CHAPTER - II

REVIEW OF RELATED LITERATURE
CHAPTER II

REVIEW OF RELATED LITERATURE

A primary survey of the theoretical as well opinion in the areas connected has brought about new insights and directions for the study. In this section some of the relevant literature have been plotted which were collected from books, journals and internet as well.

The related literature presented in this section is divided in to five major heads such as:

2.1 Psychological profile

2.2 Personality type

2.3 Emotional Intelligence

2.4 Intelligence

2.5 Mental health

2.1 STUDIES ON PSYCHOLOGICAL PROFILES

M.C. Mc Neill and C.K. John Wang (2006) in their comparative study of Psychological profiles of elite school sports players in Singapore examined the motivational types, achievement goals and beliefs about various aspects of sport in a Singapore secondary schools that classified statements in the sport and non-sport streams. This study cluster analyzed the profile of motivational types and achievement goals in 121 grade 9 pupils aged between 14 and 15 years and examined the difference in their beliefs about the purpose of sport. Result revealed three-
distinct clusters with 33% of the sample with an “motivated” profile, 48% in a “highly motivated” cluster and 19% in a “high task-mastery” cluster.

These three clusters differed significantly in their beliefs about the purpose of sport also, “motivated students were less likely to endorse mastery and physically active life style and being a good citizen” as purposes of sport. Compared to the other two clusters (both PS < 0.05). The main difference between the “highly motivated” and “high task-mastery” clusters was that the former were more likely to endorse “gaining social status” as one of the main purpose of sport (P < 0.05).

L.K. Zason Chian and John Wang (2008) in their research on Motivational Profiles of Junior College Athletes: A cluster analysis identify the motivational profiles underlying sport participation among young Singaporean college athletes, as well as to examine the relationships between motivational profiles and a range of cognitive, affective, and behavioral indices. Junior college athletes (N = 303, mean age = 17.64, SD = .60) completed a questionnaire assessing achievement goal orientations, self-determination, sport ability beliefs, perceived competence, and other motivational indices. Four meaningful clusters were identified and validated with differences in perceived motivational climates and other variables. The use of cluster analysis in the present study proved fruitful in identifying subgroups of athletes with differentiated motivational patterns. Consequently, the information obtained could assist coaches in designing intervention programs that target their athletes’ motivational needs.

Sameer E Bhagirathi and Deepak Mehta (2009) conducted a comparative study of the psychological profiles of Indian Railways and Madhya Pradesh National and International Level Male Cricket Players. The purpose of the study was to find out the comparative result of the psychological profiles of Indian Railways and Madhya Pradesh International and National Level male 98 cricket players. The findings revealed that there was a significant difference found that is, 2.8 in their personality patterns, it means railways cricketers were better in their personality
parameters, it means Railways cricketers were better in their personality compare to Madhya Pradesh cricketers and found insignificant that, 0.12 in SCAT, which means there was no difference in sports competition Anxiety of Railways cricketers and Madhya Pradesh cricketers.

Paola Feher and Michael . C. ( 2003 ) in their study on Psychological Profile of Rock climbers: State and Trait Attributes states that a positive relationship between various trait attributes include increased self esteem, competitiveness, perfectionism, life satisfaction, and sensation seeking. In addition, individuals exhibiting a high level of sensation seeking have shown a marked tendency to underestimate risks.

Versari (2001) tested and evaluated 510 Athletes In order to answer questions related to athletes personality type. To examine the relationship between personality types, sport preference and performance, team and individual athletes’ personality profile were designed. Results indicate that teams exhibit a predictable personality profile and that by understanding the psyche of the athlete, performance and team productivity can be enhanced. Inter personal communication amongst players and coaching can improve players can take advantage of their personal preferences and strengths and work on developing other areas identified in the assessment process. Optimal communication and performance can be achieved by identifying the athletes’ preferred learning and personality styles.

Personality types are attracted to and succeed in certain sports just like they do in certain occupations. The more athletes and coaches understand about their personalities and the team profile, the more productive they can be. Versari points out certain Benefits of Understanding the Personality Profile of Athletes as 1. Helps assess the fit between persons and sports and even positions in a team. 2. Helps coaches and athletes in a strained relationship analyze the source of the conflict and build a strategy to reduce it. 3. Can leads to motivated and committed behavior. 4. Useful for athlete and sports professional in career and life planning, self-
management (such as stress/time management) and interpersonal skills areas and

5. Many applications in team building and management.

Nicolas Cognave and Christine Le Scanlf (2007) investigated the psychological profiles and emotional regulation characteristics of women involved in risk-taking sports. The research sample (N=180) consisted of three groups of women engaged in: (1) non-risk sports (N=90); (2) risk-taking sports for leisure purposes (N=53); or (3) risk-taking sports as professionals (N=37). Each participant completed five questionnaires, the Sensation Seeking Scale, the Bem Sex Role Inventory, the Barratt Impulsiveness Scale, Risk & Excitement Inventory, and the Toronto Alexithymia Scale. The results revealed significant differences between the groups’ profiles. Of particular interest are the differences that exist between the profiles of Group 2 (escape profile, masculine gender identity, and high scores on sensation seeking, impulsivity, alexithymia) and Group 3 (compensation profile, androgynous gender identity, average score on sensation seeking, and low scores on impulsivity, alexithymia). We propose that the professional woman might be considered a model for preventing destructive risk-taking behaviors.

White . S.A. (2002) conducted a study on Adolescent goal profiles, perceptions of the parent initiated motivational climate and competitive trait anxiety. The purpose of this study was to examine the combined effects of task- and ego-orientation on adolescents’ perceptions of the parent-initiated motivational climate and competitive trait anxiety. Participants were 279 male and female adolescents (mean age = 14.41 years) who competed on organized sport teams. Based on a mean split on the two TEOSQ (Task Ego Orientation in Sport Questionnaire) subscales, four goal orientation profile groups were created: high-task/high-ego, high-task/low-ego, high-ego/low-task, and low-task/low-ego. MANOVA (Multivariate Analysis of Variance) results indicated that the high-task/low-ego group perceived that both their mother and father endorsed a learning and enjoyment motivational climate. In contrast, the high-ego/low-task group thought their mother and father valued a climate where success was coupled with low effort. In this
group, fathers were perceived to cause worry about making mistakes. This group experienced the highest levels of competitive trait anxiety. For the high-task/high-ego group it was found that fathers emphasized a climate where success was linked to low levels of exerted effort and mothers were perceived to cause worry about making mistakes.

Alan L Smith and Isabel Balaguer (2006) in their research on Goal orientation profile differences on perceived motivational climate, perceived peer relationships, and motivation – related responses of youth athletes to determine if dispositional achievement goal orientation profiles that are reported in the literature would be observed in a sample of youth athletes, and to examine potential achievement goal orientation profile differences on perceptions of the motivational climate, perception of peer relationships, and motivation-related responses.

Male soccer players (n=223). In the present study a lower proportion of participants exhibited achievement goal profiles consisting of relatively high ego orientation. Achievement goal profile differences were found for all variables except positive friendship quality, with a general friend for those reporting relatively lower task goal orientation to exhibit less adaptive responses, overall, the finding support a achievement goal frameworks and suggest that further examination of dispositional achievement goals may afford a deeper understanding of social relationships and motivational process in youth sport.

Christopher T Beedie and Peter C Terry (2000) in their research on The profile mood states and athletic performance: Two meta-analyses. The study comprised two meta-analyses of published studies that used the Profile of Mood States (POMS) to investigate relationships between mood and athletic achievement (n = 13) and between mood and performance outcome (n = 16). Results showed that effect sizes (ESs) for the level of achievement misanalysis were minimal (Weighted Mean ES = .10, SD = .07), a finding consistent with a previous meta-analysis by Rowley, Landers, Kyllo, and Etnier (1995). Larger effects were found
for the performance outcome meta-analysis (\textbf{Weighted Mean ES} = .31, SD = .12). Effects were moderate for vigor, confusion, and depression, small for anger and tension, and very small for fatigue. All effects were in the direction predicted by Morgan’s (1985) Mental Health Model. Effects were larger in sports of short duration, in sports involving open skills, and where performance was judged using self-referenced criteria. Findings suggest that the POMS has utility in the prediction of performance outcome but not in the prediction of level of achievement.

Mirzaei, B, Curby, DG, Rahmani (2009)- Conducted a research on Physiological profile of elite Iranian junior freestyle wrestlers. The purpose of the present investigation was to describe the physiological profile of elite Iranian junior freestyle wrestlers. Seventy elite wrestlers (age 19.8 ± 0.9 years) who were invited to the national training camps, based on their top 10 national ranking, participated in this study. The physiological profile included body weight, flexibility (sit and reach test), maximal oxygen consumption (Bruce protocol), maximal anaerobic power of the legs (Wingate test), muscular endurance and strength (bench press, squat, pull-ups, push-ups, grip strength, and bent-knee sit-up test), speed (40-m sprint), agility (4 × 9-m shuttle run), and body composition (7-site skinfold). The major results (mean ± SD) are as follows: body weight (kg): 77.5 ± 19.8; flexibility (cm): 38.2 ± 3.94; maximal oxygen consumption (ml·kg$^{-1}·$min$^{-1}$): 50.5 ± 4.7; maximal anaerobic power of the legs (W): 455.5 ± 87.6; 1-repetition maximum bench press (weight lifted kg body weight$^{-1}$): 1.4 ± 0.15; 1-repetition maximum squat (weight lifted kg body weight$^{-1}$): 1.7 ± 0.2; push-ups (n): 66.9 ± 7.6; pull-ups (n): 31.6 ± 9.7; grip strength (force in kg·body weight kg$^{-1}$) 1.02 ± 0.11; bent-knee sit-ups (n): 66.5 ± 8; speed (s): 5.07 ± 0.17; agility (s): 8.7 ± 0.25; and body fat (%): 10.6 ± 3.8. The present study provides baseline physiological data that have been used in the prescription of individual training programs for these athletes. This information is also available to the coaches and can contribute to the general strategy employed by a wrestler and for a specific match.
Giyasettin Demirhan (2007) investigated the Psychological profile of Turkish rock calibers: An examination of climbing experience and rout facility. The purpose of this study was to examine sensation seeking, physical self-perception, and intrinsic and extrinsic motives of rock climbers and to compare these psychological constructs with respect to their years of climbing experience and the difficulty of their climbing routes. 64 climbers ($M$ age = 29.1 yr., $SD$ = 6.4) voluntarily participated in this study. The Arnett Inventory of Sensation Seeking (AISS), Physical Self-Description Questionnaire (PSDQ), and Sport Motivation Scale (SMS) were administered to the rock climbers. Analysis indicated that the mean score of rock climbers on the Novelty subscale of the Sensation Seeking Scale was 33.9 ($SD$ = 3.6) and mean value on the Intensity subscale was 29.2 ($SD$ = 5.2). The mean scores of rock climbers on the PSDQ ranged between 3.9 ($SD$ = 1.0, Physical Activity) and 5.1 ($SD$ = 1.1, Body Fat). Descriptive analysis indicated that the highest mean score of rock climbers on the SMS was obtained in Intrinsic motivation to Experience Stimulation (5.7, $SD$ = 0.9). The independent sample $t$ test showed no significant differences in sensation seeking, physical self-perception, and sport motivation with regard to years of climbing experience and route difficulty ($p > .05$). It may be concluded that sensation seeking in climbers is high, and they have internal motivational orientation and positive physical self-perception; their competence in climbing has no obvious relationship to these variables. Popularized by Sigmund Freud and neo-Freudians, Erickson (20010), The psychodynamic approach to personality is characterized by two themes. First emphasis is placed on unconscious determinants of behavior, such as what Freud called the id, or instinctive drives, and how these conflict with the more conscious aspects of personality, such as the superego (one’s moral conscience) or ego (the conscious personality). Second, this approach focuses on understanding the person as a whole, rather than identifying isolated traits or dispositions.

The psychodynamic approach is complex: it views personality as a dynamic set of processes that are constantly changing and often in conflict with one another.
For example, those taking a psychodynamic approach to the study of personality might discuss how unconscious aggressive instincts conflict with other aspects of personality, such as one’s superego, to determine behavior. Special emphasis is placed on how adult personality is shaped by the resolution of conflicts between unconscious forces and the values and conscience of the superego in childhood.

Although the psychodynamic approach has had a major impact on the field of psychology, especially on clinical approaches to psychology; it has had little impact in sport psychology. Swedish sport psychologists Apitzsh, (1995) has urged North Americans to give more attention in this approach, however, pointing out the support that it receive in non-English studies of its value to sport Apitzsh has measured defense mechanisms in athletes and used this information to help performers better cope with stress and anxiety. Specifically, he contends that athletes often feel threatened and read with anxiety. As a defense against their anxiety, athletes display various unconscious defense mechanisms, such a maladaptive repression (the athletes freeze or become paralyzed during play) or denial of the problem. When inappropriate defense mechanisms are employed, the athletes’ performance and satisfaction and affected. Through psychotherapy, however, athletes can learn to effectively deal with these problems.

A weakness of the psychodynamic approach is that it focuses almost entirely on internal determinants of behavior, giving little attention in the social environment. For this reason many contemporary sport psychology specialists do not adopt it, however, not all the behavior of an exercise or athlete is under conscious control, and at times it may be appropriate to focus on unconscious determinants of behavior. For example, a world-class aerial skier experienced a particularly bad crush, and when he recovered, he could not explain his inability to execute the complex skill he was injured on. He described that in the middle of executing the skill he would freeze up, “like a deer caught in headlights”. Moreover, extensive cognitive
behavioral psychology strategies which have been successfully used with other skiers were not effective in helping him. The athlete eventually might be referred to a clinical psychologist who takes a more psychodynamic approach to the problem and might succeed with that method.

Gordon Allport, Raymond Catell, and Haris Eysenck Cattell (1993) developed a personality inventory with 16 independent personality factors (16PE) that he believed to describe a person. Eyseck viewed traits as relative, the two men significant traits ranging on continuam from introversion to extraversion and from stability or emotionally. They argued that personality could best he understood by considering traits that are relatively enduring and stable over time.

However, simply knowing an individual’s personality traits will not always help us predict how he or she will behave in a particular situation. For example, some people anger easily during sport activity, whereas others wisdom get angry. Yet the individuals who tend to get angry in sport may not necessarily become angry in other situations. So simply knowing an individual’s personality traits does not necessarily predict whether he or she will act on them. The predisposition toward anger does not tell you what specific situations will provoke by focusing on the situations or environment that might trigger behaviors, rather than personality traits.

Stuart & J.H Biddle (2008) – conducted a research on Motivation and self-perception profiles and links with physical activity in adolescent girls. Research shows a decline in participation in physical activity across the teenage years. It is important, therefore, to examine factors that might influence adolescent girl’s likelihood of being physically active. This study used contemporary theoretical perspectives from psychology to assess a comprehensive profile of motivational and self-perception variables in 11–16 year old English girls (n=516). A cross-sectional design was employed. Cluster analysis was conducted to (a) map cluster
profiles and (b) test whether clusters differed in physical self-worth, global self-esteem, and physical activity. Results revealed a five-cluster solution depicting 40% of the sample as moderately motivated, 30% lowly motivated in two clusters, and 30% highly motivated, also in two clusters. However, differences between clusters on physical activity were quite small. Results show potential areas for intervention to enhance the motivation of adolescent girls for physical activity.

Elsevier .B.V & Jaana Haapasalo (2009) – in their study Personality profile of subjects engaged in high physical risk sports. The present study investigated the relationship between some personality traits and participation in high physical risk sports. Twenty-seven alpinists, 72 mountaineering-related sportsmen, 221 sportsmen and 54 subjects not engaged in any risky activity, were administered the Sensation Seeking Scale, the EPQ, the Impulsiveness Scale of the IVE, the Socialization Scale of the CPI, and the Susceptibility to Punishment and Reward Scales. The results seem to indicate that there exists a personality profile of subjects engaged in high physical risk normative activities who share the following characteristics: extraversion, emotional stability, conformity to social norms, and seeking thrill and experience by socialized means.

Asha (2003) examined the combined effect of creativity and intelligence on stress and mental health of college students. The sample consisted of 126 postgraduate students (61 male and 65 female students). Descriptive Test of Creativity, Mathew Test of Mental Abilities, Students Academic Stress Scale and Mental Health Inventory were used. The results indicated that the high creative high intelligent groups of male and female students experienced less stress and better mental health than the less creative-less intelligent male and female students. The study suggested that cognitive excellence is a resource for adapting to stressful conditions and fostering mental health.
The available literature regarding the relationship of physical activity and mental health in its clinical point of view suggests that exercise can reduce clinical symptoms of mental illness. For example O’neal et al, (2000) says that evidence obtained from anecdotal records, clinical observations, epidemic logical research and prospective studies suggest that physical activity may reduces an individual’s risk for developing depression and may alleviate symptoms in persons with mild to moderate depression.

Hodge, Ken & Petlichkoff (2008) conducted a research on Goal profile in sport motivation. This investigation compared cluster analysis with the mean-split procedure for examining goal-orientation profiles and examined whether the goal-profile groups revealed differences in athletes’ perceptions of their physical abilities. 257 rugby players (14–39 yrs) completed a questionnaire assessing goal orientation, perceived rugby ability and competence, and self-concept of physical ability. Unlike the mean-split procedure, in which scores are forced into high/high, high/low, low/high, or low/low groups, cluster analysis revealed groups that varied in low-, moderate-, and high-task and -ego goals. Moreover, no extreme group profiles (high-ego/high-task or low-ego/low-task) emerged when cluster analysis was used. Multivariate results from the cluster analysis revealed that Cluster 4 (low-ego/moderate-task) reported significantly lower levels of perceived rugby ability/competence than did Cluster 3 (high-ego/moderate-task), indicating that ego might be the determining orientation in adaptive or maladaptive goal profiles. The Cluster 3 goal-profile group (high-ego/moderate-task) scored highest on all 3 dependent measures related to perception of physical abilities. (PsycINFO Database Record (c) 2010 APA, all rights reserved) Asha (2003) examined the combined effect of creativity and intelligence on stress and mental health of college students. The sample consisted of 126 post-graduate students (61 male and 65 female students). Descriptive Test of Creativity, Mathew Test of Mental Abilities, Students Academic Stress Scale and Mental Health Inventory were used. The results indicated that the high creative high intelligent groups of male and female students experienced less stress and better mental health than the less creative-less intelligent male and female
students. The study suggested that cognitive excellence is a resource for adapting to stressful conditions and fostering mental health.

The available literature regarding the relationship of physical activity and mental health in its clinical point of view suggests that exercise can reduce clinical symptoms of mental illness. For example O’neal et al, (2000) says that evidence obtained from aneendotal records, clinical observations, epidemic logical research and prospective studies suggest that physical activity may reduces an individual’s risk for developing depression and may alleviate symptoms in persons with mild to moderate depression.

David Fletcher & Jennifer Cumming conducted a study on Motivational Profiles and Psychological skills Use within Elite Youth sport. This study investigated associations between achievement goal orientations and reported psychological skill use in sport. Five hundred seventy three elite young athletes completed the Perceptions of Success Questionnaire (POSQ; Roberts, Treasure, & Balague, 1998) and the Test of Performance Strategies (TOPS; Thomas, Murphy, & Hardy, 1999). Cluster analysis revealed three distinct goal profile groups: Cluster 1—Higher-task/Moderate-ego (n = 260); Cluster 2—Lower-task/Higher-ego (n = 120); and Cluster 3—Moderate-task/Lower-ego (n = 119). A MANOVA revealed a significant multivariate effect, Pillai’s Trace = .11, $F(16, 1076) = 3.75, \ p = .001$, $\eta^2 = .05$, with post hoc tests determining that higher-task/moderate-ego athletes reported using significantly more Imagery, Goal setting, and positive Self-talk skills when compared with Lower-task/Higher-ego and/or Moderate-task/Lower-ego athletes. These findings are discussed with respect to the potential role that achievement goals play in the application and development of psychological skills in youth sport.

Bruce C Ogilvie (2010) in his Longitudinal studies of the potential effect of high-level competition upon the character formation of youthful competitors in sports
cannot be found in the literature of psychology or physical education. In a recent study of age-group swimmers, trends for both boys and girls of ages between 10 and 14 appeared to be so consistent that it becomes possible to engage in more intelligent speculation about the effects of competition upon personality. The data, presented in cross-sectional form, will have to be interpreted with caution because of the highly select sample that they represent.

My research interest in the area of athletic personality, motivation, and the possible effects on character formation of competition has developed from extensive clinical experience with problem athletes. During a period of years, athletes from every sport representing every level from age-group competition through high school, college, and professional teams have been referred because of psychological problems. The

Hughes.s.l (2010) conducted a study among athletes. This study identified the personality profiles of athletes (n=66; 35 runners, 24 cyclists, 5 skiers, and 2 snowshoers) who participated in the Iditasport Human Powered Ultra-Marathon in Alaska, USA, in 1998, 1999 and 2000. Iditasport participants scored significantly higher on both the extraversion (t=3.79, p<0.05) and openness (t=3.01, p<0.05) scales of the NEO-Five Factor Inventory (NEO-FFI) and the experience seeking scale of Zuckerman’s Sensation Seeking Scale (SSS-V) (t=3.84, p<0.05) when compared to the norm groups. A significant correlation was found between experience seeking and openness scores, r(53)=0.54, p<0.05. These athletes also scored lower on the disinhibition (t=-5.47, p<0.05) scale of the SSS-V when compared to the standardized sample. No significant differences were found on the neuroticism, agreeableness and conscientiousness scales of the NEO-FFI or the boredom susceptibility and thrill and adventure seeking scales of the SSS-V.

Eva Nickson & Balazs (2003) conducted a study among the U S female athletes who were competitors in the 1972 Olympic Games. The resulting EPPS group profile
strongly points to the essential normality of these competitors. Within the framework of a well-balanced needs profile, the 2 highest group needs scores were in the realm of achievement and autonomy. Thus, these prominent athletes demonstrated the kind of personality profile anticipated from a group of women with seemingly high needs for achievement and self-accomplishment. It is concluded that the EPPS may be a promising personality measure to assess achievement motivation. Bowers (1973) found that the interaction between persons and situations could explain twice as many behaviors as traits or situations alone.

The interactional approach requires investigating how people read individually in particular sport and physical activity settings.

For example, Fisher and Zwart (1982) studied the anxiety that athletes showed in different basketball situations before, during, and after the game. Here are a few of the game situations.

* With 2 seconds left and score tied 70-70, you have just been fouled and your free throw might win the game.

* The crowd is very foul and is directing most of its comments toward you.

* You have just made a bad play and your coach is criticizing you.

* You are in the locker room after losing a game you really expected to win.

Given these situations, the athletes were asked to report to what degree they would react in these ways (worded as in the study)

a. Get an uneasy feeling

b. React on overemotionally
c. Want to avoid the situation

d. Get a “choking” feeling.

e. Enjoy the challenge

The athletes’ reaction to each basketball situation are colored by their particular mental and emotional makeup, Jeff, who is usually anxious and uptight, may “choke” before shooting free throws with a tied score, whereas Pal, who is laid back and less anxious, might enjoy the challenge.

Another approach in personality type involves specifying certain key characteristics or extreme scores that must be manifest before any individual is said to fit the type. In this approach people who do not fit the type are simply ignored, and attention is focused on the relatively pure cases that fit the ‘strike zone’ for the type in question. For e.g. in base ball the ‘strike zone’ is over the plate and at a specific height, between the batters’ knees and just below the shoulders. Anywhere else is the ball zone. Similarly, if people’s trait characteristics all fail within a given ‘type zone’. fitting a particular pattern for cluster, we can speak of a psychological type. People must show certain specific personality characteristics to a certain degree before they are typed. The ‘strike zone’ approach is also used to identify type A and type B people Type A persons are hard driving and competitive. They live under constant pressure, largely of their own making. They seek recognition and advancement and take on multiple activities with deadlines to meet. Much of the time they may function well as alert, competent, efficient people who get things done. When put under stressful conditions they cannot control, how ever they likely to become hostel, impatient, anxious, and disorganized.

Type B persons are quite opposite. They are easy going, non-competitive, placid and unflappable. They weather stress easily. On a tread mill test. Type A’s expend more energy and use a greater proportion of their oxygen capacity than do Type B’s,
yet they rate their fatigue as less severe. If asked to judge when a minute has lapsed
Type A’s judge the periods as significantly shorter than do Type B’s. In other words,
Type A’s show a push toward achievement, a suppression of the costs fatigue) to
themselves, and impatience with delay.

It is particularly interesting that when placed in long lasting stressful situations
over which they have little control, Type A’s tend to give up. They show a kind of
helplessness and become less responsive and less effective than Type B’s. At first,
they struggle to control the situations; but when they fail to do so they stop coping.

While developing the research based concept of emotional intelligence. Mayer
expression al (1999) said that the field of cognition and affect provided some of
the foundation for a new theory of emotional intelligence. He included many
variables as emotional perception, emotional integration, understanding emotion,
and management of emotion and measuring emotional intelligence in his overall
description of emotional intelligence.

Mayer and Salovey proposed the ability model of emotional intelligence. They
opine that emotional intelligence is a type of social in that involves the ability to
monitor one’s own and others emotions, to discriminate among them and to use
this information to guide ones thinking and action. They proposed four broad
components of emotional intelligence.

1). Perception, appraisal and expression of emotions: It includes identification
of ones” and others emotions, ability to discriminate between accurate and
inaccurate emotions and express them accurately.
2). Emotional facilitation of thinking: It embraces generating emotions as aids to judgment and memory, encouraging problem solving and facilitating, reasoning and creativity. It changes mood swings from pessimistic to optimistic etc.

3). Understanding, analyzing emotions and employing emotional knowledge: This includes the ability to label emotions and recognize relations such as relation between liking and loving, ability to interpret the emotions, their meaning, understand complex and simultaneous feelings of love and hate.

4). Reflective regulation of emotions: It helps in promoting emotional and intellectual growth. It is concerned with the ability to stay open to feelings, both pleasant and unpleasant, ability to detach from an emotion and ability to monitor and manage the emotions reflectively. It includes the selection of emotionally rewarding work, which enhances self-motivation.

This model predicts that emotionally intelligent individuals are more likely to have emotionally sensitive parenting, able to reframe emotions effectively, choose good emotional role models, able to communicate and discuss feelings and develop expert knowledge in a particular emotional area such as moral or ethical feeling or spiritual feelings etc.

Somewhat distinct from mental ability model is mixed model. In this emotional intelligence has been conceptualized as involving much more than ability of perceiving, assimilating, understanding and managing emotions. These alternative conceptions include not only emotion and intelligence but also motivation, non ability traits and global personal and social functioning (Goleman, 1995).

2.2 STUDIES ON PERSONALITY TYPE
Versari (2001) tested and evaluated 510 Athletes In order to answer questions related to athletes personality type. To examine the relationship between personality types, sport preference and performance, team and individual athletes’ personality profile were designed. Results indicate that teams exhibit a predictable personality profile and that by understanding the psyche of the athlete, performance and team productivity can be enhanced. Inter personal communication amongst players and coaching can improve players can take advantage of their personal preferences and strengths and work on developing other areas identified in the assessment process. Optimal communication and performance can be achieved by identifying the athletes’ preferred learning and personality styles.

Personality types are attracted to and succeed in certain sports just like they do in certain occupations. The more athletes and coaches understand about their personalities and the team profile, the more productive they can be. Versari points out certain Benefits of Understanding the Personality Profile of Athletes as 1. Helps assess the fit between persons and sports and even positions in a team. 2. Helps coaches and athletes in a strained relationship analyze the source of the conflict and build a strategy to reduce it. 3. Can leads to motivated and committed behavior. 4. Useful for athlete and sports professional in career and life planning, self-management (such as stress/time management) and interpersonal skills areas and 5. Many applications in team building and management.

Pachauri (1999) feels that certain personality attributes are important to achieve success in sports. Another popular belief is that certain personality attributes may be developed or modified through sport participation. Both of these issues have been extensively investigated over the last three decades. Reviewing the studies concerned, the author remarks that no distinguishable athletic personality has been shown to exist. No consistent dispositional personality differences between athletic sub groups have been shown to exist. But he suggests that although many researchers in sport psychology feel that the area of sport personality research has yielded no useful findings. It may be argued that this is not true. The sport personality
research of the last three decades has progressed by paradigms theories and assessment methods to provide sport psychologists with some definite findings.

Swaminathan, (1998) In his comparative study of the same kind to find out whether participation in sport event has any relationship with state and trait anxiety and with the expression of anger, Speilberger’s scales measuring these three variables were given to 100 high school students of whom 50 represented their school in sports: while the rest never participated in any sport activity. Only male students in the 10th, 11th and 12th standard were studied. Analysis of the results using the critical ratio revealed that participation in sports has significant relationship to state and trait anxiety and anger- in dimension. But no significant difference between sport and non-sport students on anger out and anger expression scores, reveals that participation in sport does not have any bearing on these two factors. In fact, on anger expressions both group of students have scored high indicating that during adolescence anger expression is a common feature.

In their (Alittm; & Shahriar,2001 ) comparative study of psychological characteristics of male and female athletes and non-athletes students. 626 students from Universities in Tehran, Iran were studied. The results of the study show clear difference in psychological abilities between athletes and non-athlete students, subjects who take part in physical activity show higher levels of self confidence, concentration, motivation, controlling psyche-level, goal setting, and imagery. Further more those subjects who exercise regularly but are not member of university teams report higher levels of these abilities. Analysis of variance revealed no difference but athletes showed high scores on all measures.

Schurr, Ashley and Joy (1997) in their research on 1,596 male college students who completed 16 PF, clearly, demonstrated that personality profile differences exist between team and individual sports. Team sport athletes were observed to be more anxious, and extroverted than individual sport athletes. Direct sport athletes (basketball, football, soccer etc.).
Williams and Parkin (1980) used the Cattell’s 16 PF questionnaire to investigate the personality profile of 85 male field hockey players. The subjects consisted of three groups based on achievement level in hockey. Multiple discriminate analysis revealed that the international group (N=18) which included the 1976 Olympic Gold Medalists had significantly different profile from the club group (which consisted of players of average ability) while the third group which comprised of players, who had represented their province (N=34) and who were regarded as being advanced were not significantly distinguishable from either or the other two groups, they appeared to be more similar to the players at the highest level.

S.E. Frazier tried to identify and compare psychological characteristics of male and female, elite and non-elite marathoners and to determine if those characteristics predicted ability level in the marathon, EPI was given to 68 male and female marathoners. The variables measured included extroversion - introversion, and neuroticism - stability. comparisons were made between male and female and elite and non-elite runners. Differences were found between male and female marathoners with females being significantly higher on neurotism stability (p < .01).

Sing and Debnath administered Indian adaptation of Catel’s 16 PF (S.D.Kapoor) to female gymnasts (N=12) and female football players (N=15) of national level to investigate the personality profiles and difference in the personality traits of these players. They conclude that football players differ significantly from gymnasts of six of the sixteen personality factors. Gymnasts were found to be more intelligent, more conscientious, having stronger super-ego strength and more controlled, having higher self – concept when compared with the National Football Team. Football players were found to be more suspicious, more apprehensive, and moody and more self-sufficient.

Kamalesh (1999) conducted a study on 191 athletes who took part in the 41
inter-university athletic meet. Five tests namely Lorrence’s tests of creative thinking
(non-verbal From- A), Standard progressive Matrices (Adults) Raven, IPAT (Form-
A) by Eysenck, and A.S. Reaction study adapted by Dr. N.K. Duth were administered.
Results revealed no significant difference in the performance of various athletics
groups (high performing and low performing boys / girls) on the tests of these
variables (levels of creativity, intelligence, anxiety, extraversion-introversion and
neurotism and ascendance submission). high performance did not show any marked
trend, negative or positive from the low performers nor did men athletes differ
from women athletes significantly on any of the variables.

Morgan and Pallock reported that elite marathon runners possessed unique
psychological characteristics that differentiate them from the normal population.
Their findings are based primarily on the profile of Mood States (POMS), which
consists of six factors: tension, depression, anger, vigor, fatigue and confusion.
The researchers found that the elite runners scored higher than college norms on
the POMS vigor factor in contrast to the other five mood states, which fell below
college norms.

Simpson (2003) administered Cattell’s 16 PF to women gymnasts to determine
their personality traits and to relate these factors to variable of success, level of
performance and experience. These factors were then pooled to determine and
isolate if possible, a gymnastic type personality profile. It was concluded that there
was no elite gymnastic personality. Gymnasts who qualify for national championship
and gymnasts who do not, exhibit the same personality factors which differentiates
between women gymnastic participants and the normal female population. A unique
personality profile is not related to successful performance in gymnastics.

Lipowski and Liposka (2001) conclude their study asserting that neuroticism
is the personality feature most strongly connected with women’s participation in
physical recreation. The higher level of this factor, the smaller amount of recreation
forms, shorter period of recreation practice. This enables arguing that Neuroticism
is not favorable for health-promoting behaviors. Neuroticism correlates negatively with general life satisfaction and own health esteem which should be a factor motivating to undertaking physical activity in order to improve one’s health. The opposite relation occurs in case of Extraversion and number of forms recreation, which is a result of the fact that extravert women require various stimulation. The extraverts, as generally more satisfied with their own lives, undertake physical activity in order to keep their health state rather than to improve it. It is probably due to their tendency for accepting the present state. As could have been presumed, Conscientiousness and openness to experiences are positively correlating with number of various forms of recreation, further more conscientiousness is related to the time of its duration. Interesting results concern analysis of agreeableness. Woman whose aim in recreation is keeping good frame of mind are more frequently characterized by the high level of this feature, while the ones with lower Agreeableness more often aim to improve their health.

What seems to be quite crucial is research for the relation between health-promoting behaviors with personality features of performing persons. The task of instructor is suggesting in co-operation with psychologist the type of recreation corresponding to the individual preferences rooting in personality structure. Thanks to such a procedure the fuller realization of health improving function of physical recreation is possible. It is especially important in case of women, who are generally less interested in movement than man.

The scientific problem is that in sport psychology literature a major disagreement is common about existence of character differences between sports persons representing different kinds of sports. 54 track and field athletes and 73 basketball players were studied by Malinausks (2001) to solve the same.

Research showed that female track-and-field athletes have slightly weaker communicability than female basketball, two third of female basketballs have communicability stronger than average, and more than a half of studied female track-
and –field athletes have average or weaker than average communicability. Therefore, on the basis of interpretation statements for study findings , it is possible to say that female student track-and-field athletes are reserved, critical, calm, distant, preferring things to people avoiding compromise in their attitudes, pedantic, always keeping accepted order. It is possible to think that they slightly easier than track-and-field athletes adapt to situation when many unsolved problems appear. However, difference according to communicability between male and female track-and-field athletes are not statistically significant.

Female athletes, compared with male track-and-field athletes, are just slightly calmer, slightly more peaceful, tolerant of traditional difficulties, believing in what they were reached, what is “tried”. The finding is the female student- basketballers compared with female track-and-field athletes, has stronger communicability, and is more dominant, better adaptable. Male track-and-field athletes, compared with male basketballers, have weaker communicability; just one third of track-and-field athletes have stronger than average community, and two thirds- average or weaker than average communicability. Differences between men and woman (basketballers ) are not statistically reliable. Men’s and woman’s analysis showed that statistically significant differences exist between basketballers and track-and-field athletes according to communicability. Basketballers more cheerful, emotionally more expressive, more attentive, more inclined to be with people and in socially impressive environment. They are less afraid of criticism, easier remembering people’s names, easier joining in to groups of active people. Obtained data do not confirm the alleged thought that woman are more communicable than men.

According to abstract thinking male and female track-and-field athletes do not have statistically significant differences, male and female basketballers do not differ significantly. According to abstract thinking statistically significant differences were found between basketballers and track-and-field athletes ( male and female
together). Thinking in to account interpretation for Cattell’s test factors, it can be said that researched basketball players are brighter, clever, more quick-witted, faster learning new things. Researched track-and-field athletes perceive more concretely.

Emotional stability is also important character trait. From obtained data it is not possible to say whether female track-and-field athletes are emotionally more stable than female basketballers. Weaker than average emotional stability is characteristic to 6 female basketballers and just one female track-and-field athletes. Better than average indicators of this trait are characteristic to a little more than half of respondents. Clear emotional stability (stronger than average) is characteristic to 11 male track-and-field athletes (from 21) and 24 basketball players (from 49). Male and female track- and- field athletes are not different statistically significantly, also there isn’t statistically significant difference between male and female basketballers. However, group of students of researched kinds of sports (basketball and track-and-field athletes) are different statistically, reliably track –and- field athletes are emotionally more stable. Obtained data confirm the thought that, taking into account interpretation statements for Cattell’s test factors, track-and-field athletes are emotionally more stable, not avoiding reality, more patient, regularly thinking about life, having stronger spiritual power, more able to keep strong morals, more able to obey and adopt, if emotional problems appear basketballers (male and female) are more neurotic, more tired, more irritable, more actively expressing their dissatisfaction – Malinauskas (2001).

Bawa and Debnath (1999) tried to explore personality characteristics of male gymnasts in Indian contest. Personality plays important role in achieving high performance in all fields of life including games and sports. The investigation has been conducted to determine the relationships of various personality traits with competition performance in gymnastics. The other purpose of the study was to determine significant of difference in personality characteristics among high,
mediocre, low performers in competitive gymnastics. The study has conducted on 108 Indian male gymnasts participated in senior National gymnastics championships – 16 P F questionnaire by Cattle and Eber was administered on each subject.

The total sample was divided into three groups on the basis of competition performance score, ie high performance group (H P G) mediocre performance group (M P G) and low performance group (L P G). Person’s product moment correlation was applied to compute relationships of various personality traits with that of competition performance in case of performance groups, one way analysis of variance (ANOVA) was applied to find out the significance of differences in various personality characteristics among the three groups. scheffé’s post hoc “T” was applied to find out the significance of difference on these personality characteristics in which “F” ratio found was significant. The result of the study reveal statistically significant negative correlation between factor F and competition performance: Factor I and competition performance. Factor M and competition performance- The score obtained by each gymnasts to compulsory competition was considered as competition performance of each 10 measured. It has also been found that high performance group in more reserved, more sober, more stable, more tough-minded and more practical when compared with mediocre and low performance groups.

Cricket is a game demands specific skills and tactics compared to any other sport. Shukla et al. (1997) tried to explore the difference between elite and non-elite players on their personality. They say that the participation in sports will acquire certain behavioral patterns specific to the sports setting they encounter of re-enforcement, contingencies are strong and consistent enough to condition certain responses. Certain personality traits can be learned while participating in any endeavor including sports. The study was based on a sample of 240 Ranji Trophy cricket players of 15 teams. Winners, runners and third place holder were selected from five zones (east, west, north, south, and central) in india during 1987-88. None
sportsmen 232 were rationally selected having sex as controlled variable who never participated in sports and were medically fit, Cattell’s sixteen personality factor (16 PF) questionnaire was given to both groups. With the help of computer the multiple discriminate factor analysis was computed at 0.01 level of confidence. The study results support the earlier findings that the elite athletes differed significantly between a successful and unsuccessful athlete on psychological factors and personality traits (Cratty, 1983, Mahoney & Avener 1977, Kamalesh, 1989)

Some other authors tried to trace out the personality factors of athletes in tune with athlete’s particular sport group. This group may be based on various criteria. Supinski, et al 2001, for e.g. Analyzed a cluster of selected personality features especially those, which are suspected to have an immediate or intermediate relationship with the kind of practiced sport. It has been endeavored to construe a ‘‘ model ‘‘ of psychological characteristics bound up with the selection and functioning of competitors, in particular sport categories; the description of differentiation of competitors, representing various sports and who are characterized by the selected types and features of personality. The sport category has been determined here according to pressure, which is exerted on an opponent. The group comprised 1259 persons, among them 665 professional sports men and 594 persons who do not coach sport, (control group, all aged 19-30). There were representatives of 37 sports categories amongst the sports men. The model of personality traits that has been created by the authors dose not fully give grounds to predict how to subordinate the concepts to the particular sport category (58 % cases have been correctly qualified) . The highest significant statistical predictive value has been received for an “intermediate pressure exerted on an opponent”. The results, which have been analyzed, indicate to the relationship of some psychical features with the requirements aimed at particular sports. The differentiation of the models and personality types describe some tendencies, though they are not always very distinct. The selection of the subjects (the students of the Wrochaw Sports Academy), on one hand correct (uniformity of the subjects in respect of, for example, interests,
education) on the other hand rejects the group of professional competitors.

In one study by Aidman and Bekeman (2001), there distinct groups of players were identified elite (senior players), non-elite (reserves) and sub-elise ("swingers" players who played at both levels) groups were found to be predictably different on Self-discipline, Achievement Striving and Neuroticism. Three categories of games played in the regular season were identified: “Close Games” that were in dispute for almost the entirety of the game, ‘Easy Wins’ where the result was well in the team’s favour most of the way and no longer in dispute and ‘Bad Losses’ where they were well beaten most of the way and no longer in the contest interactive effects of personality and playing conditions (easy win, bad loss or close game) on player performance were analyzed through a series of Hierarchical Regression Analyses. In particular, Self-discipline and Neuroticism significantly influenced performance in the “easy win” games, whereas performance in “close” games was affected by Neuroticism, Self-liking, Self-competence and Global Self-worth.

Further, these game conditions were found to interact with player perceptions of somatic stress response ("exciting" versus "threatening") in influencing player performance, which supports the hypothesized role of stress appraisal and not the absolute levels of anxiety. In determining athletic performance at elite level. Players, who report an overly threatening appraisal of their somatic stress responses, perform more poorly in general and to a much greater extent when incurring a heavy loss, as shown with far lower scores on average credits, Players who report being excited by their somatic stress response, perform equally well in bad losses regardless of threatened they feel by stress, and perform with very little, if any difference, in games where they are winning well. The data suggests, however, that how these players perform in close games depends on how threatened they feel by their own somatic stress response, with those who report being highly threatened, tending to perform better. The data show that the pattern of performance deteriorate as a player feels more threatened than they do excited by their stress response. Those players who show a balanced or exited appraisal demonstrate no statistical difference in the
pattern of play between the game conditions. Overall, the findings tend support to the notion that levels of athletic achievement, as well as specific performance, may be predictable – both accurately and meaningfully- from personality characteristics, provided that a sound hypothesis-driven approach is utilized (Aidman & Bekerman, 2001).

Expectancy research in sport focuses on performance cues (i.e. physical ability, effort) omitting the potential influence of personality cues (i.e. confidence) on expectations and failing in link expectations with performance. The purpose of Solomons’ (2001) study was to examine the influence of various impression cues (performance and personality) on athletic performance. Head coaches completed the Expectancy Rating Scale to assess expectations of physical ability, and both coaches and athletes completed Vealey’s Trust Sport Confidence Inventory to assess athlete confidence levels. Multiple regression analyses revealed that coach evaluation of athlete confidence was the only significant predictor of performance. Levels of the three expectancy variables differed across sport type.

Rhodes et.al (2001) investigated the moderating influence of the five factor model of personality (FFM) on the theory of planned behavior (PB) in the exercise domain, Although an analysis of all possible moderation effects was conducted, it was hypothesized that high extraversion (E) and conscientiousness (C) individuals would demonstrate significantly stronger relationship between intentions and exercise behavior than those low in E and C Conversely, it was expected that high neuroticism (N) individuals would show a significantly wexxxx relationship between intension and exercise behavior. C moderated the effects of affective attitude on intention and intention on behavior. The results generally support the possibility of personality being a moderator of the PB but highlight the need for future research and replication.

Tatters field (1975) Conducted an experimental study, among athletes. Findings of his study proves that development of personality in 106 boys (aged 11-14years)
heavily engaged in a competitive swimming environment one can say that the total personality profile did change during the experimental period and relative to a control group of non-competitive type boys the most pronounced changes were in the direction of increased extroversion and decreased anxiety and a lower level of independence.

Manoj and Subramanynm (2000) carried out one investigation to find out the gender dominance on inertia, Activation, and stability, which were the components of personality. The sample consisted of 100 sports persons from different sports and games, taken from Kerala State (50 male and 50 females). The age of the subjects ranged from 21 years and above. The data were collected by using Mathew I.A.S. Rating Scale Questionnaires. The results indicate that there was no such significant difference in the analysis of the data. Investigation was done on dominance level of Inertia, Activation, Stability. Inertia + Activation, Inertia + Stability, and Activation + Stability. The data on stability dominance group was found that female sports person showed a higher degree of stability dominance. The data on inertia + Activations dominance characters, no such significant difference was found between Sex and I.A.S. On inertia stability dominant character a high significant difference was found between sex and between the variables I.A.S. On Activation + Stability female sports person showed higher degree in this linked dominance. Except the linked character of Inertia + Activation all the result showed the female sports persons were dominating higher than the male sports persons.

They concluded as follows:

1. Analysis of data showed that there was a significant difference on male and female sport persons, inertia, activation and stability level on stability dominant group and also found that female sports person showed a higher degree of stability dominance.
The present conception views stability as stress tolerance, freedom to adjust and final happiness in different types of situation and act or not act or and choose. So a sportsman with a great deal of stability has maximum stress tolerance. However he or she has also a very sensitive, discriminating nervous system. They respond to delicate things like incongruity of instruction, moral contractions and so on. They are aesthetic, philosophical and are capable of deep emotions. Through he is capable of adjusting to a variety of new situation uncongenial (Morally, esthetically and socially) situations cause stress in them and create state of intense and prolonged anxiety or deep depression. Unbearable prolonged contradictions can land him in schizophrenia.

2. Analysis of data on inertia + Activation dominant characters, no such significant difference was found between sexes or between the inertia, activation and stability. Comparing this group with western psychological concept, it is a mixture of introversion and extroversion. In this analysis male and female sports person showed equally dominant character.

A men or women with a great degree of inertia is generally well adjusted when not exposed to stress, they are incapable of having deep emotions.

A man or woman with higher activation was found with a great deal of restlessness and ambition. They respond the stress with aggression. This reactions are individualistic and purposive.

3. Analysis of data on inertia +stability dominant character, a high significant difference was found between, sexes and also between the variables (I.A.S).

The modern concept of introversion involve a mixture of inertia and stability difference found between the male and female sport persons showed a higher degree of this linked dominance.
4. Analysis of data of activation + stability dominant character, higher significant differences were found between the sexes and also between the variable (I.A.S.). The modern concept of extroversion involves a mixture of activation and stability. In this analysis it was crystal clear that male and female sports person showed higher degree of this linked dominance.

5. Except the linked charted inertia + activation all the three results of the analysis, showed female sports person were dominating highly in the other three characters.

The study of relationship between personality and sport performance is a dynamic component of sport psychology (terms and Nature, 2002). A psychological analysis of nature will be incomplete without variously personality.

Regarding the review of related literature on personality with exclusion can be draws.

1. Research findings are rather pychal in the cause whether the outstanding athiets posseciory aisplayed by the agerage the personality of the

2. The findings related t personality in sport is subjected to situation according to the differences in of personality, methodology, sample etc.

2.3 STUDIES ON PSYCHOLOGICAL PROFILE EMOTIONAL INTELLIGENCE

2.3.1 Some basic concepts related to emotional intelligence

A number of concepts like experiential intelligence, emotional effaces, social intelligence, inter and intra-personal intelligence have provided the basis for the development of the EI concept. A brief discussion of these concepts may help in understanding the EI concept in its proper perspective and distinguish it from other related concepts.
The merging of emotion and intelligence as a cognitive ability under the caption of emotional intelligence (EI) was proposed by Peter Salovey and John Mayer (1990). It was defined as “ability to monitor one’s own and others feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions”. The concept of EI however, received popularly by Daniel Goleman in 1995.

Even though the term EI has received considerable attention recently, earlier psychologists and philosophers had already laid down the foundation Thingujum (2002) quotes Spinoza, Aristotle, and Ellis. In 1677, Spinoza said that both the emotion and the intellect together contribute to the ultimate cognitive not. He talked about three levels of cognition for knowledge, that is, emotional cognition, intellectual cognition, and a kind of institution. Aristotle also stressed on what reason dictates when one gets angry with the right person to the proper extent at the right time. In 1962 Ellis, pointed on that human emotion and thinking are not separate process, but that they significantly overlap and can never be viewed completely apart from each other.

Sternberg (1998) talked about triarchic theory of Intelligence that consists of componential intelligence, experiential intelligence and contextual intelligence. The third component, contextual intelligence is very much overlapping with EI because it manages our ability to handle everyday life affairs in an efficient and practical way. The central ideas are our capacity to make adjustment to various contexts with a proper selection of contexts to that we can improve our environment in a better way to meet our needs. “Street smart of business sense” are the best words to express contextual intelligence. Without having high IQ one can have high contextual intelligence (Zimbardo & Gerring, 1996).

Considering the observations of various authors like Ellis, Mource, Wechsler, Gardner, Sternberg, Salovey and Mayer etc. Thingujam (2002) concludes that it is by now no surprise to welcome a new construct of EI if we took minutely at the following
points: 1) the inseparability of “human thinking and emotion” by Ellis, or emotion being considered as “higher form of intelligence” by Mowrer, 2) Wechsler’s contention of including affective ability for measuring total intelligence; 3) the entry of intra-personal intelligence and interpersonal intelligence in multiple intelligence by Gardner 4) the inclusion of contextual intelligence in triarchic theory of intelligence by Stemberg 5) the several criticisms posed against social intelligence in terms of theoretical conceptualization by Salovey and Mayer, Precisely, the symbolic nature of emotion and cognition are very much supported by the existing literature.

Somewhat distinct from mental ability model is mixed model. In this emotional intelligence has been conceptualized as involving much more than ability of perceiving, assimilating, understanding and managing emotions. These alternative conceptions include not only emotion and intelligence but also motivation, non ability traits and global personal and social functioning (Goleman, 1995).

Goleman’s (1995) model of emotional intelligence is an example of mixed model. He states that emotional intelligence will account for success at home, school and at work, Among youth, emotional intelligence will lead to less rudeness; more popularity imposed learning and better decisions. At work, emotional intelligence will assist people in teamwork, cooperation and to work more effectively.

### 2.3.2 Experiential Intelligence

Epstein (1991) persuasively argued that besides national intelligence, there is a second kind of intelligence which is not measured by IQ tests and it is known as experiential intelligence. The rational mind learns by abstracting, analyzing, reasoning, etc., whereas the experiential mind learns directly from experience and operates by intellective wisdom. The experiential mind is more closely connected
to emotions than the rational mind and operates on the basis of past experiences. It is considered vital to the well-being of the individual because it automatically interprets what is going on, how one feels, and what should be done. The experiential mind influences everyday effectiveness and success by the way it orchestrates and, thus, enhances basis life skills.

### 2.3.3 Interpersonal Intelligence

This involves control of desires, recognizing and responding to other’s thoughts and feelings, knowledge of rules and strategies to resolve conflicts, organizing oneself, and making group decisions. Rather than focusing on a single EI, Gardner (1993) referred to the capacities that deal with one’s own feelings and those of others from two related but distinct intelligences. Inter and intra personal Intelligences. Research indicated that the effectiveness of people who relate to and monitor and interpret the feelings and motivations of others is independent of their performance on IQ tests and other conventional measures of cognitive and holistic achievement. The development of interpersonal intelligence depends upon, contextual, cultural as well as biological factors.

### 2.3.4 Emotional Competence

This is related to the demonstration of self-efficacy in emotion eliciting social transactions (Sanrni, 2003). Self-efficacy and emotion eliciting social interactions are considered central to the emotionally competent functioning of individuals (i.e., how-people respond emotionally, yet strategically and simultaneously apply their knowledge about emotions and motional expressiveness to their relationship with others). Self-efficacy is an individual’s capacity and skill to achieve desired outcome.

Sanrni (2003) integrated emotional competence with concepts such as wisdom, sympathy, self-control, fairness and sense of reciprocity. As individual’s moral...
disposition is related to his sense of emotional self-efficacy.

2.3.5 Family and the development of emotional Intelligence

Family is viewed as the primary context in which children’s emotional competencies are developed. Parents directly or indirectly influence children’s reaction to or way of coping with emotionally executive situations. The influence of parental expressiveness on children ability to interpret and understand others’ emotional reactions has been observed (Dodge, 1985). Further, parental expressions of emotions like hostility towards the child, and anger is related to the development of social-emotional competences of children as it shapes children’s feelings about themselves and others (Eisenberg or at, 1997). It has also been demonstrated that parental practices and behaviors are linked to children’s socio-emotional responses (Eisenberg & Fabes, 1994).

The study, conducted by Auke Toilegen and his colleagues used the Multidimensional Personality Questionnaire (MPQ) as an index of normal personality characteristics. The MPQ measures a broad range of normal personality traits, many of which are related to personal and interpersonal adaptation.

The last three personality traits in this study Positive Emotionality, Negative Emotionality, Constraint are similar in content to the broad personality traits of Extraversion, Neuroticism, and Psychoticism, respectively. Positive Emotionality is a composite of the traits of well being, Social potential Achievement, and Social Closeness. Hence, it is related to the broad experience of positive emotional states in an individual as well as interpersonal context. Well being in particular, is related to a sense of optimism and hope about one’s future, and attribute shown to function as a protective factor when faced with stressors that could place an individual at risk for emotional distress or disorder. Similarly, social closeness and social potency relate to the desire for and success at negotiating interpersonal associations with others. These characteristics, too, have been shown to function as “buffers” for
individuals who are under stress. Hence, we see a moderate degree of genetic influence on personality characteristics that may play a role in promoting or maintaining mental health, as well as moderate unique environmental influence and smaller but significant shared environment influence on these traits.

Negative Emotionality (a composite of stress reaction, attention and aggression) has been proposed as a general risk factor for emotional distress and disorder.

**2.4 STUDIES ON MENTAL HEALTH**

Although we might consider optimism and the expression of a positive mental attitude as a personality profiles, it seems reasonable to discuss separately the findings in this area given the importance accorded to these constructs in the literature on stress, coping and resilience. Writers and researchers in this area have generally approached the topic from a purely ‘environmental’ perspective, arguing that our expectations about the world (Generalized to encompass a broad sense of optimism or pessimism) are essentially learned as a result of the history of our daily interactions with people and things.

**2.4.1 Mental health and emotions**

An emotional consists of activity in the brain and nervous system that is reflected in bodily changes and in a particular subjective experience typically described as a feeling or mood. To understand the part that emotions play in coping and mental health, one must know emotions in the larger context of biosocial systems. To this end, in their article on ‘emotions and mental health’ they (Izard et al. 1998) describe the components of an emotion, the emotion system, and personality as a set of systems that has emotions as the primary motivational system. They include an overview of the and neurophysiology of emotions. As understanding of these process help in so appreciate how reality emotions play a direct role in physical
and mental health. They conclude with emotion regulation and the role of emotion in relationships and in specific psychological disorders.

Emotions are important factors in the development of a healthy personality and social competence and in the development of psychopathology. It has been noted that a person’s skills in understanding and regulating emotions are more important as overall competence than IQ.

Because emotions are compelling motivational forces, they have a pervasive influence on perception, thought, and action. Each of the discrete emotions of human experience has unique motivational characteristics, and their motivational power is stable across the life span. For example, fear motivates protective behavior and the search for safety and security at all ages.

Studies of the effect of emotions on behavior suggest that the motivational functions of emotions are inherently adaptive. Emotions become maladaptive when they are not effectively connected to appropriate thought and action. Thus, fear helps ensure our well being whenever our security is threatened, but unrealistic fear may lead to an anxiety disorder. Sadness over the loss of loved one can being a family together and strengthen social bonds, but unrelieved sadness and grief can lead to depression.

As a result of evolutionary processes through thousands of generations, our genes give us emotion response predispositions that are relatively specific to each emotion. Thus, a particular condition predisposes to think and act in a particular manner that facilitates coping with the situation, as when fear generates protective behavior in a dangerous situation. The evolutionary process that put so much adaptive information in our genes requires millions of years and proceeds at a very slow pace. By comparison, cultural evolution is rapid, it has greatly increased the number, variety, and complexity of emotion-eliciting events and situations in daily life. The
number and variety of responses required to adapt to contemporary life circumstances is far greater than that provided by biological evolution. Genetic predisposition to respond to natural clues to danger has worked well in keeping us from stepping off precipices or from exploring the recesses of a strange and dark cave alone, but it does far less well in protecting us from the multitude of culturally derived dangers of contemporary urban culture. In our complex society, we are required to learn a new array of protective substrates of the first two components but much less on the experiential component. The first function of the neural component is to evaluate the ongoing stream of information from our sense organs and to activate a change in emotion state when the situation requires it. In many circumstances incoming sensory information demands no new emotion, and the neural substrates can continue their work of sustaining the emotion state already prevent to consciousness. In a person of positive mental health, the ongoing state is typically the emotion of interest, the emotion that motivates most or our constructive and creative endeavors, including play, the learning of abstract knowledge, and the acquisition of the skills that lead to mental and social competence.

In some cases, the information we obtain through our sense from internal and external events requires the activation of a new emotion. When we perceive danger and the incoming information elicits fear. Neuroscientists have not yet explained the brain activities involved in the activation of other emotions. As present, we can only speculate that processes similar to those in four occur when a situation calls for joy, sadness, anger, or some other emotion.

Three things are important in evaluating the role of the neural component of emotion in mental health; however, these things are not altogether independence of other systems. First, misperceptions and misinterpretations can fool the brain and cause it to generate as inappropriate or unnecessary emotion. Misperceiving a garden lizard as it poisonous snake or an innocuous remark as threatening will activate needless fear. Second, because the brain has separate pathways for spontaneous
(involuntary) and intentional (voluntary) facial expressions of emotions, a person can intentionally deceive the observer. All that is repaired for deception is to learn to exert voluntary controlled smile may be inconsequential in a social greeting, but deleterious as a sign of innocence after antisocial behavior. Third, genetic defects or injuries in certain brain structures can dysfunction in the emotions system, and this can lead to serious deficits in social competence and to mental health problems.

2.4.2 Intelligence and mental health

Sakfike (1998) gives a clear idea about the relation between intelligence and mental health. He says that a general framework for relating intelligence to mental health is provided to cognitive models of well-being and intelligence. Healthy, well-being tends to reflect people’s cognition about themselves and the mental and physical worlds they inhabit. For example, depressed intelligence and to have self-esteem, to retrieve predominantly negative of excepts in reaving that experience the sentence side of life. Within this cognitive framework, there is scope for relationship between intelligence and mental health. On one hand, of the way in the development of intelligence and the behavioral expression of intelligence.

2.4.3 Personality, Gender, and Mental Health

Time urgency is one of the distinguishing characteristics of type A personality. Type A persons are hand driving and competitive, they live under constant pressure, largely of their own making.

Koslowdky, (1998) has explored the relationship of commuting with various affective and physical consequences in relation with mental health. A model that describes the process includes three main antecedent variables objective (commute-related and environmental) stressors, moderators and subjective (perceived difficulty of the trip) stressors.
Time urgency as a moderator variable has a cognitive component associated with it. During the commute, this manifests itself in the commuter who is acutely aware of the passage of time. Such an individual may look at his (her) watch all the time, may ask others if the time of the dashboard or overhead clock is really correct or they turn to the new station each brief of half-hour. For a commuter who is time urgent, the whole experience may be quite negative and strain responses may occur even before the commute actually beings. Deadlines, train schedules, and making connections are all time contingent and experienced awareness of close critical points may be sufficient to bring about strain reactions.

Gender as another major source for individual difference has been examined in relation with mental health. Research indicates that women not only experience stress more than men, they also have more symptomatology than men. Women are exposed to more stressful life extents than are men and, as a result they have higher rates of psychological distress. Women experience anxiety and mood disorders at a greater rate than men as a result of the kind of outcome measures that are typically used in research in this area. These studies tend to employ self-report measures of symptomatology. It is generally assumed that if an individual is coping reasonably, well, she/he is free from anxiety and depression. This conceptualization of effective coping leads to a bias in research findings given that women, more than men, often express distress. Some argue that women appear more distressed because they are more likely than men to report symptoms of all kinds. Gender-role factors contribute to the degree to which individual report symptoms and seek help. Traditional masculine and feminine gender roles differ in the amount of vulnerability and permissibility in seeking help from others. Traditionally, men are seen as strong and invulnerable, thus restraining men from showing symptoms of mental illness or seeking help. The traditional feminine gender role allows and even encourages vulnerability to problem, thus resulting in the greater reporting of illness symptomatology.
2.4.4 Physical health and mental health

Those who enjoy good physical health are most likely to have good mental health, which includes mental poise and balance, emotional control etc. Participation in games and sports presents opportunities for promoting emotional health and preventing delinquency, says Kamlesh (1983). He cites studies by Hardman, Kane who have confirmed that athletes with higher performance are more emotionally sound and less anxious.

In two field experiments with middle-aged adults the effects of exercise on well being were investigated by Alfermann and Stoll (2001). In both experiments participants were randomly assign to either experimental or mental group. The subjective well being was assessed before and after six programme. The results pointed to the fact that exercise is one, but not the only strategy to improve mental health.

Another study examines eating attitudes, body satisfaction, reasons for exercise and general psychological well being in female nonathletes and Division III college athletes. A total of 115 nonathletes and 94 athletes completed measures of eating attitudes, body satisfaction, trait affect, reasons for exercise, and perceived self-competence. On the majority of measures, the scores of athletes revealed less eating disorder symptomatology and healthier psychological functioning than the scores of nonathletes. These results indicate that female athletic involvement can be associated with healthy eating and psychological functioning.

More specifically, the effect of different exercise frequencies to psychological health of older adults was the focus of their study (watanabe and Takeshima, 2001) indicated that different frequencies of exercise showed improvements of psychological health more than in the control group. Therefore, these results suggested that those taking exercise should participate to exercise programme more than twice a week to gain psychological benefits.
In the case of athletes’ training, the frequency of physical exercise would be sufficient so as to produce psychological benefits.

Multby and Day (2001) go one step further. They searched the relationship between exercise motive and psychological well being. Among individuals exercising for less than six months, a number of extreme motivations for exercise were significantly related to poorer psychological well being. Among individuals exercising for six months or more, a number of intrinsic motivations were significantly related to better psychological well being.

Evidence obtained from anecdotal records, clinical observations, epidemiological research and prospective studies suggest that physical nativity may reduce an individual’s risk for developing depression and may alleviate symptoms in persons with mild to moderate depression (O’neal et al., 2000).

The ability of individuals to unsulate, protect, or inoculate themselves against the stresses of life through the regular exercise is called stress inoculation. Research shows that the psychological benefits associated with regular exercised do not normally require an increase in physical fitness (Rejeski, et al. 1998). Aerobic fitness, however, thus appear to be a necessary precursor to the stress inoculation effect. Acrobically fit individuals appear to be inoculated against stress, illness, and the general handses of life to a greater extent than less acrobically fit individuals.

A positive self-concept is valued as a desirable outcome in many disciplines such as sport, exercise, health, educational, developmental, clinical, and social psychology. Self concept is frequently posited as a mediating variable that facilitates the attainment of other desired outcomes such as physical activity, exercise adherence, or health related physical fitness (March, 2002). Even in studies in which self-concept is not the major focus of interest, it is useful to evaluate self-concept because of its importance as a mediating variable that facilities the attainment of
other desired outcomes cited above.

Exercise appears to have a positive relationship also with self-concept (Sonstroem, 1984, Soustroem, et all, 1994, Biddle, 1995). Sonstroern (1984) suggested that these changes in self-concept might be associated with the perception of improved fitness, rather than with actual changes in physical fitness. Although studies so far have not proved that changes in physical fitness produce changes in self-concept, exercise programs seem to lead to significant increases in self-esteem, especially with subjects who initially show low self-esteem.

Parallel to the sport personality research, the exercise and self-concept research has shown that it is best to think of self-concept of self-esteem not only as a general trait (global self-esteem) but also as including numerous content-specific dimensions, such as social self-concept, academic self-concept, and physical self-concept. As you might expect, research shows that exercise participation has the greatest effect on the physical dimension of self-concept (March & Sonstroem, 1995Fox, 1997).

In two field experiments with middle-aged adults the effects of exercise on self-concept and well-being were investigated. In both experiments participants were randomly assigned to either experimental or control groups. In experiment 1 a total of 24 female and male participants took part in an exercise program for six months. Physical self-concept, self-esteem, and subjective well-being were assessed before and after the 6 month program. Compared with wait-list control group (13 participants) exercises improved significantly in physical self-concept and decreased in psychosomatic complaints. In Experiment 2, 57 female and male adults participated in exercise programs for six months. Placebo attention groups were the control group. The placebo attention group members (36) took part either in relaxation of feedback training. Self-concept and well-being measures were assessed three times; before and after the 6 months after the program’s completion. The Exercise and self-Esteem Model (EXSEM) of Sonstroem, Harlow and Josephs
(1994) could be partially replicated by the authors (Alfennam and Stoll2001). It assumes that exercise first influences physical self-concept such that people develop a higher degree of physical competence and physical acceptance. This subsequently should lead to heightened feelings of global self-esteem. In addition, the main effects of time showed that not only exercise but also other kinds of intervention were able to influence the dependent variables. Motor performance tests likewise indicated that participants of all groups improved over time. The results point to the fact that exercise is one, but not the only strategy to improve mental health.

Ho et al. (2001) compared male and female college athletes’ global self-esteem and physical self-perception. The results showed that masculine and androgynous college athletes have significantly higher global self-esteem than feminine and undifferentiated college athletes. On the basis of athletes having higher self-esteem than non-athletes, the present study confirmed that gender roles like androgynous or masculine were more prominent that of feminine and undifferentiated for college athletes as they were more competitive in nature.

In a study conducted by Mathur (1981), the mean of the self-esteem scores was higher for the student participants in sports, but not significantly different than the mean self-esteem score of the non-participant students in sports.

A study entitled as “Motor skills and self-esteem in children in a private and a public school”, confirmed the results of earlier studies showing that there is a strong relation between motor competence and self-esteem. More interesting is the hypothesis that such a relation is influenced by type of environment (i.e., school setting) was supported. However, more research is needed before final conclusions with respect to the relation between environment and self-esteem/motor competence can be made (Moea, et al 2001).

2.4.5 Intelligence, Creativity and Mental Health
Asha (2003) examined the combined effect of creativity and intelligence on stress and mental health of college students. The sample consisted of 126 post-graduate students (61 male and 65 female students). Descriptive Test of Creativity, Mathew Test of Mental Abilities, Students Academic Stress Scale and Mental Health Inventory were used. The results indicated that the high creative high intelligent groups of male and female students experienced less stress and better mental health than the less creative-less intelligent male and female students. The study suggested that cognitive excellence is a resource for adapting to stressful conditions and fostering mental health.

The available literature regarding the relationship of physical activity and mental health in its clinical point of view suggests that exercise can reduce clinical symptoms of mental illness. For example O’neal et al, (2000) says that evidence obtained from anedotol records, clinical observations, epidemic logical research and prospective studies suggest that physical activity may reduces an individual’s risk for developing depression and may alleviate symptoms in persons with mild to moderate depression.

Kamlesh (1983) asserted that the sportsmen enjoy better physical health, which ultimately leads to sound mental health.

2.4.6 The Psychodynamic Approach

Popularized by Sigmund Freud and neo-Freudians, such as Curl Jung and Eric Erickson, the psychodynamic approach to personality is characterized by two themes (Cox, 1998). First emphasis is placed on unconscious determinants of behavior, such as what Freud called the id, or instinctive drives, and how these conflict with the more conscious aspects of personality, such as the superego (one’s moral conscience) or ego (the conscious personality). Second, this approach focuses on understanding the person as a whole, rather than identifying isolated traits or dispositions.
The psychodynamic approach is complex: it views personality as a dynamic set of processes that are constantly changing and often in conflict with one another (Vealey, 1992). For example, those taking a psychodynamic approach to the study of personality might discuss how unconscious aggressive instincts conflict with other aspects of personality, such as one’s superego, to determine behavior. Special emphasis is placed on how adult personality is shaped by the resolution of conflicts between unconscious forces and the values and conscience of the superego in childhood.

Although the psychodynamic approach has had a major impact on the field of psychology, especially on clinical approaches to psychology; it has had little impact in sport psychology. Swedish sport psychologists Apitzsh, (1995) has urged North Americans to give more attention in this approach, however, pointing out the support that it receive in non-English studies of its value to sport Apitzsh has measured defense mechanisms in athletes and used this information to help performers better cope with stress and anxiety. Specifically, he contends that athletes often feel threatened and read with anxiety. As a defense against their anxiety, athletes display various unconscious defense mechanisms, such a maladaptive repression (the athletes freeze or become paralyzed during play) or denial of the problem. When inappropriate defense mechanisms are employed, the athletes’ performance and satisfaction and affected. Through psychotherapy, however, athletes can learn to effectively deal with these problems.

A weakness of the psychodynamic approach is that it focuses almost entirely or internal determinants of behavior, giving little attention in the social environment. For this reason many contemporary sport psychology specialists do not adopt it, however, not all the behavior of an exercise or athlete is under conscious control, and at times it may be appropriate to focus on unconscious determinants of behavior. For example, a world-class aerial skis experienced a particularly bad crash, and when he recovered, he could not explain his inability to execute the complex skill
he was injured on. He described that in the middle of executing the skill he would freeze up, “like a deer caught in headlights”. Moreover, extensive cognitive behavioral psychology strategies which have been successfully used with other skiers were not effective in helping him. The athlete eventually might be referred to a clinical psychologist who takes a more psychodynamic approach to the problem and might succeed with that method.

2.4.7 The Trait Approach

The trait approach assumes that fundamental units of personality—in traits—are relatively stable. That is, personality traits are enduring and consistent across a variety of situations. Taking the trait approach, psychologists consider that the causes of behavior generally reside within the person. They minimize the role of situational or environmental factors. Traits are considered to predispose a person to act a certain way, regardless of the situation or circumstances. If an athlete is competitive, for example, he or she will be predisposed to playing hard and giving all, regardless of the situation or score. A predisposition, however, does not mean that the athlete will always act this way, a simply means that the athlete is likely to be competitive in sport situations.

The most noted of the traits proponents in the 1960s included Gordon Allport, Raymond Catell, and Haris Eysenck Cattell developed a personality inventory with 16 independent personality factors (16PE) that he believed to describe a person. Eyseck viewed traits as relative, the two men significant traits ranging on continuam from introversion to extraversion and from stability or emotionally. They argued that personality could best he understood by considering traits that are relatively enduring and stable over time.

However, simply knowing an individual’s personality traits will not always help us predict how he or she will behave in a particular situation. For example, some people anger easily during sport activity, whereas others wisdom get angry. Yet the
individuals who tend to get angry in sport may not necessarily become angry in other situations. So simply knowing an individual’s personality traits does not necessarily predict whether he or she will act on them. The predisposition toward anger does not tell you what specific situations will provoke by focusing on the situations or environment that might trigger behaviors, rather than personality traits.

### 2.4.8 The Situation Approach

The situation approach argues that behavior is determined largely by the situation or environment. It draws from social learning theory (Bandura, 1977) which explains behavior in terms of observational fearing (modeling) and social reinforcement (feedback). Simply stated, this approach holds that environmental influences and reinforcements shape the way one behaves. He might not confident, for instance, in one situation but tentative in another, regardless of his particular personality traits. Furthermore, if the influence of the environment is strong enough, the effect of personality traits will be minimal. For example, if the person is introverted and shy, he might act assertively or even aggressively if he sees someone getting mugged. Many football players restaurant gentle and shy off the field, but the game (the situation) requires them to act aggressively. Thus, the situation would be a more important determinant of their behavior than would be their particular personality traits.

Although the situation approach is not as widely embraced by sport psychologists as the trait approach is. Martin and Lunasden (1987) contend that the behavior is sport and physical education can be influenced by changing the reinforcements in the environment. Still, the situation approach, like the trait approach, cannot truly predict behavior. A situation can certainly influence someone’s behavior, but other people will not be swayed by the same situation.

### 2.4.9 The Interactional Approach
The interactional approach considers the situation and person as co-determinates of behavior—that is, as variables that together determine behavior. In other words, knowing both an individual’s psychological traits and particular situations are helpful to understand behavior. Not only do personal traits and situational factors independently determine behavior, but at times they interact or mix with each other in unique ways to influence behavior. For example, a person with a high hostility trait won’t necessarily be violent in all situations (e.g., as a frustrated spectator at football game in the presence of his mother). However, when the hostile person is placed in the right potentially violence might result (e.g., he hits a spectator from the other team who boos his or her favorite player).

Most sport and exercise psychologists favor the interactional approach to studying behavior. Bowers (1973) found that the interaction between persons and situations could explain twice as many behaviors as traits or situations alone.

The interactional approach requires investigating how people read individually in particular sport and physical activity settings.

For example, Fisher and Zwart (1982) studied the anxiety that athletes showed in different basketball situations before, during, and after the game. Here are a few of the game situations.

* With 2 seconds left and score tied 70.70, you have just been fouled and your free throw might win the game.

* The crowd is very foul and is directing most of its comments toward you.

* You have just made a bad play and your coach is criticizing you.

* You are in the locker room after losing a game you really expected to win.
Given these situations, the athletes were asked to report to what degree they would react in these ways (worded as in the study)

a. Get an uneasy feeling

b. React on overemotionally

c. Want to avoid the situation

d. Get a “choking” feeling.

e. Enjoy the challenge

The athletes “reaction to each basketball situation are colored by their particular mental and emotional makeup, Jeff, who is usually anxious and uptight, may “choke” before shooting free throws with a tied score, whereas Pal, who is laid back and less anxious, might enjoy the challenge.

Another approach in personality type involves specifying certain key characteristics or extreme scores that must be manifest before any individual is said to fit the type. In this approach people who do not fit the type are simply ignored, and attention is focused on the relatively pure cases that fit the ‘strike zone’ for the type in question. For e.g. in base ball the ‘strike zone’ is over the plate and at a specific height, between the batters’ knees and just below the shoulders. Anywhere else is the ball zone. Similarly, if people’s trait characteristics all fail within a given ‘type zone’. fitting a particular pattern for cluster, we can speak of a psychological type. People must show certain specific personality characteristics to a certain degree before they are typed. The ‘strike zone’ approach is also used to identify type A and type B people Type A persons are hard driving and competitive. They live under constant pressure, largely of their own making. They seek recognition and advancement and take on multiple activities with dead lines to meet. Much of the
time they may function well as alert, competent, efficient people who get things done. When put under stressful conditions they cannot control, however they likely to become hostile, impatient, anxious, and disorganized.

Type B persons are quite opposite. They are easy going, non-competitive, placid and unflappable. They weather stress easily. On a treadmill test. Type A’s expend more energy and use a greater proportion of their oxygen capacity than do Type B’s, yet they rate their fatigue as less severe. If asked to judge when a minute has lapsed Type A’s judge the periods as significantly shorter than do Type B’s. In other words, Type A’s show a push toward achievement, a suppression of the costs fatigue) to themselves, and impatience with delay.

It is particularly interesting that when placed in long lasting stressful situations over which they have little control, Type A’s tend to give up. They show a kind of helplessness and become less responsive and less effective than Type B’s. At first, they struggle to control the situations; but when they fail to do so they stop coping.