CHAPTER II

REVIEW OF RELATED LITERATURE

The research for reference material is time consuming but fruitful phase of the graduate programme. A familiarity with the literature in any problem area helps the students to discover what is already known, what others have attempted to find out, what methods have been promising disappointing, and what problems remain to be solved.

The literature in any field forms the foundation upon which all future work will be built. The review of literature is generally used as a basis for inductive reasoning for locating and synthesizing all the relevant literature on a particular topic.

The present chapter covers the available literature pertaining to the studies made on various aspects of assessment of psychological profiles of sportsmen in general and basketball, football and volleyball in particular. The review of literature has been collected from a number of pertinent studies undertaken by the physical educationists, sports scientists and sports administrators. Considering the purpose of the present study the reviews have been mainly classified into the following aspects:

1. Related Studies on Personality Dimensions
2. Related Studies on Temperament Traits

2.1 STUDIES ON PERSONALITY DIMENSIONS

Sjogren et.al. (2006) examined the effects of a workplace physical exercise intervention on subjective physical well-being, psychosocial functioning and general well-being. The study was a cluster randomized-controlled trial with the department (n=4) as the unit of randomization. The subjects (n=90) were office workers [mean
age 45.7 (SD 8.5) years]. Psychosocial functioning and well-being variables were measured by descriptive visual rating scales. The cross-over design consisted of one 15-week intervention period of light resistance training and guidance and another 15-week period of no training and no guidance. The statistical analysis was based on linear mixed models. The active component of the intervention, light resistance training, resulted in a slight, but statistically significant, increase in subjective physical well-being (P=0.015). At the average training time of 5 min/working day (25 min/week) the average increase during the 15-week period was 4 units (95% confidence interval (CI) 1-7) and 5% (95% CI 1-9). The physical exercise intervention had no effect on somatic symptoms, anxiety, self-confidence, mood, mental stress at work, working atmosphere, life satisfaction or meaning of life. Daily light resistance training, conducted during the working day, had a positive direction on subjective physical well-being among office workers.

Guszkowska M (2004) made a meta-analysis of correlational and experimental studies which reveal positive effects of exercise, in healthy people and in clinical populations (also in patients with emotional disorders) regardless of gender and age. The benefits are significant especially in subjects with an elevated level of anxiety and depression because of more room for possible change. Mostly improvements are caused by rhythmic, aerobic exercises, using of large muscle groups (jogging, swimming, cycling, walking), of moderate and low intensity. They should be conducted for 15 to 30 minutes and performed a minimum of three times a week in programs of 10-weeks or longer. The results confirm the acute effect of exercise i.e. the reductions in anxiety and depression after single sessions of exercise. The changes in anxiety, depression and mood states after exercise are explained most frequently by the endorphin and monoamine hypotheses. Exercise may also increase body temperature, blood circulation in the brain and impact on hypothalamic-pituitary-adrenal axis and physiological reactivity to stress. The possible psychological
mechanisms include improvement of self-efficacy, distraction and cognitive dissonance.

Wang J, et.al. (2004) examined dispositional self-consciousness and trait anxiety as predictors of choking in sport. Sixty-six basketball players completed the Self-Consciousness Scale and the Sport Anxiety Scale prior to completing 20 free throws in low-pressure and high-pressure conditions. A manipulation check showed that participants experienced significantly higher levels of state anxiety in the high-pressure condition. A series of hierarchical multiple regression analyses supported the hypothesis that self-conscious athletes were more susceptible to choking under pressure. The best predictors of choking were private self-consciousness and somatic trait anxiety that together accounted for 35% of the explained variance. We discuss a number of possible explanations regarding the discrepancy between the present results and previous studies mainly relating to task characteristics, skill level of participants and manipulations of pressure.

Parfitt G, and Pates J. (1999) considered the influence of competitive anxiety and self-confidence state responses upon components of performance. Basketball players (n = 12) were trained to self-report their cognitive anxiety, somatic anxiety and self-confidence as a single response on several occasions immediately before going on court to play. Performance was video-recorded and aspects of performance that could be characterized as requiring either largely anaerobic power (height jumped) or working memory (successful passes and assists) were measured. Intra-individual performance scores were computed from these measures and the data from seven matches were subjected to regression analysis and then hierarchical regression analysis. The results indicated that, as anticipated, somatic anxiety positively predicted performance that involved anaerobic demands. Self-confidence, and not cognitive anxiety, was the main predictor of performance scores with working
memory demands. It would appear that different competitive state responses exert differential effects upon aspects of actual performance. Identifying these differences will be valuable in recommending intervention strategies designed to facilitate performance.

Eidson TA. (1997) examined 70 hearing-impaired basketball players participating in a national basketball tournament completed Neeman and Harter's Self-perception Profile examining their feelings of social acceptance, athletic competence, and global self-worth. In addition, players completed the Sport Competition Anxiety Test for trait anxiety and the Competitive State Anxiety Inventory evaluating their cognitive and somatic anxiety as well as their feelings of self-confidence. Correlations indicated an inverse relationship for subjects' ratings of athletic competence with their scores on trait anxiety and rated cognitive and somatic state anxiety. The correlation between rated self-worth and the subjects' feelings of confidence was low and positive. Results were discussed in relation to achievement-motivation theory.

Kirker, Tenenbaum and Mattson (2000) conducted a study to investigate of the dynamics of aggression: direct observations in ice hockey and basketball. There have been significant problems in the study of sports aggression, and they are linked to how aggression has been defined, measured, and analyzed. Following a review of the whole domain, this study aimed to construct a theoretically coherent and ecologically valid framework for research on processes underlying sports aggression and to contribute to the advancement of knowledge in the area. An exploratory method using computer observational analysis as the primary research method, along with complementary questionnaires and personal reflections, considered aggression in two comparison sports: ice hockey and basketball. Data were compiled and classified by involved and independent experts relative to factors and behaviours associated with sports aggression derived from a comprehensive review of the literature. Among the
study's findings were that: (a) aggression was instrumental in nature two-thirds of the time; (b) aggressive acts typically occurred in clusters and varied in frequency according to game circumstances; and (c) multiple variables and aggression theories were related to severely aggressive acts. The complex dynamics of sports aggression via similar naturalistic methodologies is discussed.

McCarthy and Kelly (1998) conducted a study on Aggression, performance variables, and anger self-report in ice hockey players. This study partially replicated a former one showing a relationship between aggression and performance among hockey players. With certain penalties used as a measure of aggression, two groups of male college ice hockey players were compared for differences in goals and assists. Those rated high in aggression scored significantly more goals than those low in aggression. The direction of differences in assists was the same but did not reach significance. When the same groups were compared for shots on goals, significant differences were found, favoring the high aggressive group. This findings was discussed in light of energy output and efficiency. Attempts to relate performance and personality measures were not successful when comparisons on a self-report measure of anger were analyzed.

Stuntz and Weiss (2003) conducted a study on the Influence of social goal orientations and peers on unsportsmanlike play. The present study was designed to examine the influence of personal (i.e., social goal orientations or definitions of success that include interpersonal relationships) and situational (i.e., peer influence) factors on decisions surrounding unsportsmanlike play. Middle school students (ages 11-15 years) completed a measure to assess task, ego, and social goal orientations. Participants also read scenarios about unsportsmanlike actions and responded to questions tapping the intention to perform those actions. A series of hierarchical regression analysis revealed that in certain peer contexts, social goal orientations
influenced unsportsmanlike play responses above and beyond the contribution of task and ego goal orientations. Results varied for boys and girls and provided support for social goal orientations in achievement motivation research in the physical domain.

Perry et.al. (2003) conducted a study on Measures of aggression and mood changes in male weightlifters with and without androgenic anabolic steroid use. Supraphysiologic doses of testosterone are associated with increased aggression that is hypothesized to be a function of testosterone serum concentrations, mood, and personality. The study attempted to characterize this relationship among weightlifters who were users (n = 10) and nonusers (n = 18) of anabolic steroids. Participants were interviewed using the Modified Mania Rating Scale and Hamilton Rating Scale for Depression to assess mood, the Buss-Durkee Hostility Inventory (BDHI) and Point Subtraction Aggression Paradigm (PSAP) to assess aggression, and the Personality Disorder Questionnaire (PDQ-R) to assess personality. Blood samples were obtained for the determination of total, free, and weakly bound testosterone. Comparisons of continuous variables between testosterone users and non-users were performed with a parametric (unpaired t-test) or non-parametric (Mann-Whitney) test where appropriate. Correlations with testosterone were examined separately for testosterone users and non-users, using Spearman rank correlation. The subjective (BDHI) and objective (PSAP) assessments of aggression found that supranormal testosterone concentrations were associated with increased aggression. However, the PDQ-R results suggest that this finding was confounded by the personality disorder profile of the steroid users, because steroid users demonstrated Cluster B personality disorder traits for antisocial, borderline, and histrionic personality disorder.

Robertson (2003) in his paper presents a critical exploration of the relationship between masculinity, sport and health by reporting findings from a wider qualitative study on lay men's and health professionals' beliefs about masculinity and
preventative health care. Recent years have seen a surge of interest in relation to 'men's health'. In particular, the Department of Health has highlighted how men's connection to sport, fitness and competitiveness can be used in health promotion initiatives to introduce facets of health. In contrast, work in the sociological and feminist literature has raised issues of concern about the relationship between men, masculinity and sport, particularly the links to aggression, misogyny and homophobia. It would appear then that a straightforward 'men + sport = health' relationship cannot be assumed. Focus groups and interviews with health professionals and men, including gay and disabled men, were undertaken to facilitate examination of the socially integrative meanings of sport and masculinity, and their relationship to health. Socializing, 'macho' culture and the body emerged as three main themes, and the implications of these empirical findings for health promotion are discussed.

Wann and Ensor (2001) conducted a study on Family motivation and a more accurate classification of preferences for aggressive sports. In previous research there were no significant differences in family motivation between individuals with a preference for aggressive sports and those with a preference for nonaggressive sports. The current study replicated the past research with a more valid method of classifying participants into the sport-preference groups. 82 participants completed the Family Motivation Subscale of the Sport Fan Motivation Scale and listed their five favorite sports. As predicted, correlations indicated no significant relationships between preferences for aggressive sports and strength of family motivation.

Mesmer-Magnus JR, and Dechuch LA. (2009), found Information sharing is a central process through which team members collectively utilize their available informational resources. The authors used meta-analysis to synthesize extent research on team information sharing. Meta-analytic results from 72 independent studies (total groups = 4,795; total N = 17,279) demonstrate the importance of information sharing
to team performance, cohesion, decision satisfaction, and knowledge integration. Although moderators were identified, information sharing positively predicted team performance across all levels of moderators. The information sharing-team performance relationship was moderated by the representation of information sharing (as uniqueness or openness), performance criteria, task type, and discussion structure by uniqueness (a 3-way interaction). Three factors affecting team information processing were found to enhance team information sharing: task demonstrability, discussion structure, and cooperation. Three factors representing decreasing degrees of member redundancy were found to detract from team information sharing: information distribution, informational interdependence, and member heterogeneity.

Tziner A, Nicola N, and Rizac A. (2003) found that Investigations of the influence on team performance of team composition, in terms of task-related attributes, e.g., personality traits, cognitive abilities, often assumes this relation to be mediated by the strength (intensity) of the interpersonal relations (social cohesion) among team members. However, there has been little empirical examination of how much social cohesion actually affects team outcomes. This preliminary study sought to examine this issue using soccer teams, which have been held to resemble workplace teams. Perceptions of team cohesion were collected from 198 Israeli soccer players (comprising 36 national league teams) during the week preceeding their weekly games. A significant correlation was found between the perceptions of social cohesion and the results of the soccer matches, indicating a link between team social cohesion and team performance. Implications of the results, as well as the study's limitations, are discussed, and avenues for research are suggested.

Martin JJ. (2008) made a study on variables grounded in social cognitive theory with athletes with disabilities were examined. Performance, training, resiliency, and thought control self-efficacy, and positive (PA) and negative (NA)
affect were examined with wheelchair basketball athletes (N = 79). Consistent with social cognitive theory, weak to strong significant relationships among the four types of self-efficacy (rs = .22-.78) and among self-efficacy and affect (rs = -.40-.29) were found. Basketball players who were efficacious in their ability to overcome training barriers were also confident in their basketball skills and efficacious in their ability to overcome ruminating distressing thoughts while simultaneously cultivating positive thoughts. Athletes with strong resiliency and thought control efficacy also reported more PA and less NA. Multiple regression analysis indicated that the four efficacies predicted 10 and 22% of the variance in PA and NA, respectively.

Arce C, et.al. (2008) described the process of developing a scale to measure the leadership capacity of players in sports teams. Research into sports leadership has focused almost exclusively on the formal leadership of the coach, in which the studies by Chelladurai, with his five-factor model, have become an essential point of reference. Nevertheless, hardly any research has been carried out into the leadership that certain players exercise over the other team members. For this purpose, a sample of 143 male basketball players was used; these participants were asked to evaluate the characteristics of the sports leader over a total of 54 indicators. Firstly, explanatory factor analysis was performed with participants' responses, using principal axis and oblique rotation methods. The factor structure obtained was then subjected to confirmatory factorial analysis, enabling us to propose a Sports Leader Evaluation Scale (EELD, in Spanish) with 18 items grouped into 3 factors, denominated empathy and responsibility, assertiveness, and impulsiveness. Satisfactory fit indices were obtained for the model, for the reliability of items and for the internal consistency of factors.

Frost BC, Ko CH, and James LR. (2007) studied on self-beliefs about personality influence the channels through which people express their implicit
motives. On the basis of this hypothesis, the authors predicted that self-beliefs about aggressiveness would influence the channel(s) through which people express their aggressive motive and the justification mechanisms they use to defend expression of this motive. For example, the authors predicted that people who were implicitly prepared to rationalize a desire to harm others would engage in (a) overt aggression if they viewed themselves as aggressive or (b) passive aggression if they viewed themselves as nonaggressive. The implicit aspects of aggressiveness were measured via conditional reasoning (L. R. James et al., 2005). Results based on intramural basketball players supported the channeling hypothesis.

Bekiari A, Digelidis N, and Sakelariou K. (2007) examined verbal aggressiveness of coaches as perceived by their athletes, 108 senior athletes (57 boys and 51 girls) ages 15-19 years. Participants were basketball players (56 athletes) and volleyball players (52 athletes) who completed questionnaires. The scale of verbal aggressiveness showed high internal consistency. A two-way analysis of variance, conducted using sex and sport as independent variables to examine interactions, yielded significant differences between adolescent volleyball and basketball athletes. Volleyball athletes had lower scores on the Verbal Aggressiveness Scale than basketball players. Research with larger samples and other sports is recommended.

Catina P, et.al. (2005) examined the degree to which positive illusion is associated with sport performance in basketball players among 3 different cultures: The United States of America, Croatia, and Norway. Positive illusion is a cognitive characteristic that is common in mentally healthy individuals, and becomes especially important in the athletic arena. The model tested in this study depicts the level of positive illusion as the main predictor variable and the performance of the basketball players as the criterion variable. the Positive Illusion Sports Scale was used to measure the predictor variable while The Basketball Evaluation System was used to
measure the criterion variable. Participants were 239 competitive male basketball
players, 122 from USA, 57 from Croatia and 60 from Norway. Results showed that
positive illusion was directly (positively) related to actual success and that these
relationships were statistically significant and consistent with positive illusion as a
theoretical construct for predicting behaviour and success.

Rogulj N, et.al. (2005) studied the differences in motor and psychologic
variables according to playing positions were analyzed in a sample of 53 elite female
handball players, members of junior and senior national team. Motor status included 8
variables for assessment of explosive strength of landing and throwing, agility, speed
strength, movement frequency, and flexibility. Psychologic status was analyzed
through 4 dimensions according to Eysenck: extroversion, psychotic behavior,
neurotic behavior, and lie. The anthropologic features analyzed showed statistically
significant differences. Considering motor abilities, differences were recorded in the
variables for assessment of speed strength, agility and leg movement frequency,
where wings predominated, whereas goalkeepers showed predominance in flexibility.
In psychologic status, differences were present in the variable for assessment of
extroversion, which was most pronounced in wings, whereas psychotic behavior was
more expressed in those at pivot position. The differences were primarily
consequential to the selection of players of a specific anthropologic profile for
particular playing positions. The hypothesis of the impact of kinesiologic specificities
of a particular playing position on the formation of the players' anthropologic profile
should be scientifically tested. Study results may found application in training and
contest practice, especially in forming anthropologic models for particular positions
during the process of player selection.
Raab M, and Johnson JG. (2004) explained empirical risk-taking behaviour in sports from an individual cognitive modeling perspective. A basketball task was used in which participants viewed four video options that varied in the degree of associated risk. The participants were independently classified by scores on the Questionnaire for Assessing Prospective Action Orientation and State Orientation in Success, Failure, and Planning Situations as action-oriented or state-oriented decision makers. The results of the experiment show that action-oriented players shoot faster and more often to the basket and that state-oriented players prefer to pass to a playmaker more often. Four versions of a computational model of decision making, Decision Field Theory, were compared to evaluate whether behavioural differences depend on the focus of attention, the initial preferences, threshold values, or an approach-avoidance interpretation of the task. Different starting preferences explained individual choices and decision times most accurately. Risk taking in basketball shooting behaviour can be best explained by different preferences for starting values for risky and safe options caused by different levels of action orientation.

Ray, et.al. (2001) undertook a study to observe any beneficial effect of yogic practices during training period on the young trainees. 54 trainees of 20-25 years age group were divided randomly in two groups i.e. yoga and control group. Yoga group (23 males and 5 females) was administered yogic practices for the first five months of the course while control group (21 males and 5 females) did not perform yogic exercises during this period. From the 6th to 10th month of training both the groups performed the yogic practices. Physiological parameters like heart rate, blood pressure, oral temperature, skin temperature in resting condition, responses to maximal and submaximal exercise, body flexibility were recorded. Psychological parameters like personality, learning, arithmetic and psychomotor ability, mental well being were also recorded. Various parameters were taken before and during the 5th and 10th month of training period. Initially there was relatively higher sympathetic
activity in both the groups due to the new work/training environment but gradually it subsided. Later on at the 5th and 10th month, yoga group had relatively lower sympathetic activity than the control group. There was improvement in performance at submaximal level of exercise and in anaerobic threshold in the yoga group. Shoulder, hip, trunk and neck flexibility improved in the yoga group. There was improvement in various psychological parameters like reduction in anxiety and depression and a better mental function after yogic practices.

Goudas M, Theodorakis Y, and Karamousalidis G. (1998) examined for a sample of 126 basketball players the psychometric properties of a Greek version of the 1995 Athletic Coping Skills Inventory-28 by Smith, Schutz, Smoll, and Ptacek. A confirmatory factor analysis supported the structural validity of the translated inventory. Moreover, six of the seven subscales showed adequate internal consistency. The discriminant validity of the scores on the inventory was supported by examining mean differences between experienced and inexperienced athletes as well as between athletes of different levels of competition. Further steps for the validation of the inventory in Greek are discussed.

Kane (1967) has questioned whether a single personality type exists for athletes. Some sports may show significant differences in personality profiles of its participants in cases where a sufficiently wide range of sports are selected (representing many team or individual sports) it is doubtful whether such clear cut differences persist. Of course, the popular belief holds that individual sport contestants are more introverted and self controlled than team oriented.

The relationship between exercise and personality has been a favorite topic of researchers for approximately three decades. However, despite the extensive research, few generalizations can be made with confidence about the effects of exercised or
improved physical fitness on personality. A major reason for the lingering ambiguity is the lack of theoretical model to explain the relationship between personality variables and exercise. The paucity of controlled experimental research is an other factor that hinders understanding. Although findings are far from conclusive, regular exercise and improved physical fitness seem to be associated with emotional stability, self assurance, extroversion and low levels of neuroticism. Whether or not exercise effectively reduces the emotional reactivity associated with type. A behaviour is still a matter of debate, as is the question of the relationship between exercise and locus of control. Addition to aerobic exercise, usually running is characterized by unpleasant withdrawal symptoms if workouts are missed. Exercise addition may have positive or negative consequences, and clients should be cautious to balance exercise with other aspect of their lives. Recent developments in self concept theory and research show that physical dimension to be an important of global self esteem. Participation in exercise programmes has consistently been associated with increases in self esteem in children and adults.

Using the Minnesota Multiphasic Personality Inventory Booth compared the personality traits of one hundred and forty one athletes to those of one hundred and forty five non athletes. The non athletes scored higher than the athletes only on anxiety and depression.

Eysenicks Personality Inventory and the 16 PF inventory by R.B. Cattell’s showed that the Physical Education students were significantly more stable and extroverted than their general college colleagues.
2.2 STUDIES ON TEMPERAMENTS

John C. Loehlin (2010) found correlations on scales of the Thurstone Temperament Schedule are examined in two twin studies (Michigan and Veterans twin samples), an adoption study (Texas), and an unpublished twin-family study. It is concluded that the joint evidence suggests (1) an appreciable effect of additive genes, differing across scales; (2) a negligible influence of shared environments, except possibly for monozygotic (MZ) twins; (3) a possible contrast effect among dizygotic (DZ) twins on temperament and personality traits, but shared interests; and (4) a causally ambiguous elevation of MZ twin correlations, which could be due either to nonadditive genetic effects or to a special sharing of environments (or self-concepts) in this group.

Coletta, (1975), investigated differences in personality characteristics between high and low-rated, open and traditional primary teachers. Teachers were evaluated through use of a modified observation Rating Scale and by subjective supervisory judgment based on five areas of assessment. Open teachers received in-service training in open classroom techniques while traditional teachers received no special training. Responses to the Edwards Personal Preference Schedule and the Thurstone Temperament Schedule were analyzed. The research design consisted of $2 \times 2$ multivariate analysis of variance (MANOVA) to determine significant difference. The results of the study indicated that no significant personality differences existed between high and low-rated, open and traditional primary teachers.

Beauvale, and Andrzej (1977) Administered 4 semiprogrammed texts to 200 females whose IQ had been measured by a Polish version of the Army General Classification Test and who had been administered the Alpert-Haber Achievement Anxiety Test, Maudsley Personality Inventory (MPI), and Thurstone Temperament
Schedule (TTS). Findings lend credibility to the hypothesis that relationships between temperament and learning performance are masked, in varying degrees, by intelligence, depending on type of text, temperament variables, and performance measures. A strong masking effect was found for the relation between the factors Active (TTS), Stable (TTS), and Neuroticism-Stability (MPI) and the scores of an achievement test administered immediately after learning unambiguous texts of complex logical structure.

Thurstone, L. L. (1951), found the correlations for the thirteen Guilford personality scores were factored by the centroid method to determine how many factors were represented. The results yielded nine linearly independent factors, two residual and seven subject to interpretation as follows: active, vigorous, impulsive, dominant, stable, sociable, and reflective.

Osborn ZH, et.al. (2009) documented research on the roles of individual differences in personality and temperament on athletic injury has lagged. We hypothesized that professional athletes with high sensation-seeking and extraversion scores, and with low effortful control scores, would experience more injuries over the course of a season, would have more severe injuries, and would miss more total days of play. Prospective design with questionnaire report at time one and injury tracking throughout an 18-week athletic season. Setting: Professional hockey team in the United States. Participants: Eighteen professional hockey players (ages 21-33). Players completed self-report personality (Sensation-Seeking Scale, Form V) and temperament (the Adult Temperament Questionnaire) measures. Quantity and severity of injury, as well as playing time missed, were tracked for 18 weeks. On average, players experienced almost 6 injuries causing a loss of 10 playing days throughout the season. Those players scoring high on Boredom Susceptibility and Total Sensation-Seeking incurred more total injuries. Those scoring high on temperamental
neutral perceptual sensitivity suffered more severe injuries. Athletes who suffered more injuries reported a preference for stimulating environments and boredom with non-stimulating environments. Injury severity was not correlated with sensation-seeking but was related to temperamental perceptual sensitivity. Implications for identification of injury-prone athletes, pre-injury training, and post-injury treatment are discussed.

Chen LH, et.al. (2008) reported that optimism is important in enhancing human psychological and physical well-being; however, the association of optimism with burnout has received little attention in sport psychology. This study recruited 139 young volleyball players (M = 16.3 yr., SD = 0.8) to examine this relation. Athletes completed the Chinese version of the Life Orientation Test at Time 1 and 4 mo. later (Time 2). The Chinese version of the Athlete Burnout Questionnaire was also administered. Analysis showed scores on optimism were negatively related to athletes' burnout scores.

Anshel MH, and Kaissidis AN. (1997) examined links between coping style, situational appraisals and the subsequent use of coping strategies in response to acute stress among competitive Australian basketball players (N = 190, 93 men and 97 women, ranging in age from 18 to 44 years). Regression analyses indicated that participants' approach and avoidance coping responses varied across four sport-related stressful situations. In addition, both personal and situational factors accounted for significant variation in players' approach coping responses, with situational factors better predictors of approach coping than personal dispositions. For avoidance coping, situational appraisals (i.e. perceived stress and controllability) were again better predictors than personal dispositions. The results lend credence to the interactional (contextual) model of coping in which participants' use of coping strategies is at least a partial function of situational demands.
Pellis SM, and McKenna MM. (1992) attempted to identify some of the factors involved in producing this individual variability. The major influence over an individual's frequency of play as a juvenile was found to be the frequency of play by the partner. That is, play appears to be contagious, in that a high playing animal stimulates its partner to play frequently as well. In male juveniles, but seemingly not in female juveniles, the subsequent adult status of one partner as dominant influences the subordinate-to-be to initiate more playful contacts. In addition to these extrinsic influences, however, there appear to be intrinsic factors that influence whether an individual is a high or low playing animal. One intrinsic factor appears to be 'boldness', so that bolder animals tend to initiate more playful contacts. Higher players tend to be more susceptible to the stereotypy-inducing effects of the dopamine agonist, apomorphine, and tend to be more dependent upon the playful activity of the partner to maintain their own high levels of play. Both of these characteristics are consistent with other studies comparing bold and timid rats. Boldness, however, only seems to influence how much play a rat will exhibit, not how much play it is capable of exhibiting. Neonatal testosterone augmentation increases juvenile play fighting but not apomorphine susceptibility, suggesting that a high player need not be a bold animal. The total frequency of play an individual is capable of initiating appears to depend upon perinatal exposure to androgens. Boldness and the playfulness of the partner appear to modulate the expression of this hormonally set value.

Quoidbach J, and Hansenne M. (2009) claimed about the positive influence of emotional intelligence (EI) on work team performance are very numerous, both in commercial and scientific literature. However, despite the huge interest that media and business consultants put in EI and its fast-growing use in organizations, there is very little empirical evidence to support these claims. In this study, we investigated the relationships between EI, performance, and cohesiveness in 23 nursing teams. EI
was assessed using the modified version of the Schutte Emotional Intelligence Scale and cohesiveness with the Group Cohesiveness Scale. Finally, nursing team performance was measured at four different levels: job satisfaction, chief nursing executives' rating, turnover rate, and health care quality. Results showed that health care quality was positively correlated with emotion regulation. Emotion regulation was also positively correlated with group cohesiveness. Surprisingly, it also appears that emotion appraisal was negatively correlated with the health care quality provided by teams. These results suggest that EI and, more specifically, Emotional Regulation may provide an interesting new way of enhancing nursing teams' cohesion and patient/client outcomes.

Hirschfeld RR, and Bernerth JB. (2008) demarcated mental efficacy and physical efficacy at the team level, and they explored these 2 factors as outcomes of 4 potential inputs and as predictors of 3 outcomes among 110 newly formed action teams in a military setting. Both types of team efficacy benefited from greater team size and an initial experience of enactive mastery, but they were not influenced by teams' female representation or knowledge pool. In terms of predictive contributions, both mental and physical efficacy facilitated internal social cohesion, yet only mental efficacy promoted problem solving and observed teamwork effectiveness.

Pain MA, and Harwood CG. (2008) examined the performance environment of the England youth soccer teams. Using a conceptually grounded questionnaire developed from the themes identified by Pain and Harwood (2007), 82 players and 23 national coaches and support staff were surveyed directly following international tournaments regarding the factors that positively and negatively influenced performance. The survey enabled data to be captured regarding both the extent and magnitude of the impact of the factors comprising the performance environment. Overall, team and social factors were generally perceived to have the greatest positive
impact, with players and staff showing high levels of consensus in their evaluations. Team leadership and strong team cohesion were identified by both groups as having the greatest positive impact. Overall, far fewer variables were perceived to have a negative impact on performance, especially for players. The main negatives common to both groups were players losing composure during games, player boredom, and a lack of available activities in the hotel. The major findings support those of Pain and Harwood (2007) and in using a larger sample helped to corroborate and strengthen the generalizability of the findings.

Zamboanga BL, Rodriguez L, and Horton NJ (2008) designed this cross-sectional study to examine sports team differences in hazardous alcohol use and drinking game participation, as well as the social correlates of these behaviours among female college athletes (N = 176; M age = 19.9 years, SD = 1.24, range = 18-22). Respondents completed self-report surveys in small groups. They reported drinking behaviours, frequency of team social events involving alcohol use, and team cohesion. The authors found significant differences across sports teams with regard to hazardous alcohol use and participation in drinking games with teammates. Findings also revealed that a high frequency of team social events involving alcohol use was associated with elevated use and an increased likelihood of drinking game participation. The authors discuss future research directions and implications.

DiMeglio K, et al. (2005) determine the impact of a team-building intervention on group cohesion, nurse satisfaction, and turnover rates. Creating an environment that supports and retains nurses represents a formidable challenge for nursing leaders. Research related to strategies that positively impact the culture in which nurses practice, thus potentially improving nurse satisfaction and reducing turnover, is critically needed. Registered nurses (RNs) employed on inpatient units in a 247-bed, private acute care Magnet teaching hospital participated in this quasi
experimental preintervention and postintervention design. The RN-RN interaction subscale from the National Database of Nursing Quality Indicators Adapted Index of Work Satisfaction, the National Database of Nursing Quality Indicators Adapted Index of Job Enjoyment, the Group Cohesion Scale, and a facilitator-developed measure were completed preimplementation and postimplementation of unit-tailored intervention strategies, which took place over a 12-month period. Turnover rates were collected 6 month preintervention and postintervention. Improvement in group cohesion, RN-RN interaction, job enjoyment, and turnover was demonstrated. Targeted, unit-based strategies can be an effective means of reducing turnover rates and improving group cohesion and nurse satisfaction.

Seznec JC, et.al. (2003) documented that the high-standard sport practice requires an optimum functioning level of the individual in all its physiological systems as a whole. If the physical program training progressed much these last years, the techniques of mental preparations are still very heterogeneous and are not based on any validated procedures, based only on individual practices. Nevertheless, the majority of athletes and trainers stress the major importance of "mental" in the realization of performances. One of the obstacles in the mental training of the athletes is the difficulty in finding tools making it possible to evaluate and measure the psychic state of the individual and its mode of coping and adjustment, apart from any psychopathology. Few studies have been carried out on applicability of the personality questionnaires derived from the current dimensional models in these populations. Our study aimed to describe the personality of the members of the French junior team of road cycling, using the Temperament and Character Inventory (TCI) developed by Cloninger to explore the seven dimensions of his psychobiologic model of personality. In this model, four dimensions are temperament factors, and three are character factors. The three main dimensions of temperament are Novelty Seeking (NS), ie the tendency towards excitement in response to novel or rewarding
stimuli, Harm Avoidance (HA) hypothesized to represent the tendency to respond intensely to signals of adverse stimuli, and Reward Dependence reflecting the tendency to respond intensely to signals of reward and to maintain behavior previously associated with reward. These personality traits are hypothetically related to underlying neurotransmitter systems (especially NS to dopaminergic function and HA to serotonergic function). The two main dimensions of character are Self-Directedness (SD) and Cooperativeness (C), measuring maturity traits respectively concerning individual and social adaptation. In this study, we used a computerized version of the TCI in a sample of 18 racing cyclists, ie all the members of the french junior national team. Their results were compared to those of 26 male, young, community subjects, derived from the french normative validation sample of the TCI. Mean comparisons were performed with the Mann-Whitney test, with Bonferroni correction for multiple comparisons. A significant difference between subjects and controls was obtained for Reward Dependence (p<0.0001), attachment RD3 (p<0.0001), and dependence RD4 (p<0.0025). No significant difference appeared between both groups for the other temperament or character dimensions. Based on temperamental Cloninger typology, the type "passionate" appeared to be the most frequent in this sample (55.6%). These results suggested that the TCI can be easily and usefully used in athletes, and that the personality profile of young competitive cyclists is not abnormal except a high level of reward dependence. Numerous applications can be derived from this use: the development of specific and personalized mental training, the screening and prevention of psychological vulnerability.

Grove JR, et.al. (1990) reported that Sport participants (n = 276) stated the most likely cause of rapid or slow recovery from injury and rated that causal factor along several dimensions. Examination of the open-ended responses suggested that four general types of attributions were utilized by the athletes: personal factors,
injury-related factors, treatment-related factors, and situational factors. Analysis of dimensional ratings indicated: (a) causes of slow recovery were consistently perceived as less stable, controllable, global, and intentional than causes of rapid recovery; (b) causes of slow recovery were sometimes perceived as more internal than causes of rapid recovery; and (c) physical self-esteem interacted with gender to influence dimensional ratings of the attributions. These findings were discussed in relation to the motivational significance of causal interpretations during recovery and in relation to the model of stress and athletic injury presented by Andersen and Williams (1988).

Schell, Allolio and Schonake (1994) conducted a study on physiological and psychological effects of Hatha – Yoga exercise in healthy women. They measured heart rate, blood pressure, the hormones cortisol, prolactin and growth hormone and certain psychological parameters in a yoga practicing group and a control group of young female volunteers prior and after the experimental period. There were no substantial differences between the groups concerning endocrine parameters and blood pressure. The heart rate was significantly different in yoga group having a significant decrease in heart rate during the yoga practice. In the personality inventory the yoga group showed markedly higher scores in life satisfaction and lower scores in excitability, aggressiveness, openness, emotionality and somatic complaints. Significant differences could also be observed concerning coping with stress and mood at the end of the experiment. The yoga group had significant higher scores in high spirits and extravertedness.

Berger and David (1988) experimented stress reduction and mood enhancement in four exercise modes, swimming, body conditioning, hatha yoga and fencing. Students voluntarily enrolled in co-educational fencing, body conditioning, swimming and yoga administered the POMS, a measure of mood states and the state anxiety subscale of the STM before and after class on three different days, students
were significantly more fatigued than before. In body conditioning, the interaction between pre and post means was significant. Yoga participants felt significantly better after exercising on four POMS subscales.

Berger, Owen and Man (1993) determined the exercise and mental health literature and then examined the influence of rational difference on the acute mood benefits of swimming on women college students (N=70) from Czechoslovakia and the United States. They completed the POMS before and after class on thee occasions. The United States swimming classes met for 50 minutes twice a week through out a 14 weeks semester Czechoslovakian swimming classes met for 90 minutes once a week throughout a biweek semester in comparison with their respective controls. Czechoslovakian swimmers reported greater mood changes than the United States swimmers. The Czechoslovakian and United States swimmers reported mood improvement on tension, depression, anger, vigor and confusion.

Stratton (1990) conducted a study to examine changes in mood states of college cross country runners across a competitive season. Also compare the mood state profiles of the men’s team and the women’s team. The POMS questionnaire was administered to the athletes every other week on Wednesday afternoon prior to practice throughout the season. Significant variations were identified for both the teams. Result reveals that the fatigue score for the females was higher than that for the males.

Anies (1998) studied the effect of exercise on mood states of sedentary females. 66 female students of All Saints College, Trivandrum participated in this study. Mood states was first induced by POMS questionnaire and responses were collected prior to the training programme and the same questionnaire was administered after the exercise programme of a total of 12 sessions extending over a
period of 4 weeks having 3 sessions per week with a duration of 45 minutes. Mood states was measured using POMS questionnaire before and after exercise. Results showed significant difference between pre test and post test where the sedentary female have positive influence upon their mood states due to the exercise programme given.

Niemen et al. (1993) experimented and concluded that cardio respiratory exercise improve psychological well being and moods in elderly women. 30 sedentary women, 67 to 85 years of age were randomly assigned to either experimental and control groups. Women in both groups exercised 30 to 40 minutes a day, 5 days a week for 12 weeks. All were measured for body composition, cardiorespiratory fitness, psychological well being and mood state before and after the experiment. Both groups showed improvement in their mood and psychological well being scores by the end of the 12 week study.

Phol (1984) assessed the effect of a 12 week aerobic dance class on body image, self esteem and fitness in female college students. 119 female college students participated in this study, 43 of those in the experimental group and the 76 to the control group. Self images were assessed using Journard’s Self Cathar seis Scales and Fitness were assessed using Cooper’s 12 min run. Body image, self image and fitness were assessed on a pre test, post test basis with a minimum time between testing occasions of 12 weeks for all sessions. There is a positive and moderate correlation between body and self image.

Woodard and Suddicle (1992) assessed self esteem of 183 college students, all over 25 years of age. Correlations between their academic success and self esteem, as measured by the Roserberg self esteem scale were positive. There was significance
Levy (2003) evaluated the effect of exercise behaviour and physical self perceptions on global self esteem in adult women to provide a test of the exercise and self esteem model. The exercise and self esteem model suggests that exercise behaviours are associated with global self esteem via perceptions of self efficiency, physical competence and physical acceptance. One hundred and twenty two adult women completed valid and reliable self report measured on exercise behaviour, exercise self efficiency, perceptions of physical competence, perceptions of physical acceptance and global self esteem. The effects of exercise behaviour perceived physical competence, and exercise self efficiency on physical acceptance, rather than being mediated by exercise self efficiency and perceived physical competence respectively. These findings provide partial support for the exercise and self esteem models and particularly suggest the importance of physical acceptance in understanding the proposed relationship between exercise and self esteem development in women. Importantly, identifying model components that contribute to the self esteem of women provides practitioners with useful information regarding logical areas to target for future interventions.

Meyers, et al. (1994) conducted a study on mood and psychological skills of world ranked female tennis players. Forty five players of 24.3 plus or minus 4.7 years of the Women International Tennis Association were divided into top ranked (1 to 65), middle ranked (75-180) and bottom ranked (200 plus) groups. The Profile of Mood States (POMS) and the Psychological Inventory for Sports (PSIS) were administered to athletes prior to matches. The effect of rank was not significant across all dependent variables. There was a trend for top ranked competitors to exhibit greater concentration than indicated in bottom ranked players. This study concluded
that the world ranked female tennis athletes exhibit mood state patterns and psychological skills similar to athletes in other sports. The high patterns and psychological skills variability and psychological skills within and between skill level coincide with highly individualized responsivity found in other cognitive, somatic and behavioural studies on sports.

Terry (1995) cites research in which tension and anger, undesirable mood states in the iceberg profile, are linked to performance success in cross country running and karate. Similarly the needs and tendencies of individual athletes are very different. He concluded that the mood states best predict performance when performance conditions include short duration events, competing against previous personal standards rather than against opponents and the opponents have similar levels of ability and conditioning. (March H. Aushel, 2003).

Berger and Motl (2000) conducted a study on recent 25 years reviews of related research literature to the effect of exercise on Profile of Mood States (POMS). They concluded that there is unequivocal support for the mood enhancing effects of exercise, specifically on improved vigor and reduced tension, depression, anger, confusion and fatigue. With respect to exercise intensity, the authors recommend that unless a participant prefers low or high exercise intensity, optimal conditions for mood changes occur at a moderate intensity level. In summary, exercise, in particular moderate intensity aerobic exercise, reduced negative mood and improved positive mood state.

Buckworth and Dishman’s (2002) review of the related literature concluded that positive associations between exercise and self esteem have been found, but effects are stronger for individuals initially lower in self esteem and the exercise has more potent effect on physical self concept and self esteem than on general self
perceptions. Exercise induces a sense of competence and person’s physical characteristics. Positive self esteem is associated with good mental health. So linking exercises with improvement in physical self concept and with better self esteem offers another reason for adopting and maintaining a physically active lifestyle.

2.3 SUMMARY OF REVIEWS

The investigator reviewed related studies on personality dimensions and temperament traits among athletes and non athletes. The reviews proved that there was scope for further research to make a study on selected psychological variables among players of different topography of basketball, football and volleyball players. Hence, this research was undertaken. Based on the experience gained through the review of related research, the investigator formed suitable methodology to be adopted for this research which is presented in Chapter III.