CHAPTER 5
Discussion

The findings of the present study were obtained after statistical analysis of data, which are given in the previous chapter. In this chapter these findings have been discussed and interpreted. The objective of the present study has been the understanding the relationship of gender and type of game with achievement behaviour, sports aggression and sports competitive anxiety. The achievement behaviour is measured with its sub scales competitiveness orientation, win orientation and goal orientation.

The first part of the discussion deals with the findings that have reference to the influence of gender and type of game on competitiveness orientation, win orientation, goal orientation, sports competitive anxiety and sports aggression. The second part of the discussion deals with the prediction of the contribution of sports competitive anxiety and sports aggression in determining competitiveness orientation, win orientation and goal orientation. The third part deals with the factor analysis of the five psychological dimensions. The strategy adopted for discussing the results has been first compared with the findings of the other researches in
that area and then an interpretation of convergence or contradictions have been attempted.

The analysis of results shows that there is significant effect of gender variable on competitiveness orientation, win orientation, goal orientation and sports competitive anxiety measures of achievement behavior. Mean comparison revealed greater score for male players (M=25.83) in comparison to female players (M= 22.11), F (1, 158) = 15.84, p<.01 on total competitiveness orientation. It shows that male players are more competitive than female players.

Previous researches show that there are gender differences in competitiveness. Most show that men are more competitive than women are in general. Most of these gender differences have been tested using self-report measures of trait competitiveness. Several studies have shown that men score higher on the competitiveness subscale of the SOQ (Gill, Kelley, Martin, & Caruso, 1991; Ruan, 1993). Other self-report measures show mixed results. A study using the SPI found that while males were more competitive that females in a novice athlete group, the reverse was true of college athletes (Jones, et al., 2001). Another study found that among 155 professional tennis players,
females were significantly more competitive (Houston, Carter, Smither, 1997).

A study of Taiwanese swimmers after participation in a tournament found that females were more competitive than males on the SOQ (Lee, 1997). As a whole, trait competitiveness measures have shown that males tend to be more competitive than females in general. Results that show females as more competitive had small samples of high-level athletes which are not typical of females in general while the male samples were larger and more representative. Although the results have not been unanimous, there seems to be reasonable support for this gender difference.

Gender differences in competitiveness are not due to biological sex, but rather to differences in social roles (Olds & Shaver, 1980). This research has shown that the more masculine a person is, as measured by the Personal Attributes Questionnaire (Spence & Helmreich, 1979), the more competitive he or she is regardless of his or her biological sex. Other research has shown that the gender difference may exist because females have a stronger desire to maintain equitable outcomes based on socialized differences in submissiveness and dominance between the genders (Wyer & Malinowski, 1972). So it
seems that this gender difference may be learned rather than biologically based.

Gill (1986) Males scored slightly higher than females on competitiveness, but most of the multivariate sex difference was due to males scoring higher on win orientation and females scoring higher on goal orientation. In contrast, the multivariate activity difference was due primarily to competitiveness; students in competitive activities scored considerably higher on competitiveness than students in noncompetitive activities. The findings suggest that sport-achievement orientation has a unique factor structure and provide evidence supporting the validity of the sport-specific, multidimensional Competitiveness Inventory.

Further mean comparison on win orientation measure shows greater score for females (M= 10.23) than male players (M= 8.62), F (1, 158) = 25.34, p<.01. It shows that male players are more win oriented than female players.

Hellandsigs (1998) females on an average participate more for friendship and fun while males participate to win. Gill (1986) Males scoring higher on win orientation and females scoring higher on goal orientation.
Mean comparison on goal orientation measure shows that males (M=11.6) are more goal oriented in comparison to female (M=9.23), F (1, 158) = 13.01, p<.01. It shows that male players are more goal oriented than female players. Male players are more focusing on achieving personal goals in competitive sport than female players.

In a study by Duda (1989) using varsity high school athletes involved in individual and team sports, a significant difference was found between the goal-orientation of female and male students. No sport-specific comparisons of the goal orientation of the participants were made. Results indicated a significantly higher score for females on task-involvement and a significantly higher ego-involvement score for males.

In examining the goal orientation of participants and their parents involved in a summer basketball camp, Duda and Hom (1993) found no significant gender-related differences in goal orientation. The results of a one-way MANOVA revealed no significant gender difference in the goal orientation of the young athletes or their parents.

Duda, Chi, Newton, Walling & Catley (1995) evaluated the goal orientation of members of a college tennis class and revealed significant differences in
TEOSQ scores related to task-involvement with females scoring significantly higher in task-involvement than males. No significant difference was found related to ego-involvement.

Li, Harmer & Acock (1996) studied the goal orientations of 467 undergraduate students enrolled in a variety of physical education classes. Examination of means for task and ego-involvement revealed significant difference only related to ego-involvement with males scoring significantly higher than females. No significant differences were found related to task-involvement. Gill (1986) males scoring higher on win orientation and females scoring higher on goal orientation.

Research indicates that results are less than consistent in regards to the goal orientation of males and females. While findings are equivocal, the majority of results indicate that, in varying degrees, more males score higher on ego-involvement than do most females and more females score higher on task-involvement than do most males.

The result on sports competitive anxiety shows that females (M= 22.08) have more competitive anxiety than males (M=18.11), F (1, 158) = 53.84, p<. 01.A number of studies have indicated that female athletes are significantly more anxious than male athletes. Kane
(1972) has reported that in general, anxiety is higher for women than for men, although there are many exceptions. Ikponmwosa (1981) examined the relationship between sex-role standards and anxiety in competitive sports situations. The results obtained in this study were consistent with those of Cosentino and Heibrum (1964) and Gall (1969).

Segal and Weinberg (1984) conducted a study on male and female graduates to assess the relationship between sex-role orientation and competition trait anxiety (CTA). The results yielded a main effect for sex with females exhibiting significantly higher levels of CTA than males.

Singh (1985) found significant sex differences in the competitive anxiety of the Indian athletes, the females having more anxiety than the males. In another study, Singh (1986) found significant differences in the anxiety scores of the athletes and the hockey players on the basis of sex, the males having less competitive anxiety than females.

Anderson and Williams (1987) conducted a study on gender role and sport competitive anxiety. The results indicated that females had significantly more competitive anxiety than all other groups.
The analysis of results shows that there is significant effect of types of games on competitiveness orientation, win orientation and goal orientation. Mean comparison revealed that individual game players (M=25.00) have higher competitiveness orientation in comparison to team games players (M=23.28) \( F(1, 158) = 5.23, p<.05 \).

Further mean comparison reveals that individual game players (M=10.20) are more win oriented in comparison to team game players (M=8.57) \( F(1, 158) = 26.69, p<.01 \).

Skordilis, Ekgavriilidis, Charitou & Aonitou (2003) Win orientation was the factor, through discriminant function analysis, that significantly separated the athletes into the three groups. The highest win score was obtained by the professional, followed by the amateur and wheelchair groups.

A team spirit requires a certain amount of trust among members (Future Orientation). Without trust and openness, teams cannot perform well. With no appreciable teamwork, an organization won't achieve potential synergies, nor will it encourage creativity and innovation (Past Orientation).

The results of goal orientation shows that individual game players (M=13.71) are more goal oriented than team game players (M=8.95) \( F(1, 158) = 60.47, p<.01 \).

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According to Jagacinski and Nicholls (1984), the two independent factors of goal orientation are present in all athletes and the degree to which each factor exhibits itself is the athlete’s goal orientation.

Carpenter and Yates (1997) found that amateur soccer players scored significantly higher for level of task-involvement than did the semiprofessionals soccer players. However, scores for ego-involvement, while higher for semiprofessionals, were not significantly different. A study by White and Zellner (1996) used the TEOSQ to describe male and female athletes participating in a variety of sports at three competitive levels of play, intercollegiate, organized high school, and college-age recreational sports. The study found that high school athletes were significantly more ego-involved than the intercollegiate athletes and that college-age recreational athletes were the highest in task-involvement. It appears that the level of competition plays and its associated motivational climate influences the goal orientation of the athlete.

Research indicates that the level of competition, gender, and possibly time of the competitive season may impact an athlete’s goal orientation and perception of motivational climate. The possibility exists that different sports may possess different motivational climates, thus
impacting the goal orientation of the participating athletes in a sport-specific manner. The link between motivational climate and resultant behavior in sport is clear, (Roberts & Treasure, 1995) yet statistical evaluation of the relationship between perception of motivational climate and goal orientation is not yet proven using the Task and Ego Orientation in Sport Questionnaire and the Perceived Motivational Climate in Sport Questionnaire. It may be possible that the athletes strive to meet the demands and expectations of the motivational climate he or she is operating in yet retains his or her previously established values and goals resulting in minimal change in goal orientation.

When an individual is task involved, their primary goals are learning, individual improvement and the mastery of skills. Success in these areas is judged against previous levels of personal performance. In contrast, ego involved individuals evaluate their abilities in comparison to others. Thus, success for this group depends on performing better than everyone else. The literature reveals that the presence of two ego involved goal setting styles is based primarily on differential levels of perceived ability (Burton, 1992). Specifically, success oriented individuals evaluate personal ability as high while failure oriented performers feel that ability is low.
Result Shows that Games X Gender interaction is significant $F(1, 156)= 134.55$, $p<0.01$ for competitiveness orientation. It means that gender and game types are collectively creating significant effect on competitiveness orientation. Result shows that Games X Gender interaction is significant $F(1, 156)= 9.69$, $p<0.01$ for win orientation. It means that gender and game types are collectively creating significant effect on win orientation. Result shows that Games X Gender interaction is significant $F(1, 156)= 184.22$, $p<0.01$ for goal orientation. It means that gender and game types are collectively creating significant effect on goal orientation.

Results show that sport competitive anxiety predicts the competitiveness orientation around 4.4 percent ($R^2= 0.044$), it means sports competitive anxiety alone is explaining 4.4% of variance. The competitiveness anxiety is a significant predictor of competitiveness orientation which accounted for 4.4% of variance. The sports competitive anxiety and sports aggression are combinedly predicting the competitiveness orientation around 5.8 percent ($R^2= 0.058$). When sports aggression was included in the equation 1.4% increment in the variance was observed.

Bredemeier and Shields, (1986) proposed that contact-sport athletes consider intentional aggression as
necessary to intense competitive play. However, it is also possible that contact-sport athletes might not recognize examples of instrumental aggression as being intense enough for contact-sport competition. “It may be that athletes in sports that are based on full body contact view instrumental aggression as natural game behavior and hostile aggression as a more appropriate means to the desired outcome of winning.” (Bredemeier & Shields, 1984) However, it is these athletes that take aggression too far in certain sports and the result does not benefit any of the athletes or the game itself. “It is instrumental aggression that is natural game behavior and is quite healthy for certain physical sports.” (Mintah et al., 1999).

Sports competitive anxiety and sports aggression combinedly have failed to predict win orientation ($R^2 = 0.006$), further even sports aggression alone has also failed to predict win orientation ($R^2 = 0.006$). It means that competitive anxiety has alone and with sports aggression failed to predict win orientation.

Tenebaum and colleagues explain that aggression occurs in sports where an athlete’s generalized expectancies for reinforcement for aggressive behavior are high, (e.g., receiving praise from parents, coaches or peers) and where the reward value outweighs the punishment value (e.g., gaining a tactical and
psychological advantage with a personal foul). “Expectancies of reward or punishment for aggressive acts may be learned by previous reinforcement or punishment or by modeling / imitation of significant others such as coaches, parents, or sport heroes.” (Tenebaum et al., 1996) Winning has become an essential part of sport and increased professionalism creates an atmosphere of winning at all costs.

Sports competitive anxiety alone is predicting 5.5 percent of variance ($R^2 = 0.055$). The competitiveness anxiety is a significant predictor of goal orientation which accounted for 5.5 of variance. Sports competitive anxiety and sports aggression combinedly predict win orientation around 5.7 percent ($R^2 = 0.057$). It means that sports competitive anxiety and sports aggression are together explaining 5.7 percent of variance. When sports aggression was included in the equation 1.4% increment in the variance was observed.

Aggression plays a major role. According to research it is apparent that sports is perhaps the only setting in which acts of interpersonal aggression are not tolerated, but enthusiastically applauded by large segments of society (e.g., Tenebaum, Stewart, Singer & Duda, 1996). Tenebaum et al., (1996) define aggression as the infliction of an aversive stimulus, physical, verbal,
or gestural upon one person by another. This definition encompasses two distinct types of aggression, hostile and instrumental. Tenebaum and colleagues describe hostile aggression as having a principal reward, or intent, to inflict pain upon another for the individual’s own sake. In instrumental aggression, the major reinforcement is the achievement of a subsequent goal.

Rascale, Coulomb and Pfister, (1998) hypothesized that there would be more aggression and higher ego-goal orientation as opposed to task-goal orientation, “In an ego-goal orientation, the individual is concerned with demonstrating skill relative to others’; the individual’s focal concern is with social comparison. In contrast, when a person has a task-goal orientation, that person is concerned with demonstrating mastery at the skill.” (Rascale, et al., 1998). It was discovered that Institutional sport context groups differed in their rating of Ego-goal orientation, but there were no significant differences in ratings of Task-goal orientation. However, it was indicated that league players were significantly higher on Ego-goal orientation. League teams were also significantly higher on instrumental aggression. With regard to means of hostile aggression, Furthermore, as relationships between goal orientations and aggression were investigated, it was identified that high Ego-goal
classified players committed more instrumental aggression than low Ego-goal classified players. Analysis also revealed that League teams displayed more instrumental aggression than Physical Education and Interscholastic teams, as the 2 latter contexts appear to be more protected from competitive pressure identified in League context. With regard to relationships between goal orientations and aggression, discriminate function analysis indicated that players scoring high on Ego-goal orientation displayed more instrumental aggression than those scoring low on Ego-goal orientation. "Therefore Ego-goal orientation could be a valuable predictor of aggression, especially instrumental aggression." (Rascale et al., 1998)

The notion of instrumental aggression being healthy for sport was also evident in a study done by Mintah, Huddleston, and Doody (1999). This was designed to explore the relationship between the extent of agreement or disagreement with the use of hostile and instrumental aggression and the types of justifications (hostile or instrumental) provided by athletes in contact and semi-contact sports.

Factor analysis of the data revealed that the five scales could be reduced into two factors. The first factor consisted of all the three-sub scale measure of
achievement behavior (competitiveness orientation, win orientation and goal orientation) explaining 40.44 percentage of variance. The second factor consisted of sports aggression and sports competitive anxiety components explaining 22.33 percentage of variance altogether. The two factors emerge to explain 62.77 percent of variance.