CHAPTER-3

METHODOLOGY
CHAPTER-3
METHODOLOGY

For any successful research it is quintessential, that the research is based on logic and reason. Thus when we talk about methodology we not only talk about the research methods but we also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or technique.

OBJECTIVES OF THE STUDY

The conducted study is primarily focused on studying the Achievement behavior in relation to Sports Aggression and Sports competitive anxiety of the players. The following objectives of the study are being stated as under.

1. To study the effect of sex difference on the competitiveness orientation, Win orientation and Goal orientation.

2. To study the effect of sex difference on the Aggression and Anxiety

3. To study the in the competitiveness orientation, Win orientation and Goal orientation of individual and team players.
4. To study the Aggression and Anxiety in the individual and team players.

5. To study the effects of Anxiety and Aggression over the Achievement behavior.

6. To study the factors underlying the various behavioural measures in the study.

**HYPOTHESIS**

H1. There is no significant difference between games regarding competitiveness orientation.

H2. There is no significant difference between genders regarding competitiveness orientation.

H3. There is no interaction between gender and games regarding competitiveness orientation.

H4. There is no significant difference between games regarding win orientation.

H5. There is no significant difference between genders regarding win orientation.

H6. There is no interaction between gender and games regarding win orientation.
H7. There is no significant difference between games regarding Goal orientation.

H8. There is no significant difference between genders regarding Goal orientations.

H9. There is no interaction between gender and games regarding Goal orientation.

H10. There is no significant difference between games regarding Sports Aggression.

H11. There is no significant difference between genders regarding Sports Aggression.

H12. There is no interaction between gender and games regarding Sports Aggression.

H13. There is no significant difference between games regarding Sports Competitive Anxiety.

H14. There is no significant difference between genders regarding Sports Competitive Anxiety.

H15. There is no interaction between gender and games regarding Sports Competitive Anxiety.
H16. There is significant influences of Sports Competition Anxiety & Sports Aggression in their contributions for competitiveness orientation.

H17. There is significant influences of Sports Competition Anxiety & Sports Aggression in their contributions for win orientation.

H18. There is significant influences of Sports Competition Anxiety & Sports Aggression in their contributions for goal orientation.

EXPERIMENTAL DESIGN

The present study aimed to incorporate two way (2x2) classification of variables Gender (male & female), type of game (individual & team) on achievement behaviour (competitiveness, win orientation and goal orientation), Sports Competition Anxiety & Sports Aggression. Sports Aggression and Sports Competitive Anxiety are further incorporated to determine predictors of achievement behaviour. Achievement behaviour is measured in terms of the competitiveness, win orientation and goal orientation.
Data Analysis Procedure

The obtained responses were scored manually and analyzed by using SPSS 11.0 statistical software for windows. ANOVA is used to analyze data of the present study. The mean standard deviation; analysis of variance and statistical techniques were used for analysis of data. Finally, in order to make the results of the present study more communicative, an attempt was made to present the findings graphically.

Tools used for the study

In the present study following tools were used for collecting the data.

1. Sports Orientation Questionnaire (SOQ)
2. Sports Competition Anxiety Test (SCAT)
3. Sports Aggression Inventory (SAI)

(1) Sport Orientation Questionnaire

Sport orientation questionnaire is used because sport orientation is a large field that had largely gone unstudied as mentioned by Gill & Deeter (1988). Competitiveness achievement orientation and achievement behaviour have been discussed but so far little research has been done on this large area. It had
been noted by various sport psychologists that there is a need for sport-specific orientation measures as this would prove to be a valuable resource to further research. As Gill & Deeter (1988) have noted, Martens developed the Sport Competition Anxiety Test (SCAT) in 1977 and it was from this sport-specific test that the value of sport-specific measures over general psychology measures was found and this provided encouragement to develop further more sport-specific measures for other areas of sport psychology. As Gill & Deeter (1988) have mentioned, general achievement motivation measures should not be used when assessing sport-specific situations as they do not have a proven validity. The primary purpose for the development of the SOQ was to develop a multi-dimensional questionnaire measuring sport-specific sporting orientations. Gill & Deeter (1988) designed this questionnaire so that it is applicable to all people who take part in sports not being gender biased and relating to both athletes and non-athletes.

The Sport Orientation Questionnaire contains three subscales: SOQ-Competitiveness (the desire to succeed in competitive sport situations), SOQ-Win Orientation (the desire to win in interpersonal competition) and SOQ-Goal Orientation (the desire to attain personal goals).
The SOQ is a self-report questionnaire in which participants rate their agreement with items on a 5-point scale from "strongly agree" to "strongly disagree." The SOQ contains 25 items divided into 3 subscales: competitiveness, goal orientation, and win orientation. Competitiveness items include: "I perform my best when I am competing against an opponent." Goal orientation items include: "I try my hardest to win when I have a specific goal." Win orientation items include: "I hate to lose." It has demonstrated acceptable levels of internal consistency, reliability, and validity (Gill, Dzewaltowski, & Deeter, 1988; Gill & Dzewaltowski, 1988) both in the US and in Taiwan (Kang, Gill, Acevado, & Deeter, 1990).

(2) Marten's Sports Competition Anxiety Test

For the measurement of competitive anxiety in sportsmen, an adapted form of sports competition anxiety test developed by Martens (1977) was used. The adapted version of the test was used in the present study. The SCAT contains 15 items, 10 of which measure symptoms associated with anxiety. The five items that are not scored are included in the inventory to reduce the likelihood of an internal response-set bias. The standard instructions of the SCAT ask respondents to indicate how they "usually feel when competing in sports and games. The 3-point scale (1 = hardly ever, 2 = sometimes, 3 =
often) respondents indicated the frequency with which they generally experienced the 10 anxiety related symptoms. Five spurious items were included in the inventory to direct some attention to other elements of competition.

The test is an A-trait scale designed for measuring a pre-disposition to respond with ranging levels of A-state in competition sports situations.

The SCAT has provided reliable and valid measures of trait anxiety, the reported reliability and validity of SCAT as an instrument for predicting A-state immediately prior to and during competition has been reported to be high (Scanlan, 1975; Martens and Gill, 1976; Simon and Martens, 1977). Martens and Simon (1976) also showed by using SCAT in quiet non-competitive situations that it was a superior predictor of pre-competition A-state.

SCAT is administered to determine competitive trait anxiety because it is a situation-specific inventory designed specifically to measure the trait of competitive anxiety. Because previous investigators (Martens et al. 1975) have concluded that SCAT was better predictor of pre-competitive state anxiety. The test-retest reliability coefficient is reported by Martens (1977) was found to be 0.77.
(3) Sports Aggression Inventory (SAI)

For the measurement of Sports Aggression, Sports Aggression Inventory (SAI) developed by Anand Kumar & P.S. Shukla (1988) was used.

English version of the SAI was used to measure the sports Aggression of the player. The Inventory consists of 25 statements and each statement carry 1 marks of which 13 are positive and 12 are negative. The maximum score which can be obtained is 25 and the minimum is Zero. The responses are in yes or no, the instructions emphasized to give participants theirselves as to judge their behavior during play situation. In this average score more than 7 focuses on extreme aggression. The inventory assumes high reliability as it is evident from split half reliability 0.84 and test – retest reliability 0.86.

Method and Procedure

The present research aimed at investigating the sport person’s achievement behaviour, sports aggression and competitive anxiety in relation to gender and type of games i.e. individual game and team game. The study was conducted on the sample given below:

Sample:

The present study was conducted on a sample of 160 players belonging to age range of 19 years to 26 years. The sample was drawn from the college affiliated to
VBS Purvanchal University, Jaunpur. The state level players screened out from the colleges using purposive random sampling techniques. The total sample of 160 was divided on the basis of gender with 59 female players and 101 male players. The classification of the player is made on the basis of type of games. The individual game players were selected from the events such as badminton, 100 meter sprint, long jump, shot-put while the team players consisted of cricket, football and hockey. The number of team player was 97 while 63 players belonged to individual game events.

**PROCEDURE FOR DATA COLLECTION**

The players were screened out from colleges, universities and stadiums. Initially principals of colleges, stadium managers, university coaches and team managers were contacted to find out the state level players of individual and team events. The list of such player was prepared. The players were contacted and a short orientation was given to them and purpose of study was explained. Interest for participation in the study was created by investigator. The test were administered on players individually as well as in small groups. The test were administered with a brief time interval and scoring of responses was done according to the manual prescribed.