As we have seen, all mental activities involve the neuro-muscular system. The since organs, the brain, the spinal cord, and the muscles are all very active whether the mental activity knows, feeling or doing. This is no way we can neither accept the old notice that psychology deals with the mind or the mental activities; nor can we accept the position of psychologists like Watson who assert that the scope of psychology should be limited only to behavior. Often behavior cannot be understood without knowledge of the experience, which influenced the action. Our desires and our thoughts influence our activities. While psychology in its quest for general principles must observe and measures external behavior, it must also get information from the grown up human beings by asking them to describe verbally their own experience.

In a broad way we may state that psychology deals with two aspects of the problems of behavior. There is on the one hand the interest in the general laws of human behavior and experience; the aim of psychology is to formulate general laws which hold good of all human beings irrespective of their sex, race etc. On the other hand it aims at the study of individual differences. While all human beings are capable of learning, it is a familiar fact that some learn faster and take less time
and some take longer time to learn the same activity, poem or song. This is due to differences in memory, intelligence etc. There are also differences regarding personality, leadership, and so on. Some of these differences are tied with age. There are differences between the activities of children, adolescents, adults and old people. It is the aid of development psychology to study these differences between the various stages in the growth of human beings. Differential psychology studies the differences between individuals. When we study them we find that these differences themselves obey certain general laws. Thus, the aim of psychology is to study the individual differences as well as the general principles of behavior.

Sports performance has been found to be related to some personality variables. Extraversion, neuroticism psychoticism are among the variables which influence sports performance in addition to many other personality variables. Extraversion has been found to be highly related or supportive to dominance and sociability in athletes and sports participants by Sperling (1942), Tillman (1964), Ruffer (1965), Whiting & Stembridge (1965), Wernet and Gottheil (1966), Bruner (1969), Kane (1970) and Ikegami (1970). Extraversion, according to Alderman (1974), is a construct evolving out of Jung's (1933) early designation of the two major attitudes of personality: the extraverted attitude, which orients the person to the external, objective world, and the introverted attitude, which orients one towards the inner, subjective world. Eysenck (1947) whose development of the two
broad personality dimensions of neuroticism-stability and extraversion-introversion provides the major underlying theoretical structure of this trait. He describes extraverted individuals as: "Outgoing, impulsive, uninhibited, involved in group activities, sociable, friendly, craving excitement, and having many social contacts. They stick their necks out and take chances, act on the spur of the moment, are optimistic, aggressive, lose their temper easily, laugh a great deal, and are unable to keep their feelings under control."

According to Eysenck (1947), extraversion is at best a behavioral description of personality, but that it does possess biological causal source implication. He believes that extraversion can be explained at the neural level in that his extraversion-introversion scale reflects the strength of the excitatory-inhibitory functions of the central (cortical) nervous system. He (1967) also proposed that the extraversion associated reticular-cortical loop systems of the brain stem. It means that the dimension involves the reticular activating system. His proposal was founded in the belief that cortical excitation in response to external stimulation (such as the effects of competition) is higher in introverts than in extraverts.

It is through the linkage of the reticular formation and hypothalamus with personality dimension that Eysenck believes differing personalities will reflect their positions on a level of arousal continuum. For example, cortical excitation in response to external stimulation (e.g. a tension situation in sports) is postulated as
being higher in introverts than in extraverts. This is because he saw introverts as having weaker nervous systems than extraverts. Conversely, he believed that inhibition will be higher in extraverts as they possess stronger inhibitory mechanisms because of their stronger nervous systems. The reason for this is that weaker nervous system is more sensitive and begins to respond at stimulus intensities which are ineffective for strong nervous systems. This results in the weaker system's responses being closer to the maximum level of responding than those of a stronger system through the stimulus intensity continuum. Eysenck feels that this represents the cortical supremacy of introverts as producing a constraint of their behavior in accordance with conditioned and learned patterns of response that lead to the emergence of those personality traits characterizing introverts. Conversely, the absence of such supremacy leads to an absence of such constraints and to the emergence of extraversion traits.

According to Alderman (1974). "Eysenck's view can be interpreted as indicating that extraverts are low on excitation and high on inhibition, which introverts being the opposite. Athletes, then, would react quite differently to a rise in arousal level from competitive circumstances depending on whether or not they are mainly extraverts or introverts. For example, an athlete, high on extraversion would have more trouble "getting up" for a game than one high on introversion,
but would be better able to handle and channel arousal later in the game because of strong inhibitory mechanism.

The dominance trait appears to be one of the important personality traits of sportsmen which have two interesting implications for sports performance, e.g. (1) Eysenck expects extraverts to have low tolerances for sensory deprivation and higher tolerances for physical pain because they have higher thresholds of arousal. It explains why athletes are, in fact, highly physically active and relatively tolerant of physical pain, which is required in many endurance events and in the hard physical training programmers required for skill perfection. (2) It is generally accepted that an optimal level of arousal, stimulation, or activation, exists in each person where his performance is maximal. It is usually represented by an inverted U-curve relationship which shows that a person's level of arousal increases, performance increases up to an optimal point, after which further increases in level of arousal result in a deterioration of performance.

As reported by Alderman (1974), "Eysenck has taken this basic premise, related it to his personality variables, and stated that if extraverts have stronger nervous systems, which have higher thresholds to stimulus intensities (i.e. arousal), then they should be able to handle higher levels of arousal before their performance deteriorates. This is undoubtedly true in outstanding athletes. The ability to withstand the extremely high levels of arousal caused by intense
competition and the usually higher vociferous spectator reactions, without a consequent drop in performance, is the hallmark of a successful athlete. A partial explanation for this ability to withstand pressure may lie in Eysenck's neural explanation of extraversion - a trait that continually crops up in athletes."

Eysenck (1960) developed two broad personality dimensions, the E scale, which is a continuum between extraversion and introversion, and the N-scale, which is a continuum between neuroticism and stability. Though this is essentially a behavior description of personality, he did attempt to link overt personality characteristics with their causal biological sources. He believes that behavioral characteristics can be explained at the neural level, with the F scale reflecting the strength of both the excitatory and inhibitory functions of the central nervous system i.e. (the cortex) and the N-scale reflecting the excitation of the autonomic nervous system.

In neuroticism, the individual reacts to some distressing stress situation with more than the usual amount of sadness and dejection. There is high level of anxiety and apprehensiveness, together with diminished activity, lowered self-confidence and a general loss of initiative. Eysenck (1967) has proposed that the neuroticism, stability dimension is more associated with the hypothalamus. His explanation revolves centrally around the hypothesized instability of the autonomic nervous system. He maintains that autonomic nervous system reactions are rooted in the
person's constitutional structure, which mediates the reaction of the sympathetic nervous system to incoming stimuli. Though people react differently to sympathetic stimulation and to the way the Para-sympathetic system is controlled. Eysenck, nevertheless, feels that it is the autonomic nervous system that does, in fact, control emotionality. In this context, introverts are seen to be more chronically aroused than extraverts and neurotic or unstable people then to become aroused more easily than stable people.

However, Eysenck (1947) states that neuroticism (emotional instability) refers to "general emotional over-responsiveness and the liability to neurotic breakdown under stress". He explains the bipolar dimension of neuroticism-stability in terms of the instability of the autonomic nervous system. He maintains that the autonomic reaction is basically dependent on an individual's constitutional structure, which mediates the strength of the sympathetic or voluntary reaction to incoming stimuli. Although there seem to be characteristic ways in which various individuals react to this sympathetic stimulation, and the way in which control is indicated by the Para-sympathetic system. Eysenck nevertheless considers the autonomic nervous system to be the most likely basis for individual differences in emotionality. This is essentially an integration and conceptualization of earlier thoughts by Jung (1939), Pavlov (1934) and Hull (1952), who suggested that variations in the strength of the
excitatory and inhibitory functions of the nervous system could account for temperamental differences in human personality.

Alderman (1974) is of the opinion that the level of emotionality in athletes to a considerable extent is "rooted at the constitutional, neural levels i.e. the inhibitory or excitability of the autonomic nervous system. This genetically sends constitutional basis is reflected in the everyday behavior of the individual. In the case of neuroticism, this appears as high emotionality or emotional instability". Emotional instability is characterized by "a low" tolerance of frustration immaturity, instability, high excitability, evasiveness, worriedness, and neurotic fatigability: On the other hand, emotional stability in athletes is characterized by "maturity, stability, quiet realism' the absence of neurotic fatigue'. It is generally felt that high emotionality is related to, or described best by Eysenk's "general neuroticism" and that emotional stability is grounded in what Kane (1964) calls personal integration or a mature control of one's emotions.

On the basis of related evidence, high emotionality in athletes would appear to indicate three things: (i) because neuroticism has virtually a zero relationship to intelligence, achievement by highly emotional athletes in sports is due to something other than intelligence, (ii) neuroticism is probably related to successful athletic performance through its manifestation in persistence, and (iii) high anxious
subjects show high speed of learning, and superior performance in relatively simple tasks, or in complex tasks where faulty associations have not been present.

In terms of the interaction between arousal level difficulty of task, and performance as a function of Eysenk's two personality dimensions, the following observations can be made:

i) People who score high on introversion and neuroticism will tend to perform better on easy or simple tasks than people high on extraversion and stability.

ii) On difficult tasks, the reverse tends to be true i.e. stable extraverts perform better than neurotic introverts.

iii) No predictions have been made on the intermediate personality types.

These predictions are based on the theory that higher arousal level (partially caused by external conditions as in competitive situations) will not cause as much disruption in the performance of people possessing strong nervous system (extraverts) simply because extraverts possess strong inhibitory potentials, i.e. they can shut out the negative or deleterious effects of high drive situations. Introverts, on the other hand, are more sensitive and respond more quickly to situations of low intensity as appears to be the case, in low arousal situations or with easy tasks.
NEED OF THE STUDY

The participation in modern sports is influenced by various physical, physiological, sociological and psychological factors. During training, besides good physique and physical fitness of the athlete, main emphasis is laid on the development of various types of motor skills involved in the game as well as on teaching the strategies, techniques and tactics of the game. Until recently, the Physical Education teachers have been paying inadequate attention to the social and psychological factors which although have been proved to contribute to performance in events in the higher competitive sports. It is only recently that sports administrators and Physical Education teachers have realized the importance of the psychological preparation and training of players to enable them to bear the strain and stresses inherent in sports participation. So, now the sports trainer and Physical Education teachers have started giving more importance to the psychological conditioning or the building the mental make-up of the players before their contests in the national and international competitions.

In modern competitive sports, psychological preparation of a team is as important as teaching them the different skills of a game with scientific methods. In these days, the teams are prepared not only to play, but to win the games. And for winning the games, it is not only the proficiency in the skills which matters but also the spirit and attitude of the players with which they play. The mental attitude
of each individual player as well as of the team can help or hinder their performance. Most of the Physical Education teachers agree that the physical characteristics, skills and training of the players are extremely important, but they also feel that good mental or psychological preparation for competition is a necessary component for success.

The aim of higher sports in this age of competition is to win in international meets or to attain peak performance in competition. And it is on this factor that the Physical Education teachers try to concentrate. In order to reach the target and accomplish the social expectation, the players also work hard, ignoring their comforts in their daily lives and practice for many hours a day. Stress, both psychological and social inhibits the peak performance of players. Unless the players are prepared mentally and psychologically for the contest, they are not able to achieve the desired results. The psychological training has to be provided to the players by the coaches to face stressful situation occurring during the competition.

Sport has become a psycho-social activity, full of tension, anxiety, fear and stresses. In competitive sports, teams and individual players play to win and this spirit of winning the matches and individual events causes many psychological stresses. So the job of the coach is to prepare or train the individual athlete as well as teams in such a way that the players individually as well as, in their capacity, as members of the team are to bear all types of stresses and overcome the effect of
over-stresses and strains which may deteriorate the sports performance. The players need to undergo such an arduous, training that they should be able to have physical load during practice schedules and can have psychic stress during the period of competition, because it is during competition that athletes as well as teams inevitably come under psychological stress.

In modern competitive sports, the role of anxiety in sports performance has attracted the attention of sports scientists. As the physical load during training of sportsmen for international competition is increasing day-by-day, the psychic stress during competition has been intensified. It has been realized that during their participation in competitive sports, the players and athletes are also anxiety-prone. Hence in these days, psychological training of the players and athletes has attracted a greater attention than in the past.

It is agreed by most of the sports scientists that besides developing the physical and physiological aspects of the players i.e. power, strength, endurance, agility and speed as well as providing the best type of the training, unit and unless the players and athletes the mentally prepared for contest, they cannot win in any competition or attain their peak performance which is considered the optimum objective of the modern sports.
Thus, it has become necessary to conduct research to know which psychological factors enhance sports performance. There is a need to conduct research on the national and international sportsmen with respect to some psychological characteristic. It is also essential to know what type of emotional problems like wellbeing anxiety, fear, aggressiveness or stresses occur when they have to face some strong opponent and how to overcome these problems to achieve the optimum level of achievement/performance. It may be possible if proper research on scientific lines is conducted on the top level sportsmen. In view of this, five psychological variables namely visual reaction time, auditory reaction time, extraversion, neuroticism and competitive well being were selected and the relationship of disjunctive reaction time, both visual and auditory with extraversion, neuroticism, psychoticism and competitive well being was examined in the present study.

a) Once the causes of the psychological problems in the Players are understood by the coach with the help of sports psychologist, various kinds of remedial techniques may be applied and help may be rendered to overcome the excessive emotional problems which affect their performance.

b) It would facilitate the Physical Education teachers in providing appropriate training to know whether traits like extraversion neuroticism and psychoticism are related with the sports performance. Whether personality traits undergo a
change with the participation in sports or with the knowledge of the personality traits of the sportsmen, their achievement can be predicted.

c) It would also help the Physical Education teachers to find out the level of personality of the top level sportsmen and then apply the different relaxation techniques to bring their well being arousal to the optimum level.

d) With an improved understanding of the personality level sports psychologists would be facilitated in identifying the various sources of well being state and would evolve the mechanisms how to reduce the competitive well being.

e) The results of the study would add further knowledge to the existing literature of sports psychology; especially the role of reaction time, extraversion, neuroticism and psychoticism sports performance.

f) The findings of the study would provide a guideline to the future research investigators in sports psychology and sports sciences to conduct further research in this field.