COGNITIVE STYLE**

With regard to the variable **Cognitive Style (Intuitive)**, no significant differences have been found between the three sports groups within International Performance level group.
Regarding the variable **Cognitive Style (Systematic)** among the three sports groups significant differences (p<0.01, F=5.964) have been found among them.

**EMOTIONAL MATURITY**

Regarding the variable **Emotional Unstability**, no significant differences were noticed among the participants from three different sports groups.

The results pertaining to the subjects from three sports groups on the variable **Emotional Regression** have indicated significant differences (p<0.05, F=4.600) among these groups. The Hockey group was found to be having significantly higher level on this variable as compared to the other two sports groups.

Regarding the variable **Social Maladjustment** the differences among the players from three sports groups were found to be significant (p<0.01, F=11.452) and players from Hockey group was found to be having significantly higher level on this variable (low mean scores indicated higher emotional maturity).

With regard to the variable **Personality Disintegration** the results have demonstrated no significant differences among three sports groups.

Pertaining to the participants from three difference sports group on the variable **Lack of Independence** the difference between them were found to be significant (p<0.05, F=3.504). The Basketball sports group was found to be significantly better on this variable as compared to those from other two performance groups.

Regarding the variable **Overall Emotional Maturity**, the difference among three sports groups within International performance level have been found to be significant at 0.01 level (F=6.267). The Hockey group was found to be having significantly better overall emotional maturity as compared to the other two sports group.

**SELF SATISFACTION**

The results concerning the variable **Individual Performance** have revealed significant differences among the three sports groups (p<0.01, F=11.882). The subjects of Hockey group were found to be having a little higher level self satisfaction on this sub-scale.
The results with regard to the variable **Team Performance** among the three sports groups have demonstrated significant differences ($p<0.01$, $F=9.519$) among these three groups. The Basketball group was found to be having significantly lower level of self satisfaction regarding their team performance as compared to the players belonging to the other groups.

With regard to the variable **Ability Utilization** the differences among three sports groups were found to be significant ($p<0.01$, $F=11.175$). The Basketball group were found to be having significantly lower level of self satisfaction regarding their ability utilization as compared to the other two sports groups.

On the variable **Strategy** the difference among the three sports groups were not found to be significant.

The results regarding the three sports groups did not reveal any significant differences among them on the variable **Personal Treatment**.

On the variable **Training and Instructions** the differences between three sports groups were found to be significant ($p<0.01$, $F=14.871$). The Basketball Sports group was found to be having significantly lower level of self satisfaction on this sub-scale.

On the variable **Team Task Contribution**, the results revealed that the interse difference between the three groups were significant ($p<0.01$, $F=16.354$). Hockey group was having significantly higher level of self satisfaction regarding team task contribution.

Regarding the variable **Team Social Contribution** among the three sports groups the differences were found to be significant ($p<0.01$, $F=18.849$). The Handball group had comparatively and significantly higher level of satisfaction on this variable.

On the variable **Ethics** regarding the three sports groups, the differences were found to be significant ($p<0.01$, $F=15.200$). The Hockey group had a significantly higher level of self satisfaction on this sub-scale.
The results with regard to three sports groups on the variable \textit{Team Integration} demonstrated significant differences (p<0.01, F=19.756) among them. The Hockey sports group was having significantly higher level team integration as compared to the other two groups.

With regard to the variable \textit{Personal Dedication}, the results have pointed out significant differences among the three sports group (p<0.01, F=9.520). The Hockey group was found to be having significantly higher level of personal dedication as compared to the other two groups.

On the variable \textit{Budget}, the differences between the three sports groups were found to be significant (p<0.01, F=9.473). Hockey players were having higher level of self-satisfaction as compared to other two sports groups.

With regard to the variable \textit{Medical Personnel} among three sports groups the interse differences were found to be significant (p<0.01, F=16.116). The Hockey players were having higher self satisfaction on this sub-scale as compared to the other two sports groups.

The results pertaining to variable \textit{Academic Support Services} have demonstrated significant differences among the three sports groups (p<0.01, F=16.413). The Hockey group was found to have significantly higher level on this variable.

With regard to the variable \textit{External Agents}, the results have brought out significant differences among the three sports groups i.e. Handball, Hockey and Basketball groups (p<0.01, F=23.35). The Hockey players were found to be significantly better on this variable as well.

Regarding the variable \textit{Overall Self-Satisfaction} the results have revealed that there existed significant differences among the three sports groups (p<0.01, F=31.536). The Hockey group which was found to have significantly higher level of overall self satisfaction.
FINDINGS REGARDING ONEWAY ANOVA RESULTS CONCERNING MALE PLAYERS WITHIN EACH SELECTED SPORTS GROUP

REGARDING HANDBALL MALE PLAYERS

With regard to the variable *Cognitive Style (Intuitive)*, the results revealed significant differences between the three performance groups of male Handball subjects (p<0.01, F 12.446). The International group was found to be significantly better on this variable as compared to the other two groups.

The results regarding the variable *Cognitive Style (Systematic)* within Handball male participants, group have also demonstrated significant differences (p<0.01, F=12.614). The International group was found to be significant better than other two groups on this variable.

The results of oneway analysis of variance regarding the variable *Overall Emotional Maturity* demonstrated that the F-value being 15.221, the same was found to be significant at 0.01 level. The International group was found to be having significantly better overall emotional maturity compared to the Interstate sports group.

Regarding the *Overall Self-Satisfaction* the results have revealed that there existed significant differences among the three performance level of men handball players (p<0.05, F=3.374). The third group i.e. International group significantly higher level of overall self satisfaction as compared to the State Group.

REGARDING HOCKEY MALE PLAYERS

With regard to the variable *Cognitive Style (Intuitive)*, the results have revealed significant differences between the three performance groups of male subjects p<0.01, F 12.650). International group was found to be significantly better than Interstate group on this variable, as high score pointed towards higher level of the Intuitive type Cognitive Style.

The results regarding the variable *Cognitive Style (Systematic)* within Hockey male players have also demonstrated significant differences (p<0.01, F=9.436). International group was found to be significant better than the other group on this variable.
The results regarding the variable **Overall Emotional Maturity** demonstrated that the F-value being 41.475, the same was found to be significant at 0.01 level. The International group was thus found to be having significantly better overall emotional maturity compared to the State and Interstate sports group.

With regard to **Overall Self-Satisfaction**, significant differences were noticed among the three performance level men Hockey players (p<0.01, F=152.131). International group was found to be having significantly higher level of overall self satisfaction.

**REGARDING BASKETBALL MALE PLAYERS**

On the variable **Cognitive Style (Intuitive)**, significant differences were found between the three performance groups of male subjects (p<0.05, F = 4.895). The International group was significantly better than State group on this variable.

The results regarding the variable **Cognitive Style (Systematic)** among Basketball male players have not demonstrated any significant differences.

Concerning the variable **Overall Emotional Maturity**, F-value being 36.611, the same was found to be significant at 0.01 level. The International group was found to be having significantly better overall emotional maturity compared to the State and Interstate sports groups.

Regarding the **Overall Self-Satisfaction** significant differences were found among the three performance level men Basketball players (p<0.05, F=4.520). The International group was found to be having significantly higher level of overall self satisfaction as compared to the State group.

**FINDINGS REGARDING ONEWAY ANOVA RESULTS CONCERNING FEMALE PLAYERS WITHIN EACH SELECTED SPORTS GROUP**

**REGARDING HANDBALL FEMALE PLAYERS**

Relating to the variable **Cognitive Style (Intuitive)**, the results have revealed significant differences between the three performance level groups of female Handball players (p<0.05, F=4.954). The International group was found to be significantly better than International group on this variable.
The results regarding the variable **Cognitive Style (Systematic)** within female Handball performance level groups also demonstrated significant differences (p<0.01, F=9.917) among these groups. The International group was found to be significantly better than the other two groups.

With regard to the variable **Overall Emotional Maturity** F-value being 20.440, the same was found to be significant at 0.01 level. These results have also demonstrate that the International group was found to be having significantly better overall emotional maturity compared to the State and Interstate performance level groups.

Concerning the variable **Overall Self-Satisfaction** the results have revealed significant differences (p<0.01, F=11.860) among the three performance level female handball players. The International Sports group was found to be having significantly higher level of overall self satisfaction.

**REGARDING HOCKEY FEMALE PLAYERS**

With regard to the variable **Cognitive Style (Intuitive)**, the results have revealed significant differences between the three performance groups of female Hockey subjects (p<0.01, F=2.114). The International group was found to be significantly better than state and Interstate groups.

The results regarding the variable **Cognitive Style (Systematic)** regarding female Hockey group also demonstrated significant differences (p<0.05, F=3.183). The International group was significantly better than Interstate group.

Regarding the variable **Overall Emotional Maturity** demonstrated that the F-value being 13.113, the same was found to be significant at 0.01 level. The International group was found to be having significantly better overall emotional maturity compared to the State level performance group.

With regard to the **Overall Self-Satisfaction** variable the results have revealed that their existed significant differences among the three performance level female hockey players (p<0.01, F=35.909). The International group was found to have significantly higher level of overall self satisfaction as compared to the State and Interstate groups. Even the Interstate group was found to be significantly better than the State group.
REGARDING BASKETBALL FEMALE PLAYERS

On the variable *Cognitive Style (Intuitive)*, the results have revealed no significant differences between the three performance level of female Basketball players.

The results regarding the variable *Cognitive Style (Systematic)* regarding female Basketball players from three performance level groups have demonstrated significant differences (p<0.01, F=14.281). The International group was found to be significantly better than Interstate group.

With regard to the variable *Overall Emotional Maturity*, F-value being 13.692, the same was found to be significant at 0.01 level. The International group was found to be having significantly better overall emotional maturity compared to the State and Interstate sports group.

Regarding the *Overall Self-Satisfaction* the results have revealed that their existed significant differences among the female players of Basketball three performance level groups (p<0.01, F=5.223). The International group had significantly higher level of overall self satisfaction as compared to the Interstate groups on this variable.

FINDINGS REGARDING ONEWAY ANOVA RESULTS CONCERNING OVERALL THREE SPORTS DISCIPLINES ON ALL THE SELECTED VARIABLES

COGNITIVE STYLE

With regard to the variable *Cognitive Style (Intuitive)*, the results have not revealed any significant differences between the Overall three sports groups.

The results regarding the variable *Cognitive Style (Systematic)* concerning three overall sports groups have demonstrated significant differences (p<0.01, F=5.176). The overall Hockey group was having significantly lower level of Cognitive Style (Systematic).
EMOTIONAL MATURITY

Regarding the variable *Emotional Unstability*, the results have not demonstrated any significant differences among the participants from three overall sports groups.

Pertaining to the players from three overall sports groups on the variable *Emotional Regression*, significant differences (p<0.01, F=7.653) were found among these sports groups. Overall Basketball group was significantly better on this variable than those from Handball and Hockey groups.

The results regarding the variable *Social Maladjustment* among male players from three overall sports groups revealed that the differences between players of Handball, Hockey and Basketball groups were significant (p<0.05, F=6.342). Handball group was having significantly lower level on this sub-scale of emotional maturity as compared to the other two sports groups.

With regard to the variable *Personality Disintegration* the results have demonstrated no significant differences among three Overall sports groups.

Pertaining to the participants from three difference overall sports groups on the variable *Lack of Independence* the difference between them found to be significant (p<0.01, F=3.344). The Basketball sports group was found to be significantly better on this variable as compared to those from other two sports groups.

Regarding the variable *Overall Emotional Maturity* the demonstrated F-value being 3.265, the same was found to be significant at 0.05 level. The Handball group was found to be having significantly lower level of overall emotional maturity compared to the other two groups.

SELF SATISFACTION

The results concerning the variable *Individual Performance* did not reveal any significant differences among the three overall sports groups.

With regard to the variable *Team Performance* among the three sports groups no significant differences have been found among these three groups.
On the variable **Ability Utilization** the results demonstrated that the differences among three sports groups were significant ($p<0.01$, $F=6.454$). Handball group was having significantly higher level of self satisfaction regarding their ability utilization.

Concerning the variable **Strategy** the results have revealed that the difference among the three overall sports groups were significant ($p<0.01$, $F=5.583$). The values revealed that Handball group was found to be significantly better on this variables.

The results regarding the three sports groups did not reveal any significant differences among them on the variable **Personal Treatment**.

The results to the variable **Training and Instructions** demonstrated that the differences between three sports groups were not significant.

On the variable Team **Task Contribution**, results revealed that the interse difference between the three groups were not significant.

Regarding the variable **Team Social Contribution** among the three sports groups the differences among them were not found to be significant.

Relating to the variable **Ethics** regarding the three sports groups the results demonstrated that the differences among them were not found to be significant.

The results with regard to three overall sports groups on the variable **Team Integration** have revealed no significant differences among them.

With regard to the variable **Personal Dedication**, the results have pointed out significant differences among the three overall sports groups ($p<0.05$, $F=3.10$). The participants of Handball group were found to be having significantly higher level of personal dedication as compared to the other two groups.

On the variable **Budget**, the results have demonstrated that the differences between the three sports groups were significant ($p<0.01$, $F=5.369$). Basketball players were having significantly higher level of self-satisfaction on this sub-scale.
With regard to the variable *Medical Personnel* among three sports groups interse differences were not significant.

The results pertaining to variable *Academic Support Services* have demonstrated no significant differences among the three sports groups.

With regard to the variable *External Agents*, the results have brought out significant differences among the three sports groups i.e. Handball, Hockey and Basketball groups (p<0.05, F=3.966).

Regarding the *Overall Self-Satisfaction* the results revealed that there existed no significant differences among the three sports groups.

**FINDINGS WITH REGARD TO OVERALL GENDER DIFFERENCES ON THE SELECTED VARIABLE**

The results with regard to the overall gender differences on the variable *Cognitive Style (Intuitive)* were not found to be significant.

On the variable *Cognitive Style (Systematic)*, the results relating to the overall gender differences no significant differences have been noticed among these gender groups.

With regard to the variable *Overall Emotional Maturity*, the results have not brought out any significant gender differences.

The results pertaining to the differences between overall gender groups concerning the variable *Overall Self Satisfaction* have not been found to be significant.

**FINDING WITH REGARD TO DIFFERENCES AMONG THREE OVERALL PERFORMANCE LEVEL GROUPS ON THE SELECTED VARIABLES**

The results relating to the overall performance groups on the variable *Cognitive Style (Intuitive)* have revealed that the differences between State and International groups were significant (p<0.01, t=6.722) with the International group having significantly higher intuitive type of cognitive style.
On the variable **Cognitive Style (Systematic)** the results have revealed that the International group were found to be having significantly higher systematic type of cognitive style as compared to the State group (p<0.01, t=7.808) and Interstate group (p<0.01, t=7.269).

Regarding the variable **Overall Emotional Maturity**, the International group was found to be significantly better than the State group (p<0.01, t-value being 13.574) as well as the Interstate group (p<0.01, t-value = 11.122).

Relating to the variable **Overall Self Satisfaction** the International level group, was found to be having significantly higher level of self-satisfaction as compared to State and Interstate groups (p<0.01 in both cases, t-values being 12.977 and 8.535 respectively).

**FINDINGS WITH REGARD TO INTER-RELATIONSHIP BETWEEN THE SELECTED VARIABLES**

The results regarding co-efficient of correlation between the selected variables concerning the State Level Performance Group have revealed significant correlation between Cognitive Style (Intuitive) and Cognitive Style (Systematic) (significant at 0.01 level (r=.293), between the variables Cognitive Style (Systematic) and Overall Self Satisfaction (at 0.05 level, r=.226) between Cognitive Style (Intuitive) and Overall Self-Satisfaction (at 0.01 level, r=.245), and finally between Overall Emotional Maturity and Overall Self-Satisfaction (r=.185, at 0.05 level).

With regard to the Interstate Level Performance Group, the results have demonstrated positive correlation between two Cognitive Styles (p<0.05, r=.209), between Cognitive style (Systematic) and Overall Self Satisfaction (r=.520, p<0.01) and between Overall Emotional Maturity and Overall Self-Satisfaction (at 0.01 level, r=.243). The results in this Table have also brought out negative correlation between Cognitive Style (Systematic) and Overall Emotional Maturity (at 0.01 level, r=.294).

The results concerning the International Level Performance Group on the related variables have revealed significant negative correlation i.e. between Cognitive Style (Systematic) and Overall Self Satisfaction (r=.210, p<0.05).

Regarding overall male participants the results have revealed significant positive interaction between systematic and intuitive types of cognitive styles (r=.424,
p<0.01), between cognitive style (systematic) and Overall Self satisfaction (r=.365, at 0.01 level) as well as between cognitive style (intuitive) and overall self satisfaction (at 0.01 level, r=.397), and finally between Overall Emotional Maturity and Overall Self Satisfaction (at 0.01 level, r=.550) with regard to the male participant, significant negative correlation (at 0.01 level) was also found between overall emotional maturity on one hand and both the types of cognitive styles (r=-.339 and -.397 respectively for systematic and intuitive styles).

With regard to the overall female participants, the results have also demonstrated significant and positive correlation between two cognitive styles (at 0.05 level r=.174), between systemic cognitive style and overall self-satisfaction (p<0.01, r=.401) and between overall emotional maturity and overall self satisfaction (at 0.01 level, r=.350). On the other hand, significant negative correlation was established between cognitive style systematic and overall emotional maturity (at 0.01 level, r=.350).

**CONCLUSIONS**

On the basis of the findings of the present study, the following conclusions have been drawn:

**CONCLUSIONS REGARDING 3X2 ANALYSIS OF VARIANCE RELATING TO HANDBALL GROUP AMONG PERFORMANCE GROUPS**

**COGNITIVE STYLE**

On the variable **Cognitive Style (Intuitive)** significant differences were found among the three performance groups of Handball discipline. With regard to the variable **Cognitive Style (Systematic)** significant differences were also found among the three performance groups.

Hypothesis No. 1(a) that there would be significant differences among Handball players performing at three varying levels on the variable Cognitive Style (Intuitive & Systematic) has been retained.
EMOTIONAL MATURITY

Pertaining to the variables Emotional Unstability, Emotional Regression, Social Maladjustment, Personality Disintegration, Lack of Independence, Overall Emotional Maturity, significant differences had been found among the selected three performance groups.

Therefore, Hypothesis No. 1(b) regarding variable Emotional Maturity (Including all its sub-scales) has been retained.

SELF SATISFACTION

On the variables Individual Performance, Team Performance, Ability Utilization, Strategy, Personal Treatment, Training and Instructions, Team Task Contribution, Team Social Contribution, Ethics, Team Integration, Budget, Medical Personnel, Academic support Service, External Agents and Overall Self-Satisfaction significant differences were found among the three performance level groups. However, no significant differences were found regarding Personal Dedication sub-scale.

Hypothesis No. 1(c) regarding self-satisfaction (including its all sub-scales) has therefore, been partially accepted qua other the sub-scales and overall self-satisfaction except sub-scale of Personal Dedication regarding which this Hypothesis has been rejected.

AMONG GENDER GROUPS

COGNITIVE STYLE

The differences between two gender group on Cognitive Style (Intuitive) groups have been found to be significant whereas on the variable Cognitive Style (Systematic) these differences have not been found to be significant.

Hypothesis No. 2(a) has been, therefore, partly accepted and partly rejected.

EMOTIONAL MATURITY

On the variables Emotional Unstability, Lack of Independence, and Overall Maturity significant gender differences have been found whereas on the variables Emotional Regression and Personality Disintegration, no significant gender differences was found.
Hypothesis No. 2(b) therefore, has been accepted partly and rejected partly.

SELF SATISFACTION

On the variables Individual Performance, Ability Utilization, Team Task Contribution, Team Social Contribution, Ethics, Team Integration, Budget, Academic Support Services and Overall Self-Satisfaction significant gender differences have been found. On the other hand no significant gender difference were noticed on the variables Team Performance, Strategy, Personal Treatment, Training and Instructions, Personal Dedication, Medical Personnel and External Agents.

Hypothesis No. 2(c) has been, therefore, partially rejected and partially accepted.

INTERACTION EFFECT

CONGITIVE STYLE (INTUITIVE)

The interaction between performance and gender on the variables Cognitive Style (Intuitive) and Cognitive Style (Systematic) was not been found to be significant.

Hypothesis No. 3(a) has, therefore, been rejected.

EMOTIONAL MATURE

The performance x gender interaction was found to be significant. On the variables Social Maladjustment, Personality Disintegration, Lack of Independence and Overall Emotional Maturity. With regard to the remaining two variables i.e. Emotional Unstability and Emotional Regression, the interaction was not found to be significant.

Hypothesis No. 3(b) has been partially retained and partially rejected.

SELF SATISFACTION

Interaction between performance and gender groups only on the variable Medical Personnel was found to be significant and with regard to other subscales and Overall Self Satisfaction the Interaction was not found to be significant.
Hypothesis No. 3(c) has been, therefore, partially retained and partially rejected.

CONCLUSIONS REGARDING 3X2 ANALYSIS OF VARIANCE RELATING TO HOCKEY GROUP AMONG PERFORMANCE GROUPS

COGNITIVE STYLE

On the variables Cognitive Style (Intuitive) and Cognitive Style (Systematic) significant differences were noticed among the three performance groups of Hockey discipline i.e. State, Interstate, and International.

Hypothesis No. 4(a) regarding variable Cognitive Style (Intuitive and Systematic) has, therefore, been accepted.

EMOTIONAL MATURITY

With regard to the variables Emotional Unstability, Emotional Regression, Social Maladjustment, Personality Disintegration, Lack of Independence and Overall Emotional Maturity significant differences were found among the selected three performance groups of Hockey discipline.

Therefore, hypothesis No. 4(b) concerning Emotional Maturity (including all its sub-scales) has been accepted.

SELF SATISFACTION

Concerning the variables Individual Performance, Team Performance, Ability Utilization, Strategy, Personal Treatment, Training and Instruction, Team Task Contribution, Team Social Contribution, Team Integration, Ethics, Personal Dedication, Budget, Medical Personnel, Academic Support Services, External Agents and Overall Self Satisfaction, significant differences were found among the three performance level groups of Hockey discipline.

Hypothesis No. 4(c) regarding variable Self-Satisfaction (including its all sub-scales) has, hence, been retained.
AMONG GENDER GROUPS

COGNITIVE STYLE

The results relating to gender differences on the variable Cognitive Style (Intuitive) have revealed significant differences between the two gender groups and on the variable Cognitive Style (Systematic) these differences were not found to be significant.

Hypothesis No. 5(a) has been, therefore, partly accepted and partly rejected.

EMOTIONAL MATURITY

The results pertaining to the differences between the two gender groups of Hockey game on the variables Emotional Unstability, Emotional Regression, Social Maladjustment, Lack of Independence as well as Overall Emotional Maturity have shown significant differences among these two groups.

Hypothesis No. 5(b) therefore, has been retained.

SELF SATISFACTION

The gender differences among Hockey players on the variables Team Performance, Team Task Contribution and Team Social Contribution have been found to be significant, whereas on other sub-scales of self-satisfaction as well as Overall Self Satisfaction these gender differences have not been found to be significant.

Hypothesis No. 5(c) has, therefore, been retained partially and rejected partially.

INTERACTION EFFECTS

COGNITIVE STYLE

The performance x gender interaction with regard to Hockey game was not found to be significant on the variables Cognitive Style (Intuitive) and Cognitive Style (Systematic).

Hypothesis No. 6(a) has been, therefore, rejected.
EMOTIONAL MATURITY

The interaction between the three performance groups and the two gender groups on the variables *Personality Disintegration, Lack of Independence and Overall Emotional Maturity* have been found to be significant with regard to Hockey game whereas regarding the remaining *sub-scales of Emotional Maturity*, no significant interaction effects have been found.

Therefore, the hypothesis No. 6(c) ha been retained partially and rejected partially.

SELF-SATISFACTION

The performance x gender interaction on the variables *Individual Performance, Ability Utilization, Strategy, Team Social Contribution, Ethics, Personal Dedication, Budget, Academic Support Services and Overall Emotional Maturity* were found to be significant whereas with regard to other sub-scales, no significant interaction were noticed.

Hypothesis No. 6(c) has been partially accepted and partially rejected.

CONCLUSIONS REGARDING 3X2 ANALYSIS OF VARIANCE
RELATING TO BASKETBALL GROUP

AMONG PERFORMANCE GROUPS

COGNITIVE STYLE (INTUITIVE)

With regard to the variable *Cognitive Style (Intuitive)* no significant differences have been found among the three performance groups of Basketball game. However, on the variable *Cognitive Style (Systematic)* significant differences were found among these three performance groups.

Hypothesis No. 7(a) has been partly accepted qua Cognitive Style (Systematic) and has been rejected qua Cognitive Style (Intuitive).

EMOTIONAL MATURITY

Regarding the variables *Emotional Unstability Emotional Regression, Social Maladjustment, Personality Disintegration, Lack of*
Independence and Overall Emotional Maturity, significant differences have been found among the selected three performance groups of Handball game.

Hypothesis No. 7(b) has been, therefore, retained.

SELF SATISFACTION

Pertaining to the variables Individual Performance, Ability Utilization, Strategy, Personal Treatment, Medical Personnel, External Agents and Overall Self-Satisfaction, significant differences were found among the three performance level groups. However, on the remaining sub-scales, i.e. Team Performance, Training and Instructions, Team Task Contribution, Team Social Contribution, Team Integration, Personal Dedication, Budget and Academic Support Services no significant differences were noticed.

Therefore, Hypothesis No. 7(c) has been partially accepted and partially rejected.

AMONG GENDER GROUPS

COGNITIVE STYLE

The differences between two gender groups of Basketball game were not found to be significant on the variables Cognitive Style (Intuitive) and Cognitive Style (Systematic).

Hypothesis No. 8(a) has, therefore, be rejected.

EMOTIONAL MATURITY

The differences between the two gender groups of Basketball on the variable Lack of Independence, have been found to be significant differences. However, differences among two gender groups on other sub-scales as well as on Overall Emotional Maturity were not found to be significant.

Hypothesis No. 8(b) has been partly retained and partly rejected.
SELF SATISFACTION

The gender differences on all the sub-scales of Self Satisfaction except Strategy, Training and Instructions and Academic Support-Services have not been found to be significant, and only on these three sub-scales, these gender differences have been found to be significant.

Hypothesis No. 8(c) has been partially accepted and partially rejected.

INTERACTION EFFECTS

COGNITIVE STYLE

The interaction between the three performance and the two gender groups on the variables Cognitive Style (Intuitive) and Cognitive Style (Systematic) have not been found to be significant.

Hypothesis No. 9(a) has therefore been rejected.

EMOTIONAL MATURITY

On all the sub scales as well as on Overall Emotional Maturity the interaction between the performance and gender groups were not found to be significant. Hypothesis No. 9(b) therefore stands rejected.

SELF SATISFACTION

Interaction between three performance groups and the two gender groups have yielded significant results only on the variable Training and Instruction.

Hypothesis No. 9(c) has been retained with regard to Training and Instruction and has been rejected with regard to other sub-scales and Overall Self-Satisfaction.

CONCLUSIONS REGARDING ONEWAY ANOVA AMONG THREE SPORTS GROUPS WITHIN STATE PERFORMANCE LEVEL.

COGNITIVE STYLE

With regard to the variables Cognitive Style (Intuitive), and Cognitive Style (Systematic) no significant differences have been found between the three sports groups of State Performance level.

Hypothesis No. 10(a) has, therefore, been rejected.
EMOTIONAL MATURITY

Regarding the variables Emotional Regression, Social Maladjustment, Personality Disintegration and Overall Emotional Maturity significant differences were found among the participants from three different sports groups within State Performance level. Pertaining to the subjects from three Sports groups within State Performance level on the variables Emotional Unstability and Lack of Independence no significant difference were found.

Hypothesis No. 10(b) has been partially accepted and partially rejected.

SELF SATISFACTION

With regard to the variables Team Performance, Ability Utilization, Strategy, Training and Instructions, Team Social Contributions, Ethics, Personal Dedication, Budget, Medical Personnel, Academic Support Services and Overall Self Satisfaction significant differences were found among these three sports groups. Concerning the variables Individual Performance, Personal Treatment, Team Task Contribution, Team Integration, and External Agents reveal no significant differences were found among the three Sports disciplines within State group.

Hypothesis No. 10(c) has been partially accepted and partially retained.

CONCLUSIONS REGARDING ONEWAY ANOVA RESULTS AMONG THREE SPORTS GROUPS WITHIN INTERSTATE PERFORMANCE LEVEL

COGNITIVE STYLE

With regard to the variables Cognitive Style (Intuitive), and Cognitive Style (Systematic) no significant differences have been between the three sports groups within Interstate performance level.

Hypothesis No. 11(a) has, therefore, been rejected.

EMOTIONAL MATURITY

Regarding all the sub-scales of Emotional Maturity as well as on Overall Emotional Maturity no significant differences were found among the participants from three different sports groups.
Hence, hypothesis No. 11(b) has been rejected.

**SELF SATISFACTION**

Concerning the variables *Individual Performance, Personal Dedication and Academic Support Services* significant differences were found among the three sports groups and with regard to *other sub-scales* as well as *Overall Self-Satisfaction* no significant differences were noticed.

Hypothesis No. 11(c) has been partially retained and partially rejected.

**CONCLUSIONS REGARDING ONEWAY ANOVA RESULTS CONCERNING THREE SPORTS GROUPS WITHIN INTERNATIONAL PERFORMANCE LEVEL**

**COGNITIVE STYLE**

Regarding the variable *Cognitive Style (Systematic)* significant differences were found among the three sports groups within International performance level whereas on the variable *Cognitive Style (Intuitive)* no significant differences were noticed.

Hypothesis No. 12(a) has been partly accepted and partly rejected.

**EMOTIONAL MATURITY**

Pertaining to the subjects from three sports groups of International Performance level on the variables *Emotional Regression, Lack of Independence, Social Maladjustment* and *Overall Emotional Maturity* significant differences were found. No significant differences were found on the other variables.

Hypothesis No. 12(b) has been partly accepted and partly rejected.

**SELF SATISFACTION**

On the variables *Strategy and Personal Treatment* the difference among the three sports groups were not found to be significant. However, on all *other sub scales* and *Overall Self-Satisfaction* significant differences were found within International level group.

Hypothesis No. 12(c) has been partially retained and partly rejected.
CONCLUSIONS REGARDING ONEWAY ANOVA RESULTS
CONCERNING MALE PLAYERS
WITHIN EACH SELECTED SPORTS GROUP

REGARDING HANDBALL MALE PLAYERS
COGNITIVE STYLE

With regard to the variables Cognitive Style (Intuitive) and Cognitive Style (Systematic), significant differences were found between the three performance groups of male Handball subjects.

Hypothesis No. 13(a), therefore stands retained.

EMOTIONAL MATUREITY

The results of oneway analysis of variance regarding the variable Overall Emotional Maturity significant differences were found among Handball male players.

Hypothesis No. 13(b) has therefore been accepted.

SELF SATISFACTION

Regarding the Overall Self-Satisfaction significant differences were found among the three performance level of men handball players.

Hypothesis No. 13(c), therefore, stands retained.

REGARDING HOCKEY MALE PLAYERS
COGNITIVE STYLE

On the variables Cognitive Style (Intuitive) and Cognitive Style (Systematic), significant differences were noticed between the three performance groups of male Hockey subjects.

Hypothesis No. 14(a), therefore, has been accepted.

EMOTIONAL MATURITY

Regarding the variable Overall Emotional Maturity significant differences were noticed among Hockey male players.

Hypothesis No. 14(b) stands retained.
SELF SATISFACTION

With regard to Overall Self-Satisfaction significant differences were noticed among the three performance level men Hockey players.

Hypothesis No. 14(c) has, therefore, been retained.

REGARDING BASKETBALL MALE PLAYERS

COGNITIVE STYLE

On the variable Cognitive Style (Intuitive) significant differences were found between the three performance groups of male Handball subjects whereas no such differences were found on the variable Cognitive Style (Systematic).

Therefore, hypothesis No. 15(a) stands partly accepted and partly rejected.

EMOTIONAL MATURITY

Concerning the variable Overall Emotional Maturity significant differences were found among male Basketball players from three performance levels.

Hypothesis No. 15(b) has been, therefore, accepted.

SELF SATISFACTION

Regarding the Overall Self-Satisfaction significant differences were found among the three performance level men Basketball players.

Hypothesis No. 15(c) therefore stands retained.

CONCLUSIONS REGARDING ONEWAY ANOVA RESULTS

CONCERNING FEMALE PLAYERS

WITHIN EACH SELECTED SPORTS GROUP

REGARDING HANDBALL FEMALE PLAYERS

COGNITIVE STYLE

Relating to the variables Cognitive Style (Intuitive) and Cognitive Style (Systematic), significant differences were found between the three performance level groups of female Handball players.

Hypothesis No. 16(a) propounding such differences, has therefore been accepted.
EMOTIONAL MATURITY

With regard to the variable *Overall Emotional Maturity* there were significant differences among female Handball players from three different performance levels. Hypothesis No. 16(b), therefore has been retained.

SELF SATISFACTION

Concerning the variable *Overall Self-Satisfaction* significant differences were found among the three performance level female handball players.

Therefore, hypothesis No. 16(c) stands accepted.

REGARDING HOCKEY FEMALE PLAYERS

COGNITIVE STYLE

Relating to the variables *Cognitive Style (Intuitive)* and *Cognitive Style (Systematic)*, significant differences were found between the three performance groups of female Hockey subjects.

Hypothesis No. 17(a) stands retained.

EMOTIONAL MATURITY

Regarding the variable *Overall Emotional Maturity* there existed significant differences among female Hockey players from three performance levels. Hypothesis No. 17(b) regarding this variable stands retained.

SELF SATISFACTION

With regard to the *Overall Self-Satisfaction* significant differences were found to exist among the three performance level female hockey players.

Hypothesis No. 17 (c), has therefore, been accepted.

REGARDING BASKETBALL FEMALE PLAYERS

COGNITIVE STYLE

Regarding the variable *Cognitive Style (Systematic)* female Basketball players from three performance level groups have demonstrated significant differences among them. On the other hand, no significant differences among these players were found on the variable *Cognitive Style (Intuitive)*.

Hypothesis No. 18(a), therefore stands retained partly and rejected partly.
EMOTIONAL MATURITY

With regard to the variable *Overall Emotional Maturity* differences among female Basketball Players have been found to significant.

Hypothesis No. 18(b) has been retained.

SELF SATISFACTION

On the *Overall Self-Satisfaction* significant differences have been found among the female players of Basketball three performance level groups.

Hypothesis No. 18(c), therefore, stands retained.

CONCLUSIONS REGARDING ONEWAY ANOVA RESULTS CONCERNING OVERALL THREE SPORTS DISCIPLINES ON ALL THE SELECTED VARIABLES

COGNITIVE STYLE

Concerning the variable *Cognitive Style (Systematic)* three overall sports groups have demonstrated significant differences among them. So far as variable *Cognitive Style (Intuitive)* was concerned, no such differences have been found.

Therefore, hypothesis No. 19(a) stands accepted partly and has been rejected partly.

EMOTIONAL MATURITY

Regarding the variable *Emotional Unstability* and *Personality Disintegration*, significant differences were not found among the participants from three overall sports groups. On the other hand, significant differences have been found on all *other sub-scales* and on the *Overall Emotional Maturity*.

Therefore, the hypothesis No. 19(b) has been accepted partly and rejected partly.

SELF SATISFACTION

On the variables *Ability Utilization, Strategy, Personal Dedication, and Budget* differences among three overall sports groups have been found to be significant. On *all other sub-scales*, as well as on *Overall Self-Satisfaction* no such differences were noticed.

Hypothesis No. 19(c) therefore, stands partially retained and partially rejected.
CONCLUSIONS WITH REGARD TO
OVERALL GENDER DIFFERENCE
ON THE SELECTED VARIABLE

With regard to the overall gender differences on the variables *Cognitive Style (Intuitive)*, *Cognitive Style (Systematic)*, *Overall Emotional Maturity* and *Overall Self Satisfaction*, the results have not brought out any significant gender differences.

Therefore, hypothesis No. 20(a) regarding Cognitive Style (b) regarding Emotional Stability and (c) stands rejected.

CONCLUSIONS WITH REGARD TO THREE
OVERALL PERFORMANCE LEVEL GROUPS
ON THE SELECTED VARIABLES

COGNITIVE STYLE

Regarding the overall performance groups the differences on the variable *Cognitive Style (Intuitive)* and *Cognitive Style (Systematic)* were found to be significant.

Hypothesis No. 21(a) therefore has been retained.

EMOTIONAL MATURITY

Regarding the variable *Overall Emotional Maturity* significant difference have been found among overall three sports groups.

Hypothesis No. 21(b) has, therefore, been accepted.

SELF SATISFACTION

Relating to the variable *Overall Self Satisfaction* significant differences have been found among the three Overall performance level groups.

Hypothesis No. 21(c) has been, therefore, accepted.

CONCLUSIONS WITH REGARD TO INTER-RELATIONSHIP
BETWEEN THE SELECTED VARIABLES

Regarding co-efficient of correlation between the selected variables concerning the State level performance group significant correlation was found
between Cognitive Style (Intuitive) and Cognitive Style (Systematic), Cognitive Style (Systematic) and Overall Self Satisfaction, between Cognitive Style (Intuitive) and Overall Self Satisfaction and finally between Overall Emotional Maturity and Overall Self Satisfaction. Other correlations were not found to be significant.

Hypothesis No. 22(a) therefore, has been accepted and rejected partially.

With regard to the Interstate level performance group, correlation between two cognitive styles, between Cognitive Style (Systematic) and Overall Self Satisfaction, between Overall Emotional Maturity and Overall Self-Satisfaction and between Cognitive Style (Systematic) and Overall Emotional Maturity have been found to be significant and other correlations were not found significant.

Hypothesis No. 22(b) has been, therefore, partially accepted and partially rejected.

The results concerning the International level performance group on the related variables have revealed significant correlation i.e. between Cognitive Style (Systematic) and Overall Self Satisfaction. No other correlation was found to be significant.

Hypothesis No. 22(c) stands retained partly and rejected partly.

Regarding overall male participants significant correlation was found between systematic and intuitive types of Cognitive Styles, between Cognitive Style (systematic) and Overall Self Satisfaction, between Cognitive Style (intuitive) and Overall Self Satisfaction and between Overall Emotional Maturity and Overall Self Satisfaction, between Overall Emotional Maturity and the two types of Cognitive Styles.

Hypothesis No. 22(d) with regard to this correlation stands retained.

With regard to the overall female participants, significant correlation was found between two Cognitive Styles, between Systemic Cognitive Style and Overall Self-Satisfaction, between Overall Emotional Maturity and Overall Self Satisfaction and between Cognitive Style (Systematic) and Overall Emotional Maturity. Other correlations have not been found to be significant.

Hypothesis No. 22(e) has, therefore, been accepted partly and rejected partly.
IMPLICATIONS OF THE STUDY

The present study has far reaching implications for the sportspersons and for all those involved and associated with the process of selection, training and coaching of these sportspersons. It is just like gospel truth that the present day athletes cannot even think of attaining excellence, specifically at international level, on the basis of their physical prowess alone. Without psychological support, they cannot even dream of attaining any significant success in competitive arena. Untiring efforts are being made to explore and utilize various psychological constructs in this pursuit of excellence but few of them still remain to be fully explored. Cognitive style, emotional maturity and self satisfaction are few of such psychological variables which need further exploration. Hence, the present study was undertaken.

1. Cognitive styles refer to the preferred ways an individual processes information; they describe a person’s typical mode of thinking, remembering or problem solving. Cognitive styles simply denote a tendency to behave in certain manner. It is usually described as a personality dimension which influences attitudes, values and social interaction. Therefore, undoubtedly, it can play a very significant role in the process of selection, training and coaching of the athletes. The findings of the present style have revealed that among all the players of Handball, Hockey, Basketball, those from International level were found to be having significantly higher level of systematic type of cognitive style. Persons having this type of cognitive style use a well defined step by step approach when solving a problem and lookout for overall method or pragmatic approach and then make an overall plan for solving the problem. The manager’s, coaches, and other persons planning for achieving excellence in sports should take note of these findings and utilize the same while hunting for talent to represent India at International levels.

2. Emotional maturity is the ability to deal constructively with reality; the capacity to adapt to change; a relative freedom from symptoms that are produced by tensions and anxieties. A sound frame of mind and a good adaption to life is determined to a large extent on the knowledge of one’s own self. Infact, it is the capacity to sublimate, to redirect one’s instinctive hostile energy into creative and constructive outlets. Such being the nature of emotional maturity, it is but inevitable that it will have significant influence in any athletic endeavour. It has been found in the present study that those players who had participated at International level in any game, be it
Handball, Hockey, Basketball, were significantly more mature and stable emotionally as compared to the participants at State or Interstate levels. These findings can have far reaching implication not only while selecting the players to represent our country but also while preparing them for competition at International level. By facilitating the process of emotional development and maturity through appropriately structured training and counselling schedules, we can hope to attain outstanding results in International sporting arena.

3. Another burning topic among sportspersons as well as for those responsible for providing conducive sporting environment is related directly with the quality and quantity of the facilities and support services that are available to the sportspersons. It has been found in the present study that the international players were significantly more satisfied with the facilities and support services made available to them as compared to those at State and Interstate levels. Infact, the State level players have been found to have expressed lowest degree of self satisfaction with regard to the facilities and amenities being made available to them. When we talk of hunting talent at grass root level, we will have to bear in mind that the players will be able to give out their best only when provided full and proper facilities, as well as help of support services. For example, it has been found that with regard to the budget, participants from this level of performance have expressed lowest level of satisfaction. It is therefore, high time that all those associated and concerned with welfare of sportspersons and promotion of sports to give serious consideration to the facilities being made at the grass root levels if we are to achieve acclaim in International competition circle.

4. Among all those involved in the process of selection, coaching and training, coaches are assumed to be more actively involved with the process of training and competition. They spend many hours interacting with athletes, and are assumed to play critical roles in shaping the quality of the athletes' sport experience (Gagne’ et al., 2003). It is, thus, important to examine the psychological training environment/climate they create over the course of the season (Ames, 1992), and how that environment relates to the well-being of athletes. To maximize the satisfaction of athletes' basic needs which in turn is expected to foster self satisfaction among athletes, the present research tentatively suggests that the three very pertinent psychobiosocial variables selected in the present study should be kept strong and by no means neglected or downplayed.
5. One way coaches might satisfy athletes' basic needs could be by applying Epstein's (1988) TARGET (acronym representing task, authority, reward, grouping, evaluation and timing) dimensions to create a more task-involving motivational climate for the satisfaction of these basic needs. During training, coaches could let the participants set their own personal goals as per their own cognitive style, let them choose what they would like to learn and monitor their own performance and progress. Although offering choice is relevant, coaches should support athletes by regarding them as individuals deserving self-determination, and not mere pawns that should be controlled to obtain a certain outcome (deCharms, 1968).

6. Based on recommendations by Horn and Harris (1996), one way coaches could modify the evaluation structure, to seemingly increase athletes' perceptions of competence, could be to encourage athletes to develop internalized performance standards. This can be done by involving athletes in self-monitoring of their exerted efforts and evaluating their own performance. Positive competence feedback also plays an important role in enhancing athletes' perceived competence (Smith & Smoll, 1997). However, coaches should make sure they do so in an informational, non-controlling manner (Ryan, 1982).

SUGGESTIONS FOR FUTURE RESEARCH

1. A more comprehensive investigation of the problem, based on the present study, would be desirable. Such follow-up study on the subjects in the present study would be prove informative as it will be helpful in finding out the long term patterns and effects of the age environment and experience on the variable Cognitive style, emotional maturity & Self Satisfaction.

2. Scope of such study may be widened by studying these psychobiosocial variables along with other important psychobiosocial variables as well as in tandem with physiological responses.

3. Study may be based on larger number of subjects keeping in view the factors like IQ levels, health levels, race and socio-economic status etc. which was not taken into consideration in the present endeavour.

4. The study can be broad based by involving players of other country so as to reach more comparative generalizations and conclusions.
5. Cross-sectional and experimental studies may also be undertaken to further explore these phenomena at length in relation to sports performance.

6. Further, for conducting more extensive and elaborate research, more performance levels may be included in the study.

7. For finding out more precisely sports specific Inter-sports differences among athletes, more team games and individual games can be included in the study.