CHAPTER IV

DATA ANALYSIS AND INTERPRETATION OF RESULTS

In this chapter, the collected data were analyzed by employing statistical software. The data were presented through tables systematically. The step-wise results along with scientific as well as logical interpretations have been presented in this chapter. Further, the results were discussed and justified with sound reasoning to draw definite conclusions.

4.1 The results and interpretation

As stated earlier, the survey part of this study considers three major variables viz., mental health, emotional intelligence and personality, which were assessed by standard questionnaires and compared among Basketball and Volleyball players. Percentage-wise data analysis of the players on each variable has been presented below.

4.1.1 Mental Health of Basketball and Volleyball players

Percentage-wise data analysis of the male players on mental health revealed that (Table 4.1) –

- 61.12% of the male Basketball players from Nanded district had higher state of mental health, whereas 72.39% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.
• For Aurangabad district, 65.14% of the Basketball players had higher state of mental health, whereas 76.23% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• 55.42% of the male Basketball players had higher state of mental health, whereas 69.12% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players representing Yeotmal district.

• In case of Jalgaon district, 65.32% of the male Basketball players had higher state of mental health, whereas 76.52% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• For Dhule district, 75.47% of the Basketball players had higher state of mental health, whereas 81.32% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• In case of Akola district, 52.43% of the male Basketball players had higher state of mental health, whereas 48.15% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.
• For Nasik district, 35.28% of the male Basketball players had higher state of mental health, whereas 68.12% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• For Buldhana district, 62.76% of the male Basketball players had higher state of mental health, whereas 39.15% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• In case of Amaravati district, 72.35% of the male Basketball players had higher state of mental health, whereas 62.25% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• 59.45% of the male Basketball players had higher state of mental health, whereas 74.35% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players representing Beed district.

• For Wardha district, 67.71% of the male Basketball players had higher state of mental health, whereas 78.61% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.
• 49.48% of the Basketball players from Ahmednagar district had higher state of mental health, whereas 61.45% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between male Basketball and Volleyball players.

• For Latur district, 59.47% of the male Basketball players had higher state of mental health, whereas 39.78% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• In case of Chandrapur district, 41.72% of the male Basketball players had higher state of mental health, whereas 60.12% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• For Nagpur district, 78.41% of the male Basketball players had higher state of mental health, whereas 81.39% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players.

• 51.64% of the male Basketball players had higher state of mental health, whereas 62.82% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players representing Bhandara district.

• 52.63% of the male Basketball players had higher state of mental health, whereas 73.56% of Volleyball players expressed higher level of
mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players representing Pune district.

- 32.78% of the male Basketball players had higher state of mental health, whereas 62.32% of Volleyball players expressed higher level of mental health. This indicates that there may be difference in mental health between state level male Basketball and Volleyball players representing Mumbai.

Individuality or uniqueness of a person was given greater attention in the beginning which culminated into the development of (1) Idiographic approach whereby each individual is considered a unique entity by virtue of his unique heredity and environment. Then the psychologists thought of similarities in different individuals. This approach came to be known as (2) Nomothetic approach. Even today, for clinical purposes, idiographic approach is indispensable while for psychosometric purposes Nomothetic approach is used. Then psychologists tried to accommodate both the approaches. Thus, the trait approach was born. Introversion, extroversion, gregariousness, neuroticism etc. are commonly known traits today. Eysenck advocated three traits viz. Introversion, Extroversion and Neuroticism. Guilford’s test of temperament has trait list that includes activity, restraint, ascendency, sociability, emotional stability, objectivity, friendliness, thoughtfulness, personal relations and masculinity. Traits can number as many as 4000 plus and also as less as only two viz. extraversion and introversion. Statistical methods were used by Cattel to narrow down the trait number. Main points of criticism labeled against trait approach are (1) a particular trait can be perceived differently by different persons (2) In critical incidents the person may not show his fixed trait, often exhibited by him in normal circumstances. The same may be dominant in one situation and submissive in another. The ancient Greeks used four types viz. Sanguine, Phlegmatic, Melancholic and Choeric, based on body humors. Kresher’s classification includes (1)
asthenic (2) athletic (3) pyknic (4) dysplastic. Sheldon used endomorphic, mesomorphic and ectomorphic body types to correlate temperament of individuals. Friedman’s type approach has received a wider acceptance, wherein Type A and Type B personality are all important types. Recently, Type C has been added into it.

Main lines of criticism of Type approach: (1) cause and effect relationship cannot be formed, as has been evident through various research findings. (2) Types are like pigeon holes, fixed and rigid.

The physical fitness as refer to new dynamic and physiological state of individual and continuum from the optimal human performance to server and death of people. The players would be found towards the above and the continuum fluctuating up and down and depending on their state training whilst at the other conditions of lines could exist while this term may be satisfactory in descriptive sense, problems arise when we try to measure to develop the complexity arises because the physical fitness is made up of series components. If we sow the example like... speed, agility, strength, endurance, flexibility & co-ordination each one of which makes some independent contribution to the whole state while some of these components & very little of anther.

HEALTH RELATED PHYSICAL FITNESS

Those aspects of physical and psychological makeup that afford and individual some protection against coronary heart disease, problems associated with being overweight muscle and joint ligament and the physiological complications of responding to stress.

This aspect of physical fitness is concerns the development of qualities which is necessary to function efficiently and maintain the human life is a
healthy life style. If we sow the components of the health related physical fitness are cardio-reparatory endurance and muscular strength & the endurance, and body composition.

COMPONENTS OF HEALTH RELATED PHYSICAL FITNESS

Health-related fitness requires desirable levels of cardio-vascular fitness, percentage body fat, flexibility and endurance. These help to prevent the incidence and severity of degenerative types of disease and increase work efficiency. The cardio vascular fitness refers to the efficiency of lungs and heart. Muscular strength and endurance is the capacity of the muscles to work against the resistance for longer time. Flexibility is the ability to move a joint freely through its complete range of movement. Percentage of body fat refers to the proportion of an individual’s total body fat. Modern physical education sees these skills more as a means to an end than as absolute or continuing in themselves.

As a matter of fact there are very few movements performed, or skills developed, which are persisted in merely for their own value, even in infancy and childhood. As soon as a goal is desired the movement or skill needed to attain it is practiced. The child who wants the cookie learns to walk over and get it. A child learns to ride a bicycle not just in order to ride the bicycle but to preserve status with the gang, go to school, or show off. Physical training is an older but still used term to describe the training of the physical components of the body without any necessary reference to the purposes which are significant in modern education. It should not be confused with physical education. They are not synonymous, as we shall see in the chapters which follow.

Nor should the term physical education be allowed to imply a separation from the mental and thus perpetuate the unfortunate but traditional notion that man exists as mind and body, and that education is concerned with only one, or at the most two, of these parts. The concept of man as a
unified being makes confusion on this score unnecessary. The physical education is most importance part of the score in human life. The natural movement of active plays or influence of everyone who are working in the field of physical education.

It has been said frequently that people in the United States are among the most sports-loving in the world. Each year millions play and other millions watch. It is common for a person to be a spectator at a contest one day and a participant the next. He may watch a baseball game, play golf, take in a tennis match, or fish, all on the same week end. There is no great class of spectators and another of participants. Many millions are skilled at both and gain from both certain elemental satisfactions.

How wide is the participation? Such things are not easy to appraise accurately, but it is probably safe to say that if there are forty million children less than 12 years of age, forty million of them at one time or another play tag or two o’cat or hide-and-seek. They develop their own version of baseball on city streets and call it stick ball. Or they play marbles under the elms in the village square. Hundreds of thousands of them annually put on their first roller skates or master the technique of the bicycle. And some are fortunate enough to learn to ski or ice-skate. More than half of them develop a love for swimming in pools and lakes and rivers. Over the years, there has developed a very real conviction that childhood is a time for play and that our children must have a full measure of it if life is to be judged good. Time enough later on, we say, for the serious business of making a living or establishing a home. Play now while you are young and can enjoy it to the fullest!

In American there are roughly fourteen million men and women who fish for sport each year, and thousands more who do it for a living. These fishermen spend a billion dollars a year on their equipment. There are millions of licensed hunters and millions more who shoot for fun at targets. Golf attracts six million people every year, and howling is the favorite sport of perhaps even more. The six billion dollars or more invested in motorboats in the inland and slat waters of the country, when added to the amount spent by
those who canoe or sail, brings boating into focus as one of the most popular sports on the American scene. More than seventy million people pay to attend baseball contests each year. They come to see hundreds of thousands of players. Roughly sixty million people watch football each season; the players in action range from little fellows barely able to see from under their oversized helmets to great professionals stars who play the game for money. Dancing in one or more of its various forms attracts vast numbers. Whether in the round dance of the ballroom or the square dance of the ballroom or the square dance of the husking bee or carnival young and old find in dance the answer to their need for self-expression and for fun. The dancing classes of the country are filled with children learning not merely the steps but also the social skills that go with the particular forms of dance most frequently used in our society. Summer find hundreds of thousands bound for the beach, the mountain lakes, and the neighborhood swimming pools. Swimming, diving, surfboarding, scuba diving, water-skiing, and boating have their devotees; the water seems to challenge the skills of people of all ages. These activities offer emancipation from the restrictions on movement which our society imposes through the highly conventional life we are supposed to lead. People fret under such restrictions and, when the opportunity is at hand or can be created, revert to the natural state of willing participation in play.

ABOUT ANTHROPOMETRIC

The study of human physical measurements by another science anthropometry. Which was wide application as one of the essential parameters constituting the selecting diagnostics of any game or sports.

The study of body type has significant place in the field of sports.

The physical structure especially the height and arm length have definite decisive advantage in many games and sports, similarly segmental length of individual body parts, specifically the leg length and arm length are of considerable advantage in certain games. The anthropometric variables
selected for the study are height, weight and arm length. The oldest type of body measurement, known, dating back to the beginning of recorded history. It was also an early type of testing in physical education. On the theory that exercise should be prescribed to affect muscle size, emphasis was placed upon muscle symmetry and proportion. In the year 1862 (Hit Chock) and later Sergeant produced profile charts to reveal how to individual compared with their standards.

Another use of anthropometry is to determine relationship between structure and motor performance. Observations of such relationship are common place observe the well proportional bodies of wrestlers and gymnasts, the super structure of great sportsman. The handball competitor’s solidarity of top-flight athletes they massive build’s of great shot-putters and discus throwers.

In anthropometric measurements like as height, weight & arm length was likely to influence skill development and performance in the games.

Remain the anthropometric measurements if we include influencing skill of the athletes development and performance of the players we be develop.

Height has the potential placement as preferable perquisite for the performance excellence in many sports or games. Anthropometric measurements have revealed co-relation between body structure and physical characteristics and sports capabilities.

Anthropometry is that branch of anthropology which is concerned with the taking of measurements of the human body. This definition has been
confined to the kinds of measurements commonly used in associating physical performance with body build.

The measurement of structure and proportion of the body is called anthropometry. It has wide application as one of the essential parameter constituting the selective diagnostic of any games or sports.

The Anthropometry consists the marking of the external measurements of the players and human body and the results can be used to appraise body build, nutritional status and the posture.

In the human motor performance was a composite of many of variables. One of which is the structure of the body and the specific measurements of the Limb Lengths, Circumference, Breadths and the Body Build indices can revel relationship between the anthropology long legs to the length and mass of the body is build to jump.

Physique will be useful in choosing a suitable physical and mental activity for an individual because of the fact that according to physique they have too many mechanical advantages.

Longer legs are helpful to take the necessary long strides over hurdles without the loss of time that jumping entails.

Tall structure and long lower extremities have been noticed in all games and events such as volleyball, basketball, high jump, pole-vault and goal-keeping where jump is involved. The height and reach of the players make better performance in these games and events.

observation. In other words, it was his intention that psychology should be completely objective. Since experience is private, subjective, he said, that it should not be included in the scope of psychology. Thus there was a swing from almost exclusive preoccupation with the analysis of experience to an
almost exclusive preoccupation with the analysis of experience to a campaign for the abandonment of experience.

As we have seen, all mental activities involve the neuro-muscular system. The sense organs, the brain, the spiral 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 emotion. Often emotion 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 emotion, 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 emotion. There is on the one hand the interest in the general laws of human emotion 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 emotion.
We have studied different aspects of man: man the perceiver, man the needful, and man the adaptive. But it has always been clear that this tripartite division is merely one of convenience – for analytic purposes – and that man, functioning in his social and physical world is an indivisible unity who perceives and desires and learns simultaneously. We now turn to the task of synthesis – to – the task of describing the whole man.

One of the first things to become apparent as we turn our attention to the whole man is that he manifests himself in infinite variety. There has never been a person exactly like you, and there never will be. And one of the major factors which distinguish you from your neighbour is the way your perceptual, motivational, and learning processes are organized into unique patterns of capacities: intelligence, abilities, talents, and aptitudes. It is this patterning and synthesis which helps makes you, you; which make you Jim McGraw, or Shirley Cohen, or Tony Morales instead of Mr. any man.

The study of the abilities of man has been intimately tied up with intelligence testing. Literally millions of people, representing different ages, economic groups, cultures, nationalities and races have been subjected to intelligence testing of one kind or another. There are individual tests (where one person at a time is tested) and group tests (where hundreds of people at a time are tested); speed tests (where the scores are determined by the rapidity with which correct answers can be given) and power tests (where the difficulty of the task successfully completed determines the score); verbal tests (requiring verbal responses to questions) and performance tests (involving such nonverbal responses as stringing variously coloured beads in a specified order.

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 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 anxiety were selected and the relationship of disjunctive reaction time, both visual and auditory with extraversion, neuroticism and competitive anxiety was examined in the present study.

The great majority of empirical research in sport personality has utilized assessment devices which embody the factor theory as their main premise. As expressed by Cattell (1973), the factor theory searches for consistencies in behaviour. It is assumed that internal dispositions or traits are relatively stable and so enduring that they override environmental or situational influences. This infers that questions cold be asked in any situation and the responses to generalized to a sport situation. Thank for example he broad category of anxiety. Is knowing that a person low on an omnibus inventory of anxiety enough to conclude that he will never exhibit anxiety; are there no situations in which his heart rate may increase a little. The situation position as exemplified in Mischel's [1969] social learning theory, appears to go too far to the other extreme, entering into open debate with personalize. This paradigm can be regarded as the antithesis of the factor theory and maintains that behavioural variation is primarily a function of the situation in which a person is placed.

Emotion is open to observation. It can be studied in the same way in which other phenomena in the universe can be studied. But among human beings there is also experience alongside with emotion. The child who has learnt to speak will not only with draw his hand when he is pricked with a pin; he also shouts that it is hurting him. The pinprick not only leads to withdrawal, which is an observable emotion, it also leads to an experience, which is expressed in the statement that he is suffering pain. This experience is not open to observation by others; it is private, it is personal. Only the person experiencing can make an assertion about it. The ancient thinkers were generally concerned with the study and analysis of these experiences. These are the mental activities that we are conscious of. We not only experience them we are also aware of them. But every mental neuromuscular system is
involved in all mental activity. A few decades ago the psychologist Watson tried to limit the scope of psychology to the near observation of human emotion so that other persons concern it only with phenomena open to observation. In other words, it was his intention that psychology should be completely objective. Since experience is private, subjective, he said, that it should not be included in the scope of psychology. Thus there was a swing from almost exclusive preoccupation with the analysis of experience to an almost exclusive preoccupation with the analysis of experience to a campaign for the abandonment of experience.

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Form these taste we have accumulated much useful information. We can fairly quickly and reliably determine where a person stands in relation to any reference group of his fellows, and on the basis of this we can predict a number of things about his performance in various situations. But the question of what it is we are testing, the question of what is “intelligence”, remains unanswered.

Intelligence is a concept variously used and variously defined. Some people define it as the ability to adapt to new circumstances, others as the ability to learn, and still others as the capacity to deal with complex and abstract material.

Different psychologists have championed these (and other) definitions of intelligence, and much research has been addressed to these questions. However, none of this research has resulted in a clear definition of intelligence. For this reason many psychologists today have reached the point where they no longer ask “What is intelligence?” They have decided that they can do a useful job in measuring intelligence without defining it. In this respect they are doing what the early physicists did when they studied heat. Long before the physicists could agree on a sound definition of heat they has invented reliable thermometers to measure changes in temperature and with these instruments they were able to discover many important physical laws.

Standardization of intelligent tests. But all of the above statements are relative to the group on which the test was standardized. To say that the “average” ten-year old can pass certain items of an intelligences test implies, of course, that we have previously tested a representative sample of the entire population of then year old children. This procedure is called standardizing the test items. The problem of obtaining a sample truly representative of the entire population is beset with difficulties. If the unrepresentative of the entire population of children the intelligence test was
standardized on a sample which did not adequately include children of the lower economic groups, merely use this test to measure the I.Q. for these children. This is but a reflection of the fact that the I.Q. is a relative score, not an absolute score.

Adult I.Q.’s We have seen that intelligence, as measured by our available tests, does not grow at the same rate after puberty as it does prior to that age this means, of course, that the concept of I.Q. cannot have the same meaning for an adult as it does for a person younger than about 16. In order to use the I.Q. unit for adults, several simplifying assumptions have been made. In computing a Stanford–Binet I.Q. for anyone over the age of 15 the person is given a chronological age of 15 no matter how old he really is. This is done because it is assumed that the average adult has stopped growing in intelligence at that age.

Since the Stanford-Binet test has been standardized on children and very young adults (up to the age of 18) many psychologists do not consider it an adequate test for older adults. In response to these difficulties a number of tests have been developed especially for adults. Among the most commonly used of these is the Wechsler Adult Intelligence Scale which consists of two parts – a verbal part and a performance part, each consisting of five kinds of items. The verbal part includes information, comprehension, vocabulary, memory span for digits forwards and backwards, arithmetical reasoning, etc. The performance scale includes tasks involving object assembly (putting together cut out parts to complete a figure such as a human profile – very much like a jigsaw puzzle), picture completion, picture arrangement, etc. It is of interest to note that the correlation between the Stanford–Binet and the Wechsler Adult Intelligence Scale is about 85.

By way of summary, in selecting items to differentiate the more intelligent from the less intelligent children, intelligence test constructors usually follow several guiding principles in the first place, the content of the items must, on the fact of it, be “intellectual” in nature; secondly, items must
discriminate between children of different ages, such that percentage of children passing the item must increase with increase in age. Other considerations also have been taken into account the items should be reasonably easy to administer and score, should sample a wide variety of tasks, and should reflect the experiences common to all children.

The use of such items when standardized on representative samples enables us then to convert the raw scores earned on intelligence tests into age scores and I.Q. scores. When this is done we find that intelligence shows a fairly constant developmental growth up to the age of approximately 14 years. This can be taken as a “known group” validation of the intelligence test. But this very fact makes for difficulties in using the I.Q. concept when measuring adult intelligence.

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dance of the husking bee or carnival young and old find in dance the answer
to their need for self-expression and for fun. The dancing classes of the
country are filled with children learning not merely the steps but also the social
skills that go with the particular forms of dance most frequently used in our
society. Summer finds hundreds of thousands bound for the beach, the
mountain lakes, and the neighborhood swimming pools. Swimming, diving,
surfboarding, scuba diving, water-skiing, and boating have their devotees; the
water seems to challenge the skills of people of all ages. These activities offer
emancipation from the restrictions on movement which our society imposes
through the highly conventional life we are supposed to lead. People fret
under such restrictions and, when the opportunity is at hand or can be
created, revert to the natural state of willing participation in play.

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.

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 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 anxiety were selected and the relationship of disjunctive reaction time, both visual and auditory with extraversion, neuroticism and competitive anxiety was examined in the present study.

The great majority of empirical research in sport personality has utilized assessment devices which embody the factor theory as their main premise. As expressed by Cattell (1973), the factor theory searches for consistencies in behaviour. It is assumed that internal dispositions or traits are relatively stable and so enduring that they override environmental or situational influences. This infers that questions cold be asked in any situation and the responses to generalized to a sport situation. Thank for example he broad category of anxiety. Is knowing that a person low on an omnibus inventory of anxiety enough to conclude that he will never exhibit anxiety; are there no situations
in which his heart rate may increase a little. The situation position as exemplified in Mischel's [1969] social learning theory, appears to go too far to the other extreme, entering into open debate with personalize. This paradigm can be regarded as the antithesis of the factor theory and maintains that behavioural variation is primarily a function of the situation in which a person is placed.

In this research, researcher try to understand relation between obesity and health related physical fitness and how we can cope with health related fitness and obesity level among urban and physical collegiate students.

Emotion is open to observation. It can be studied in the same way in which other phenomena in the universe can be studied. But among human beings there is also experience alongside with emotion. The child who has learnt to speak will not only with draw his hand when he is pricked with a pin; he also shouts that it is hurting him. The pinprick not only leads to withdrawal, which is an observable emotion, it also leads to an experience, which is expressed in the statement that the is suffering pain. This experience is not open to observation by others; it is private, it is personal. Only the person experiencing can make an assertion about it. The ancient thinkers were generally concerned with the study and analysis of these experiences. These are the mental activities that we are conscious of. We not only experience them we are also aware of them. But every mental neuromuscular system is involved in all mental activity. A few decades ago the psychologist Watson tried to limit the scope of psychology to the near observation of human emotion so that other persons concern it only with phenomena open to observation. In other words, it was his intention that psychology should be completely objective. Since experience is private, subjective, he said, that it should not be included in the scope of psychology. Thus there was a swing from almost exclusive preoccupation with the analysis of experience to an almost exclusive preoccupation with the analysis of experience to a campaign for the abandonment of experience.
As we have seen, all mental activities involve the neuro-muscular system. The sense organs, the brain, the spiral 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 emotion. Often emotion 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 emotion, 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 emotion. There is on the one hand the interest in the general laws of human emotion 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 emotion.

We have studied different aspects of man: man the perceiver, man the needful, and man the adaptive. But it has always been clear that this tripartite
division is merely one of convenience – for analytic purposes – and that man, functioning in his social and physical world is an indivisible unity who perceives and desires and learns simultaneously. We now turn to the task of synthesis – to – the task of describing the whole man.

One of the first things to become apparent as we turn our attention to the whole man is that he manifests himself in infinite variety. There has never been a person exactly like you, and there never will be. And one of the major factors which distinguish you from your neighbour is the way your perceptual, motivational, and learning processes are organized into unique patterns of capacities: intelligence, abilities, talents, and aptitudes. It is this patterning and synthesis which helps makes you, you; which make you Jim McGraw, or Shirley Cohen, or Tony Morales instead of Mr. any man.

The study of the abilities of man has been intimately tied up with intelligence testing. Literally millions of people, representing different ages, economic groups, cultures, nationalities and races have been subjected to intelligence testing of one kind or another. There are individual tests (where one person at a time is tested) and group tests (where hundreds of people at a time are tested); speed tests (where the scores are determined by the rapidity with which correct answers can be given) and power tests (where the difficulty of the task successfully completed determines the score); verbal tests (requiring verbal responses to questions) and performance tests (involving such nonverbal responses as stringing variously coloured beads in a specified order.

Form these taste we have accumulated much useful information. We can fairly quickly and reliably determine where a person stands in relation to any reference group of his fellows, and on the basis of this we can predict a number of things about his performance in various situations. But the question of what it is we are testing, the question of what is “intelligence”, remains unanswered.
Intelligence is a concept variously used and variously defined. Some people define it as the ability to adapt to new circumstances, others as the ability to learn, and still others as the capacity to deal with complex and abstract material.

Different psychologists have championed these (and other) definitions of intelligence, and much research has been addressed to these questions. However, none of this research has resulted in a clear definition of intelligence. For this reason many psychologists today have reached the point where they no longer ask “What is intelligence?” They have decided that they can do a useful job in measuring intelligence without defining it. In this respect they are doing what the early physicists did when they studied heat. Long before the physicists could agree on a sound definition of heat they has invented reliable thermometers to measure changes in temperature and with these instruments they were able to discover many important physical laws.

Standardization of intelligent tests. But all of the above statements are relative to the group on which the test was standardized. To say that the “average” ten-year old can pass certain items of an intelligence test implies, of course, that we have previously tested a representative sample of the entire population of then year old children. This procedure is called standardizing the test items. The problem of obtaining a sample truly representative of the entire population is beset with difficulties. If the unrepresentative of the entire population of children the intelligence test was standardized on a sample which did not adequately include children of the lower economic groups, merely use this test to measure the I.Q. for these children. This is but a reflection of the fact that the I.Q. is a relative score, not an absolute score.

Adult I.Q.’s We have seen that intelligence, as measured by our available tests, does not grow at the same rate after puberty as it does prior to that age this means, of course, that the concept of I.Q. cannot have the same meaning for an adult as it does for a person younger than about 16. In order
to use the I.Q. unit for adults, several simplifying assumptions have been made. In computing a Stanford – Binet I.Q. for anyone over the age of 15 the person is given a chronological age of 15 no matter how old he really is. This is done because it is assumed that the average adult has stopped growing in intelligence at that age.

Since the Stanford-Binet test has been standardized on children and very young adults (up to the age of 18) many psychologists do not consider it an adequate test for older adults. In response to these difficulties a number of tests have been developed especially for adults. Among the most commonly used of these is the Wechsler Adult Intelligence Scale which consists of two parts – a verbal part and a performance part, each consisting of five kinds of items. The verbal part includes information, comprehension, vocabulary, memory span for digits forwards and backwards, arithmetical rezoning, etc. The performance scale includes tasks involving object assembly (putting together cut out parts to complete a figure such as a human profile – very much like a jig – saw puzzle), picture completion, picture arrangement, etc. It is of interest to note that the correlation between the Stanford – Binet and the Wechsler Adult Intelligence Scale is about 85.

By way of summary, in selecting items to differentiate the more intelligent from the less intelligent children, intelligence test constructors usually follow several guiding principles in the first place, the content of the items must, on the fact of it, be “intellectual” in nature; secondly, items must discriminate between children of different ages, such that percentage of children passing the item must increase with increase in age. Other considerations also have been taken into account the items should be reasonably easy to administer and score, should sample a wide variety of tasks, and should reflect the experiences common to all children.

The use of such items when standardized on representative samples enables us then to convert the raw scores earned on intelligence tests into age scores and I.Q. scores. When this is done we find that intelligence shows
a fairly constant developmental growth up to the age of approximately 14 years. This can be taken as a “known group” validation of the intelligence test. But this very fact makes for difficulties in using the I.Q. concept when measuring adult intelligence.

Sports performance has been found to be related to some personality variables. Extraversion and neuroticism 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 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:

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 (2007), extraversion is at best a behavioural 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 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 behaviour 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.”

Anthropometric measurement was central concerns of the first phase of the scientific era of measurements, which began in 1860’s. Current interest in anthropometric measurements focuses on three areas, growth measures, and body type and body composition. The use of such measures includes classification. Prediction of growth patterns and predictions of success is motor activities as well as assessment of obesity.

Measurement of body size includes such descriptive information as height, weight and surface area, while measures of body proportion describe the relationship between height and weight and among legs, widths and circumferences of various body segments. It was been found that top athletes in some sports tend to have those proportions that bio-mechanically aid the particular performance required.
A significant contribution was made by Freud in showing the inner (mental) world as most important factor in human personality. Freud emphasized childhood experiences and past memories as vital to one’s personality make up. Parental and peer group influence were given due attention, in due course on time. Jung gives concept of archetype based on what he called collective unconscious. He spoke of (1) personal unconscious (2) collective unconscious and (3) Conscious. He was the first Western psychologist to have used, implicitly, the constructs approaching the concept of the self.

Adler: Emphasized individual role in society which, according to him, results in inferiority and superiority. His theory gave importance to the mode of upbringing of children.

Karen Harney: Security, being central to one’s personality, is responsible for development of different motives like power, exploitation, submission, affection etc.

Sullivan: gave stress to psychological needs, socialization and interpersonal relationship.

Eric Ericson: psychosocial aspect, underlying development at different ages, was considered important.

Skinner: Operant behavior in development of personality was emphasized.

Maslow: importance of inner nature and motivation were considered as bases of personality development.

Individuality or uniqueness of a person was given greater attention in the beginning which culminated into the development of (1) Idiographic approach whereby each individual is considered a unique entity by virtue of his unique heredity and environment. Then the psychologists thought of similarities in different individuals. This approach came to be known as (2) Nomothetic
approach. Even today, for clinical purposes, idiographic approach is indispensable while for psychosometric purposes Nomothetic approach is used. Then psychologists tried to accommodate both the approaches. Thus, the trait approach was born. Introversion, extroversion, gregariousness, neuroticism etc. are commonly known traits today. Eysenck advocated three traits viz. Introversion, Extroversion and Neuroticism. Guilford’s test of temperament has trait list that includes activity, restraint, ascendency, sociability, emotional stability, objectivity, friendliness, thoughtfulness, personal relations and masculinity. Traits can number as many as 4000 plus and also as less as only two viz. extraversion and introversion. Statistical methods were used by Cattel to narrow down the trait number. Main points of criticism labeled against trait approach are (1) a particular trait can be perceived differently by different persons (2) In critical incidents the person may not show his fixed trait, often exhibited by him in normal circumstances. The same may be dominant in one situation and submissive in another. The ancient Greeks used four types viz. Sanguine, Phlegmatic, Melancholic and Choeric, based on body humors. Kreshmer’s classification includes (1) asthenic (2) athletic (3) pyknic (4) dysplastic. Sheldon used endomorphic, mesomorphic and ectomorphic body types to correlate temperament of individuals. Friedman’s type approach has received a wider acceptance, wherein Type A and Type B personality are all important types. Recently, Type C has been added into it.

Main lines of criticism of Type approach: (1) cause and effect relationship cannot be formed, as has been evident through various research findings. (2) Types are like pigeon holes, fixed and rigid.

The physical fitness as refer to new dynamic and physiological state of individual and continuum from the optimal human performance to server and death of people. The players would be found towards the above and the continuum fluctuating up and down and depending on their state training.
whilst at the other conditions of lines could exist while this term may be satisfactory in descriptive sense, problems arise when we try to measure to develop the complexity arises because the physical fitness is made up of series components. If we sow the example like... speed, agility, strength, endurance, flexibility & co-ordination each one of which makes some independent contribution to the whole state while some of these components & very little of another.

HEALTH RELATED PHYSICAL FITNESS

Those aspects of physical and psychological makeup that afford and individual some protection against coronary heart disease, problems associated with being overweight muscle and joint ligament and the physiological complications of responding to stress.

This aspect of physical fitness is concerns the development of qualities which is necessary to function efficiently and maintain the human life is a healthy life style. If we sow the components of the health related physical fitness are cardio-reparatory endurance and muscular strength & the endurance, and body composition.

COMPONENTS OF HEALTH RELATED PHYSICAL FITNESS

Health-related fitness requires desirable levels of cardio-vascular fitness, percentage body fat, flexibility and endurance. These help to prevent the incidence and severity of degenerative types of disease and increase work efficiency. The cardio vascular fitness refers to the efficiency of lungs and heart. Muscular strength and endurance is the capacity of the muscles to work against the resistance for longer time. Flexibility is the ability to move a joint freely through its complete range of movement. Percentage of body fat refers to the proportion of an individual's total body fat. Modern physical
education sees these skills more as a means to an end than as absolute or continuing in themselves.

As a matter of fact there are very few movements performed, or skills developed, which are persisted in merely for their own value, even in infancy and childhood. As soon as a goal is desired the movement or skill needed to attain it is practiced. The child who wants the cookie learns to walk over and get it. A child learns to ride a bicycle not just in order to ride the bicycle but to preserve status with the gang, go to school, or show off. Physical training is an older but still used term to describe the training of the physical components of the body without any necessary reference to the purposes which are significant in modern education. It should not be confused with physical education. They are not synonymous, as we shall see in the chapters which follow.

Nor should the term physical education be allowed to imply a separation from the mental and thus perpetuate the unfortunate but traditional notion that man exists as mind and body, and that education is concerned with only one, or at the most two, of these parts. The concept of man as a unified being makes confusion on this score unnecessary. The physical education is most importance part of the score in human life. The natural movement of active plays or influence of everyone who are working in the field of physical education.

It has been said frequently that people in the United States are among the most sports-loving in the word. Each year millions play and other millions watch. It is common for a person to be a spectator at a contest one day and a participant the next. He may watch a baseball game, play golf, take in a tennis match, or fish, all on the same week end. There is no great class of spectators and another of participants. Many millions are skilled at both and gain from both certain elemental satisfactions.

How wide is the participation? Such things are not easy to appraise accurately, but it is probably safe to say that if there are forty million children
less than 12 years of age, forty million of them at one time or another play tag or two o’cat or hide-and-seek. They develop their own version of baseball on city streets and call it stick ball. Or they play marbles under the elms in the village square. Hundreds of thousands of them annually put on their first roller skates or master the technique of the bicycle. And some are fortunate enough to learn to ski or ice-skate. More than half of them develop a love for swimming in pools and lakes and rivers. Over the years, there has developed a very real conviction that childhood is a time for play and that our children must have a full measure of it if life is to be judged good. Time enough later on, we say, for the serious business of making a living or establishing a home. Play now while you are young and can enjoy it to the fullest!

In American there are roughly fourteen million men and women who fish for sport each year, and thousands more who do it for a living. These fishermen spend a billion dollars a year on their equipment. There are millions of licensed hunters and millions more who shoot for fun at targets. Golf attracts six million people every year, and howling is the favorite sport of perhaps even more. The six billion dollars or more invested in motorboats in the inland and slat waters of the country, when added to the amount spent by those who canoe or sail, brings boating into focus as one of the most popular sports on the American scene. More than seventy million people pay to attend baseball contests each year. They come to see hundreds of thousands of players. Roughly sixty million people watch football each season; the players in action range from little fellows barely able to see from under their oversized helmets to great professionals stars who play the game for money. Dancing in one or more of its various forms attracts vast numbers. Whether in the round dance of the ballroom or the square dance of the ballroom or the square dance of the husking bee or carnival young and old find in dance the answer to their need for self-expression and for fun. The dancing classes of the country are filled with children learning not merely the steps but also the social skills that go with the particular forms of dance most frequently used in our society. Summer find hundreds of thousands bound for the beach, the mountain lakes, and the neighborhood swimming pools. Swimming, diving,
surfboarding, scuba diving, water-skiing, and boating have their devotees; the water seems to challenge the skills of people of all ages. These activities offer emancipation from the restrictions on movement which our society imposes through the highly conventional life we are supposed to lead. People fret under such restrictions and, when the opportunity is at hand or can be created, revert to the natural state of willing participation in play.

ABOUT ANTHROPOMETRIC

The study of human physical measurements by another science anthropometry. Which was wide application as one of the essential parameters constituting the selecting diagnostics of any game or sports.

The study of body type has significant place in the field of sports.

The physical structure especially the height and arm length have definite decisive advantage in many games and sports, similarly segmental length of individual body parts, specifically the leg length and arm length are of considerable advantage in certain games. The anthropometric variables selected for the study are height, weight and arm length. The oldest type of body measurement, known, dating back to the beginning of recorded history. It was also an early type of testing in physical education. On the theory that exercise should be prescribed to affect muscle size, emphasis was placed upon muscle symmetry and proportion. In the year 1862 (Hit Chock) and later Sergeant produced profile charts to reveal how to individual compared with their standards.

Another use of anthropometry is to determine relationship between structure and motor performance. Observations of such relationship are common place observe the well proportional bodies of wrestlers and gymnasts, the super structure of great sportsman. The handball competitor's
solidarity of top-flight athletes they massive build's of great shot-putters and
discus throwers.

In anthropometric measurements like as height, weight & arm length was
likely to influence skill development and performance in the games.

Remaining the anthropometric measurements if we include influencing
skill of the athletes development and performance of the players we be
develop.

Height has the potential placement as preferable perquisite for the
performance excellence in many sports or games. Anthropometric
measurements have revealed co-relation between body structure and
physical characteristics and sports capabilities.

Anthropometry is that branch of anthropology which is concerned with
the taking of measurements of the human body. This definition has been
confined to the kinds of measurements commonly used in associating
physical performance with body build.

The measurement of structure and proportion of the body is called
anthropometry. It has wide application as one of the essential parameter
constituting the selective diagnostic of any games or sports.

The Anthropometry consists the marking of the external measurements
of the players and human body and the results can be used to appraise body
build, nutritional status and the posture.

In the human motor performance was a composite of many of
variables. One of which is the structure of the body and the specific
measurements of the Limb Lengths, Circumference, Breadths and the Body
Build indices can reveal a relationship between the anthropometry of long legs to the length and mass of the body and build to jump.

Physique will be useful in choosing a suitable physical and mental activity for an individual because of the fact that according to physique they have too many mechanical advantages.

Longer legs are helpful to take the necessary long strides over hurdles without the loss of time that jumping entails.

Tall structure and long lower extremities have been noticed in all games and events such as volleyball, basketball, high jump, pole-vault and goal-keeping where jump is involved. The height and reach of the players make better performance in these games and events.

Observation. In other words, it was his intention that psychology should be completely objective. Since experience is private, subjective, he said, that it should not be included in the scope of psychology. Thus there was a swing from almost exclusive preoccupation with the analysis of experience to an almost exclusive preoccupation with the analysis of experience to a campaign for the abandonment of experience.

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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 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 anxiety were selected and the relationship of disjunctive reaction time, both visual and auditory with extraversion, neuroticism and competitive anxiety was examined in the present study.

The great majority of empirical research in sport personality has utilized assessment devices which embody the factor theory as their main premise. As expressed by Cattell (1973), the factor theory searches for consistencies in behaviour. It is assumed that internal dispositions or traits are relatively stable and so enduring that they override environmental or situational influences. This infers that questions cold be asked in any situation and the responses to generalized to a sport situation. Thank for example he broad category of
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Emotion is open to observation. It can be studied in the same way in which other phenomena in the universe can be studied. But among human beings there is also experience alongside with emotion. The child who has learnt to speak will not only with draw his hand when he is pricked with a pin; he also shouts that it is hurting him. The pinprick not only leads to withdrawal, which is an observable emotion, it also leads to an experience, which is expressed in the statement that the is suffering pain. This experience is not open to observation by others; it is private, it is personal. Only the person experiencing can make an assertion about it. The ancient thinkers were generally concerned with the study and analysis of these experiences. These are the mental activities that we are conscious of. We not only experience them we are also aware of them. But every mental neuromuscular system is involved in all mental activity. A few decades ago the psychologist Watson tried to limit the scope of psychology to the near observation of human emotion so that other persons concern it only with phenomena open to observation. In other words, it was his intention that psychology should be completely objective. Since experience is private, subjective, he said, that it should not be included in the scope of psychology. Thus there was a swing from almost exclusive preoccupation with the analysis of experience to an almost exclusive preoccupation with the analysis of experience to a campaign for the abandonment of experience.

As we have seen, all mental activities involve the neuro-muscular system. The sense organs, the brain, the spiral 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 emotion. Often emotion 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 emotion, 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 emotion. There is on the one hand the interest in the general laws of human emotion 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 emotion.

We have studied different aspects of man: man the perceiver, man the needful, and man the adaptive. But it has always been clear that this tripartite division is merely one of convenience – for analytic purposes – and that man, functioning in his social and physical world is an indivisible unity who
perceives and desires and learns simultaneously. We now turn to the task of synthesis – to – the task of describing the whole man.

One of the first things to become apparent as we turn our attention to the whole man is that he manifests himself in infinite variety. There has never been a person exactly like you, and there never will be. And one of the major factors which distinguish you from your neighbour is the way your perceptual, motivational, and learning processes are organized into unique patterns of capacities: intelligence, abilities, talents, and aptitudes. It is this patterning and synthesis which helps makes you, you; which make you Jim McGraw, or Shirley Cohen, or Tony Morales instead of Mr. any man.

The study of the abilities of man has been intimately tied up with intelligence testing. Literally millions of people, representing different ages, economic groups, cultures, nationalities and races have been subjected to intelligence testing of one kind or another. There are individual tests (where one person at a time is tested) and group tests (where hundreds of people at a time are tested); speed tests (where the scores are determined by the rapidity with which correct answers can be given) and power tests (where the difficulty of the task successfully completed determines the score); verbal tests (requiring verbal responses to questions) and performance tests (involving such nonverbal responses as stringing variously coloured beads in a specified order.

From these tests we have accumulated much useful information. We can fairly quickly and reliably determine where a person stands in relation to any reference group of his fellows, and on the basis of this we can predict a number of things about his performance in various situations. But the question of what it is we are testing, the question of what is “intelligence”, remains unanswered.

Intelligence is a concept variously used and variously defined. Some people define it as the ability to adapt to new circumstances, others as the
ability to learn, and still others as the capacity to deal with complex and abstract material.

Different psychologists have championed these (and other) definitions of intelligence, and much research has been addressed to these questions. However, none of this research has resulted in a clear definition of intelligence. For this reason many psychologists today have reached the point where they no longer ask “What is intelligence?” They have decided that they can do a useful job in measuring intelligence without defining it. In this respect they are doing what the early physicists did when they studied heat. Long before the physicists could agree on a sound definition of heat they have invented reliable thermometers to measure changes in temperature and with these instruments they were able to discover many important physical laws.

Standardization of intelligent tests. But all of the above statements are relative to the group on which the test was standardized. To say that the “average” ten-year old can pass certain items of an intelligences test implies, of course, that we have previously tested a representative sample of the entire population of ten year old children. This procedure is called standardizing the test items. The problem of obtaining a sample truly representative of the entire population is beset with difficulties. If the unrepresentative of the entire population of children the intelligence test was standardized on a sample which did not adequately include children of the lower economic groups, merely use this test to measure the I.Q. for these children. This is but a reflection of the fact that the I.Q. is a relative score, not an absolute score.

Adult I.Q.’s We have seen that intelligence, as measured by our available tests, does not grow at the same rate after puberty as it does prior to that age this means, of course, that the concept of I.Q. cannot have the same meaning for an adult as it does for a person younger than about 16. In order to use the I.Q. unit for adults, several simplifying assumptions have been made. In computing a Stanford – Binet I.Q. for anyone over the age of 15 the
person is given a chronological age of 15 no matter how old he really is. This is done because it is assumed that the average adult has stopped growing in intelligence at that age.

Since the Stanford-Binet test has been standardized on children and very young adults (up to the age of 18) many psychologists do not consider it an adequate test for older adults. In response to these difficulties a number of tests have been developed especially for adults. Among the most commonly used of these is the Wechsler Adult Intelligence Scale which consists of two parts – a verbal part and a performance part, each consisting of five kinds of items. The verbal part includes information, comprehension, vocabulary, memory span for digits forwards and backwards, arithmetical reasoning, etc. The performance scale includes tasks involving object assembly (putting together cut out parts to complete a figure such as a human profile – very much like a jigsaw puzzle), picture completion, picture arrangement, etc. It is of interest to note that the correlation between the Stanford – Binet and the Wechsler Adult Intelligence Scale is about 85.

By way of summary, in selecting items to differentiate the more intelligent from the less intelligent children, intelligence test constructors usually follow several guiding principles in the first place, the content of the items must, on the fact of it, be “intellectual” in nature; secondly, items must discriminate between children of different ages, such that percentage of children passing the item must increase with increase in age. Other considerations also have been taken into account the items should be reasonably easy to administer and score, should sample a wide variety of tasks, and should reflect the experiences common to all children.

The use of such items when standardized on representative samples enables us then to convert the raw scores earned on intelligence tests into age scores and I.Q. scores. When this is done we find that intelligence shows a fairly constant developmental growth up to the age of approximately 14 years. This can be taken as a “known group” validation of the intelligence
test. But this very fact makes for difficulties in using the I.Q. concept when measuring adult intelligence.

The bicycle but to preserve status with the gang, go to school, or show off. Physical training is an older but still used term to describe the training of the physical components of the body without any necessary reference to the purposes which are significant in modern education. It should not be confused with physical education. They are not synonymous, as we shall see in the chapters which follow.

Nor should the term physical education be allowed to imply a separation from the mental and thus perpetuate the unfortunate but traditional notion that man exists as mind and body, and that education is concerned with only one, or at the most two, of these parts. The concept of man as a unified being makes confusion on this score unnecessary. The physical education is most importance part of the score in human life. The natural movement of active plays or influence of everyone who are working in the field of physical education.

It has been said frequently that people in the United States are among the most sports-loving in the word. Each year millions play and other millions watch. It is common for a person to be a spectator at a contest one day and a participant the next. He may watch a baseball game, play golf, take in a tennis match, or fish, all on the same week end. There is no great class of spectators and another of participants. Many millions are skilled at both and gain from both certain elemental satisfactions.

How wide is the participation? Such things are not easy to appraise accurately, but it is probably safe to say that if there are forty million children less than 12 years of age, forty million of them at one time or another play tag or two o’cat or hide-and-seek. They develop their own version of baseball on city streets and call it stick ball. Or they play marbles under the elms in the village square. Hundreds of thousands of them annually put on their first roller
skates or master the technique of the bicycle. And some are fortunate enough to learn to ski or ice-skate. More than half of them develop a love for swimming in pools and lakes and rivers. Over the years, there has developed a very real conviction that childhood is a time for play and that our children must have a full measure of it if life is to be judged good. Time enough later on, we say, for the serious business of making a living or establishing a home. Play now while you are young and can enjoy it to the fullest!

In American there are roughly fourteen million men and women who fish for sport each year, and thousands more who do it for a living. These fishermen spend a billion dollars a year on their equipment. There are millions of licensed hunters and millions more who shoot for fun at targets. Golf attracts six million people every year, and howling is the favorite sport of perhaps even more. The six billion dollars or more invested in motorboats in the inland and slat waters of the country, when added to the amount spent by those who canoe or sail, brings boating into focus as one of the most popular sports on the American scene. More than seventy million people pay to attend baseball contests each year. They come to see hundreds of thousands of players. Roughly sixty million people watch football each season; the players in action range from little fellows barely able to see from under their oversized helmets to great professionals stars who play the game for money. Dancing in one or more of its various forms attracts vast numbers. Whether in the round dance of the ballroom or the square dance of the ballroom or the square dance of the husking bee or carnival young and old find in dance the answer to their need for self-expression and for fun. The dancing classes of the country are filled with children learning not merely the steps but also the social skills that go with the particular forms of dance most frequently used in our society. Summer find hundreds of thousands bound for the beach, the mountain lakes, and the neighborhood swimming pools. Swimming, diving, surfboarding, scuba diving, water-skiing, and boating have their devotees; the water seems to challenge the skills of people of all ages. These activities offer emancipation from the restrictions on movement which our society imposes through the highly conventional life we are supposed to lead. People fret
under such restrictions and, when the opportunity is at hand or can be created, revert to the natural state of willing participation in play.

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In this research, researcher try to understand relation between obesity and health related physical fitness and how we can cope with health related fitness and obesity level among urban and physical collegiate students.

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The use of such items when standardized on representative samples enables us then to convert the raw scores earned on intelligence tests into age scores and I.Q. scores. When this is done we find that intelligence shows a fairly constant developmental growth up to the age of approximately 14 years. This can be taken as a “known group” validation of the intelligence test. But this very fact makes for difficulties in using the I.Q. concept when measuring adult intelligence.

Sports performance has been found to be related to some personality variables. Extraversion and neuroticism 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 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:
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 (2007), extraversion is at best a behavioural 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 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 behaviour 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.” was central concerns of the first phase of the scientific era of measurements, which began in 1860’s. Current interest in anthropometric measurements focuses on three areas, growth measures, and body type and body composition. The use of such measures includes classification. Prediction of growth patterns and predictions of success is motor activities as well as assessment of obesity.

Measurement of body size includes such descriptive information as height, weight and surface area, while measures of body proportion describe the relationship between height and weight and among legs, widths and circumferences of various body segments. It was found that top athletes in some sports tend to have those proportions that bio-mechanically aid the particular performance required.

A significant contribution was made by Freud in showing the inner (mental) world as most important factor in human personality. Freud emphasized childhood experiences and past memories as vital to one’s personality make up. Parental and peer group influence were given due attention, in due course on time. Jung gives concept of archetype based on what he called collective unconscious. He spoke of (1) personal unconscious (2) collective unconscious and (3) Conscious. He was the first Western psychologist to have used, implicitly, the constructs approaching the concept of the self.

Adler: Emphasized individual role in society which, according to him, results in inferiority and superiority. His theory gave importance to the mode of upbringing of children.

Karen Harney: Security, being central to one’s personality, is responsible for development of different motives like power, exploitation, submission, affection etc.
### Table 4.1
Percentage-wise results in Mental health of the Basketball and Volleyball players

<table>
<thead>
<tr>
<th>No.</th>
<th>Districts</th>
<th>Basketball Players</th>
<th>Volleyball Players</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Nanded</td>
<td>61.12%</td>
<td>72.39%</td>
</tr>
<tr>
<td>02</td>
<td>Aurangabad</td>
<td>65.14%</td>
<td>76.23%</td>
</tr>
<tr>
<td>03</td>
<td>Yevatmal</td>
<td>55.42%</td>
<td>69.12%</td>
</tr>
<tr>
<td>04</td>
<td>Jalgaon</td>
<td>65.32%</td>
<td>76.52%</td>
</tr>
<tr>
<td>05</td>
<td>Dhule</td>
<td>75.47%</td>
<td>81.32%</td>
</tr>
<tr>
<td>06</td>
<td>Akola</td>
<td>52.43%</td>
<td>48.15%</td>
</tr>
<tr>
<td>07</td>
<td>Nasik</td>
<td>35.28%</td>
<td>68.12%</td>
</tr>
<tr>
<td>08</td>
<td>Buldhana</td>
<td>62.76%</td>
<td>39.15%</td>
</tr>
<tr>
<td>09</td>
<td>Amravati</td>
<td>72.35%</td>
<td>62.25%</td>
</tr>
<tr>
<td>10</td>
<td>Beed</td>
<td>59.45%</td>
<td>74.35%</td>
</tr>
<tr>
<td>11</td>
<td>Wardha</td>
<td>67.71%</td>
<td>78.61%</td>
</tr>
<tr>
<td>12</td>
<td>Ahmednagar</td>
<td>49.48%</td>
<td>61.45%</td>
</tr>
<tr>
<td>13</td>
<td>Latur</td>
<td>59.47%</td>
<td>39.78%</td>
</tr>
<tr>
<td>14</td>
<td>Chandrapur</td>
<td>41.72%</td>
<td>60.12%</td>
</tr>
<tr>
<td>15</td>
<td>Nagpur</td>
<td>78.41%</td>
<td>81.39%</td>
</tr>
<tr>
<td>16</td>
<td>Bhandara</td>
<td>51.64%</td>
<td>62.82%</td>
</tr>
<tr>
<td>17</td>
<td>Pune</td>
<td>52.63%</td>
<td>73.56%</td>
</tr>
<tr>
<td>18</td>
<td>Mumbai</td>
<td>32.78%</td>
<td>62.32%</td>
</tr>
</tbody>
</table>
4.1.2 Emotional intelligence of Basketball and Volleyball players

Percentage-wise data analysis of the male players on emotional intelligence revealed that (Table 4.2) –

- 73.46% of the male Basketball players from Nanded district had higher state of emotional intelligence, whereas 65.42% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

- For Aurangabad district, 73.32% of the Basketball players had higher state of emotional intelligence, whereas 63.68% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

- 62.75% of the male Basketball players had higher state of emotional intelligence, whereas 71.54% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players representing Yeotmal district.

- In case of Jalgaon district, 58.81% of the male Basketball players had higher state of emotional intelligence, whereas 66.15% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.
• For Dhule district, 63.37% of the Basketball players had higher state of emotional intelligence, whereas 73.52% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

• In case of Akola district, 59.51% of the male Basketball players had higher state of emotional intelligence, whereas 61.28% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

• For Nasik district, 58.43% of the male Basketball players had higher state of emotional intelligence, whereas 73.43% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

• For Buldhana district, 79.15% of the male Basketball players had higher state of emotional intelligence, whereas 62.47% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

• In case of Amaravati district, 65.32% of the male Basketball players had higher state of emotional intelligence, whereas 69.71% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.
• 73.25% of the male Basketball players had higher state of emotional intelligence, whereas 65.27% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players representing Beed district.

• For Wardha district, 73.24% of the male Basketball players had higher state of emotional intelligence, whereas 79.39% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

• 59.28% of the Basketball players from Ahmednagar district had higher state of emotional intelligence, whereas 72.14% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between male Basketball and Volleyball players.

• For Latur district, 65.24% of the male Basketball players had higher state of emotional intelligence, whereas 48.67% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

• In case of Chandrapur district, 56.62% of the male Basketball players had higher state of emotional intelligence, whereas 65.48% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.
• For Nagpur district, 71.78% of the male Basketball players had higher state of emotional intelligence, whereas 76.45% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players.

• 62.33% of the male Basketball players had higher state of emotional intelligence, whereas 73.15% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players representing Bhandara district.

• 49.12% of the male Basketball players had higher state of emotional intelligence, whereas 62.28% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players representing Pune district.

• 49.36% of the male Basketball players had higher state of emotional intelligence, whereas 71.57% of Volleyball players expressed higher level of emotional intelligence. This indicates that there may be difference in emotional intelligence between state level male Basketball and Volleyball players representing Mumbai.
<table>
<thead>
<tr>
<th>No.</th>
<th>Districts</th>
<th>Basketball Players</th>
<th>Volleyball Players</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Nanded</td>
<td>73.46%</td>
<td>65.42%</td>
</tr>
<tr>
<td>02</td>
<td>Aurangabad</td>
<td>73.32%</td>
<td>63.68%</td>
</tr>
<tr>
<td>03</td>
<td>Yevatmal</td>
<td>62.75%</td>
<td>71.54%</td>
</tr>
<tr>
<td>04</td>
<td>Jalgaon</td>
<td>58.81%</td>
<td>66.15%</td>
</tr>
<tr>
<td>05</td>
<td>Dhule</td>
<td>63.37%</td>
<td>73.52%</td>
</tr>
<tr>
<td>06</td>
<td>Akola</td>
<td>59.51%</td>
<td>61.28%</td>
</tr>
<tr>
<td>07</td>
<td>Nasik</td>
<td>58.43%</td>
<td>73.43%</td>
</tr>
<tr>
<td>08</td>
<td>Buldhana</td>
<td>79.15%</td>
<td>62.47%</td>
</tr>
<tr>
<td>09</td>
<td>Amravati</td>
<td>65.32%</td>
<td>69.71%</td>
</tr>
<tr>
<td>10</td>
<td>Beed</td>
<td>73.25%</td>
<td>65.27%</td>
</tr>
<tr>
<td>11</td>
<td>Wardha</td>
<td>73.24%</td>
<td>79.39%</td>
</tr>
<tr>
<td>12</td>
<td>Ahmednagar</td>
<td>59.28%</td>
<td>72.14%</td>
</tr>
<tr>
<td>13</td>
<td>Latur</td>
<td>65.24%</td>
<td>48.67%</td>
</tr>
<tr>
<td>14</td>
<td>Chandrapur</td>
<td>56.62%</td>
<td>65.48%</td>
</tr>
<tr>
<td>15</td>
<td>Nagpur</td>
<td>71.78%</td>
<td>76.45%</td>
</tr>
<tr>
<td>16</td>
<td>Bhandara</td>
<td>62.33%</td>
<td>73.15%</td>
</tr>
<tr>
<td>17</td>
<td>Pune</td>
<td>49.12%</td>
<td>62.28%</td>
</tr>
</tbody>
</table>
4.1.3 Personality level of Basketball and Volleyball players

Percentage-wise data analysis of the male players on personality revealed that (Table 4.3) –

- 52.17% of the male Basketball players from Nanded district had higher state of personality, whereas 61.78% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

- For Aurangabad district, 67.92% of the Basketball players had higher state of personality, whereas 71.29% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

- 49.13% of the male Basketball players had higher state of personality, whereas 57.26% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players representing Yeotmal district.

- In case of Jalgaon district, 51.75% of the male Basketball players had higher state of personality, whereas 61.34% of Volleyball players expressed higher level of personality. This indicates that there may be
difference in personality between state level male Basketball and Volleyball players.

- For Dhule district, 54.12% of the Basketball players had higher state of personality, whereas 46.63% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

- In case of Akola district, 62.47% of the male Basketball players had higher state of personality, whereas 57.67% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

- For Nasik district, 72.12% of the male Basketball players had higher state of personality, whereas 68.37% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

- For Buldhana district, 45.76% of the male Basketball players had higher state of personality, whereas 57.48% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

- In case of Amaravati district, 62.51% of the male Basketball players had higher state of personality, whereas 72.32% of Volleyball players expressed higher level of personality. This indicates that there may be
difference in personality between state level male Basketball and Volleyball players.

- 49.68% of the male Basketball players had higher state of personality, whereas 57.74% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players representing Beed district.

- For Wardha district, 58.62% of the male Basketball players had higher state of personality, whereas 63.17% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

- 68.54% of the Basketball players from Ahmednagar district had higher state of personality, whereas 69.46% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between male Basketball and Volleyball players.

- For Latur district, 48.12% of the male Basketball players had higher state of personality, whereas 57.25% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

- In case of Chandrapur district, 45.64% of the male Basketball players had higher state of personality, whereas 51.82% of Volleyball players expressed higher level of personality. This indicates that there may be
difference in personality between state level male Basketball and Volleyball players.

• For Nagpur district, 69.24% of the male Basketball players had higher state of personality, whereas 72.12% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players.

• 48.64% of the male Basketball players had higher state of personality, whereas 55.27% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players representing Bhandara district.

• 72.28% of the male Basketball players had higher state of personality, whereas 76.54% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players representing Pune district.

• 74.12% of the male Basketball players had higher state of personality, whereas 76.19% of Volleyball players expressed higher level of personality. This indicates that there may be difference in personality between state level male Basketball and Volleyball players representing Mumbai.
Table 4.3
Percentage-wise results in Personality of the Basketball and Volleyball players

<table>
<thead>
<tr>
<th>No.</th>
<th>Districts</th>
<th>Basketball Players</th>
<th>Volleyball Players</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Nanded</td>
<td>57.17%</td>
<td>61.78%</td>
</tr>
<tr>
<td>02</td>
<td>Aurangabad</td>
<td>67.92%</td>
<td>71.29%</td>
</tr>
<tr>
<td>03</td>
<td>Yevatmal</td>
<td>49.13%</td>
<td>57.26%</td>
</tr>
<tr>
<td>04</td>
<td>Jalgaon</td>
<td>51.75%</td>
<td>61.34%</td>
</tr>
<tr>
<td>05</td>
<td>Dhule</td>
<td>54.12%</td>
<td>46.63%</td>
</tr>
<tr>
<td>06</td>
<td>Akola</td>
<td>62.47%</td>
<td>57.67%</td>
</tr>
<tr>
<td>07</td>
<td>Nasik</td>
<td>72.12%</td>
<td>68.37%</td>
</tr>
<tr>
<td>08</td>
<td>Buldhana</td>
<td>45.76%</td>
<td>57.48%</td>
</tr>
<tr>
<td>09</td>
<td>Amravati</td>
<td>62.51%</td>
<td>72.32%</td>
</tr>
<tr>
<td>10</td>
<td>Beed</td>
<td>49.68%</td>
<td>57.74%</td>
</tr>
<tr>
<td>11</td>
<td>Wardha</td>
<td>58.62%</td>
<td>63.17%</td>
</tr>
<tr>
<td>12</td>
<td>Ahmednagar</td>
<td>68.54%</td>
<td>69.46%</td>
</tr>
<tr>
<td>13</td>
<td>Latur</td>
<td>48.12%</td>
<td>57.25%</td>
</tr>
<tr>
<td>14</td>
<td>Chandrapur</td>
<td>45.64%</td>
<td>51.82%</td>
</tr>
<tr>
<td>15</td>
<td>Nagpur</td>
<td>69.24%</td>
<td>72.12%</td>
</tr>
</tbody>
</table>
16  Bhandara  48.64%  55.27%
17  Pune  72.28%  76.54%
18  Mumbai  74.12%  76.19%

4.1.4 Status of Mental Health of Basketball and Volleyball players

The comparison between mental health of Basketball and Volleyball players of Maharashtra state has been presented in Table 4.4.

The result revealed that the male state level Basketball and Volleyball players possess a high level of mental health and their percentages were 57.70 and 65.98 respectively. This result indicates that the mental health of the state level male Basketball and Volleyball players were different (Table 4.4).

The result of Chi Square test further revealed that there was significant difference in mental health between the Basketball and Volleyball players especially who are participating in state level championship ($X^2=17, p<0.05$) (Fig.4.1).

Thus, Volleyball players had better level of mental health than the Basketball players.
Fig. 4.1 Mental Health status of state level Basketball and Volleyball players

<table>
<thead>
<tr>
<th></th>
<th>B. Ball</th>
<th>V. Ball</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Health</td>
<td>57.70%</td>
<td>65.98%</td>
</tr>
</tbody>
</table>
4.1.5 Status of Emotional Intelligence of Basketball and Volleyball players

The status of emotional intelligence and its comparison among the male state level Basketball and Volleyball players have been presented in Table 4.4.

The result revealed that the male state level Basketball and Volleyball players possess a high level of emotional intelligence and their percentages were 64.13 and 67.87 respectively. This result indicates that the emotional intelligence of the state level male Basketball and Volleyball players were different (Table 4.4).

However, the result Chi-square test further revealed that there was no significant difference in emotional intelligence among the Basketball and Volleyball players especially who are participating in state level championship ($X^2=08, p>0.05$) (Fig.4.2).

Thus, the Basketball players had similar level of emotional intelligence like the Volleyball players.
Fig. 4.2 Emotional Intelligence of state level Basketball and Volleyball players

<table>
<thead>
<tr>
<th></th>
<th>B.Ball</th>
<th>V.Ball</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emo Int</td>
<td>64.13</td>
<td>67.87</td>
</tr>
</tbody>
</table>
4.1.6 Status of Personality of Basketball and Volleyball players

The status of personality and its comparison among the male state level Basketball and Volleyball players has been presented in Table 4.4.

The result revealed that the state level male Basketball and Volleyball players possess a good level of personality and their percentages were 58.77 and 62.98 respectively. This result indicates that the personality of the state level male Basketball and Volleyball players were perhaps different (Table 4.4).

However, the result of Chi Square test revealed that the difference in personality among the Basketball and Volleyball players especially who are participating in state level championship, is not statistically significant ($X^2=10$, $p>0.05$) (Fig.4.3).

Thus, the state level Basketball and Volleyball players possess a similar level of personality.
Fig. 4.3 Personality status of state level Basketball and Volleyball players

<table>
<thead>
<tr>
<th></th>
<th>B. Ball</th>
<th>V. Ball</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persona</td>
<td>58.77</td>
<td>62.98</td>
</tr>
<tr>
<td>Subjects</td>
<td>Psychological Characteristics of male basketball &amp;volleyball players (percentage)</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mental Health</td>
<td>Emotional Intelligence</td>
</tr>
<tr>
<td>Basketball players</td>
<td>57.70</td>
<td>64.13</td>
</tr>
<tr>
<td>Volleyball players</td>
<td>65.98</td>
<td>67.87</td>
</tr>
</tbody>
</table>

Chi-Square Test $(X^2)$  
- $X^2=17$ (p<0.05)  
- $X^2=08$ (p>0.05)  
- $X^2=10$ (p>0.05)
The word personality was first used by Cicero (106-43B.C.) to mean as one appears to others and also, the part played by one in one’s life. The root of personality is persona, a Greek word, which means a mask one wears in a drama or a role one plays in a drama or in social situations. Other derivatives of persona are: to personate i.e. to pretend to be, personable i.e. pleasing and good looking etc. The concept of personality has developed through years from persona effect to the one’s adjustment with a given environment and finally has led to the definition which is comprehensive enough: most characteristic integration of an individual’s physical structure, modes of behavior, interests, attitudes, capacities and aptitudes.

Indian concept of personality is amply indicated by the term vyaktitva that has Anj as root and tin as suffix. Anj means to bring out or to make explicit. It connotes that there is something which can be made explicit viz. suksma sarira or subtle body. This suksma sarira has two main aspects, knowledge and activity. Thus, we see that the concept of vyaktitva has deeper areas to touch. Dr. Indrasen of Pondicherry has said, Indian concept of personality analyses its normal make up, discovering and devising the conditions of its growth and delineating the quality and character of its highest status. In simple words, it speaks about what man is, what he can become and how he can become that. If we compare both the definitions we find that the Western concept is silent about the origin of personality while Indian concept indicates suksma sarira (subtle body) as the very basis of one’s personality. As well, the Western concept does not indicate developmental aspect, sufficiently, while the Indian one does.

Development of the Concept of Personality

Individuality or uniqueness of a person was given greater attention in the beginning which culminated into the development of (1) Idiographic approach whereby each individual is considered a unique entity by virtue of his unique heredity and environment. Then the psychologists thought of
similarities in different individuals. This approach came to be known as (2) Nomothetic approach. Even today, for clinical purposes, idiographic approach is indispensable while for psychosometric purposes Nomothetic approach is used. Then psychologists tried to accommodate both the approaches. Thus, the trait approach was born. Introversion, extroversion, gregariousness, neuroticism etc. are commonly known traits today. Eysenck advocated three traits viz. Introversion, Extroversion and Neuroticism. Guilford's test of temperament has trait list that includes activity, restraint, ascendancy, sociability, emotional stability, objectivity, friendliness, thoughtfulness, personal relations and masculinity. Traits can number as many as 4000 plus and also as less as only two viz. extraversion and introversion. Statistical methods were used by Cattel to narrow down the trait number. Main points of criticism labeled against trait approach are (1) a particular trait can be perceived differently by different persons (2) In critical incidents the person may not show his fixed trait, often exhibited by him in normal circumstances. The same may be dominant in one situation and submissive in another. The ancient Greeks used four types viz. Sanguine, Phlegmatic, Melancholic and Choeric, based on body humors. Kreshmer’s classification includes (1) asthenic (2) athletic (3) pyknic (4) dysplastic. Sheldon used endomorphic, mesomorphic and ectomorphic body types to correlate temperament of individuals. Friedman’s type approach has received a wider acceptance, wherein Type A and Type B personality are all important types. Recently, Type C has been added into it.

Main lines of criticism of Type approach: (1) cause and effect relationship cannot be formed, as has been evident through various research findings. (2) Types are like pigeon holes, fixed and rigid.

The physical fitness as refer to new dynamic and physiological state of individual and continuum from the optimal human performance to server and death of people. The players would be found towards the above and the
continuum fluctuating up and down and depending on their state training
whilst at the other conditions of lines could exist while this term may be
satisfactory in descriptive sense, problems arise when we try to measure to
develop the complexity arises because the physical fitness is made up of
series components. If we sow the example like... speed, agility, strength,
endurance, flexibility & co-ordination each one of which makes some
independent contribution to the whole state while some of these components
& very little of anther.

HEALTH RELATED PHYSICAL FITNESS

Those aspects of physical and psychological makeup that afford and
individual some protection against coronary heart disease, problems
associated with being overweight muscle and joint ligament and the
physiological complications of responding to stress.

This aspect of physical fitness is concerns the development of qualities
which is necessary to function efficiently and maintain the human life is a
healthy life style. If we sow the components of the health related physical
fitness are cardio-reparatory endurance and muscular strength & the
endurance, and body composition.

COMPONENTS OF HEALTH RELATED PHYSICAL FITNESS

Health-related fitness requires desirable levels of cardio-vascular
fitness, percentage body fat, flexibility and endurance. These help to prevent
the incidence and severity of degenerative types of disease and increase
work efficiency. The cardio vascular fitness refers to the efficiency of lungs
and heart. Muscular strength and endurance is the capacity of the muscles to
work against the resistance for longer time. Flexibility is the ability to move a
joint freely through its complete range of movement. Percentage of body fat
refers to the proportion of an individual's total body fat. Modern physical
education sees these skills more as a means to an end than as absolute or continuing in themselves.

As a matter of fact there are very few movements performed, or skills developed, which are persisted in merely for their own value, even in infancy and childhood. As soon as a goal is desired the movement or skill needed to attain it is practiced. The child who wants the cookie learns to walk over and get it. A child learns to ride a bicycle not just in order to ride the bicycle but to preserve status with the gang, go to school, or show off. Physical training is an older but still used term to describe the training of the physical components of the body without any necessary reference to the purposes which are significant in modern education. It should not be confused with physical education. They are not synonymous, as we shall see in the chapters which follow.

Nor should the term physical education be allowed to imply a separation from the mental and thus perpetuate the unfortunate but traditional notion that man exists as mind and body, and that education is concerned with only one, or at the most two, of these parts. The concept of man as a unified being makes confusion on this score unnecessary. The physical education is most importance part of the score in human life. The natural movement of active plays or influence of everyone who are working in the field of physical education.

It has been said frequently that people in the United States are among the most sports-loving in the world. Each year millions play and other millions watch. It is common for a person to be a spectator at a contest one day and a participant the next. He may watch a baseball game, play golf, take in a tennis match, or fish, all on the same week end. There is no great class of spectators and another of participants. Many millions are skilled at both and gain from both certain elemental satisfactions.

How wide is the participation? Such things are not easy to appraise accurately, but it is probably safe to say that if there are forty million children
less than 12 years of age, forty million of them at one time or another play tag or two o’cat or hide-and-seek. They develop their own version of baseball on city streets and call it stick ball. Or they play marbles under the elms in the village square. Hundreds of thousands of them annually put on their first roller skates or master the technique of the bicycle. And some are fortunate enough to learn to ski or ice-skate. More than half of them develop a love for swimming in pools and lakes and rivers. Over the years, there has developed a very real conviction that childhood is a time for play and that our children must have a full measure of it if life is to be judged good. Time enough later on, we say, for the serious business of making a living or establishing a home. Play now while you are young and can enjoy it to the fullest!

In American there are roughly fourteen million men and women who fish for sport each year, and thousands more who do it for a living. These fishermen spend a billion dollars a year on their equipment. There are millions of licensed hunters and millions more who shoot for fun at targets. Golf attracts six million people every year, and howling is the favorite sport of perhaps even more. The six billion dollars or more invested in motorboats in the inland and slat waters of the country, when added to the amount spent by those who canoe or sail, brings boating into focus as one of the most popular sports on the American scene. More than seventy million people pay to attend baseball contests each year. They come to see hundreds of thousands of players. Roughly sixty million people watch football each season; the players in action range from little fellows barely able to see from under their oversized helmets to great professionals stars who play the game for money. Dancing in one or more of its various forms attracts vast numbers. Whether in the round dance of the ballroom or the square dance of the ballroom or the square dance of the husking bee or carnival young and old find in dance the answer to their need for self-expression and for fun. The dancing classes of the country are filled with children learning not merely the steps but also the social skills that go with the particular forms of dance most frequently used in our society. Summer find hundreds of thousands bound for the beach, the mountain lakes, and the neighborhood swimming pools. Swimming, diving,
surfboarding, scuba diving, water-skiing, and boating have their devotees; the water seems to challenge the skills of people of all ages. These activities offer emancipation from the restrictions on movement which our society imposes through the highly conventional life we are supposed to lead. People fret under such restrictions and, when the opportunity is at hand or can be created, revert to the natural state of willing participation in play.

ABOUT ANTHROPOMETRIC

The study of human physical measurements by another science anthropometry. Which was wide application as one of the essential parameters constituting the selecting diagnostics of any game or sports.

The study of body type has significant place in the field of sports.

The physical structure especially the height and arm length have definite decisive advantage in many games and sports, similarly segmental length of individual body parts, specifically the leg length and arm length are of considerable advantage in certain games. The anthropometric variables selected for the study are height, weight and arm length.

IMPORTANCE OF ANTHROPOMETRIC VARIABLES

Anthropometric measurements of body structure are the oldest type of body measurement, known, dating back to the beginning of recorded history. It was also an early type of testing in physical education. On the theory that exercise should be prescribed to affect muscle size, emphasis was placed upon muscle symmetry and proportion. In the year 1862 (Hit Chock) and later Sergeant produced profile charts to reveal how to individual compared with their standards.
Another use of anthropometry is to determine relationship between structure and motor performance. Observations of such relationship are common place observe the well proportional bodies of wrestlers and gymnasts, the super structure of great sportsman. The handball competitor’s solidarity of top-flight athletes they massive build’s of great shot-putters and discus throwers.

In anthropometric measurements like as height, weight & arm length was likely to influence skill development and performance in the games.

Remaining the anthropometric measurements if we include influencing skill of the athletes development and performance of the players we be develop.

Height has the potential placement as preferable perquisite for the performance excellence in many sports or games. Anthropometric measurements have revealed co-relation between body structure and physical characteristics and sports capabilities.

Anthropometry is that branch of anthropology which is concerned with the taking of measurements of the human body. This definition has been confined to the kinds of measurements commonly used in associating physical performance with body build.

The measurement of structure and proportion of the body is called anthropometry. It has wide application as one of the essential parameter constituting the selective diagnostic of any games or sports.

The Anthropometry consists the marking of the external measurements of the players and human body and the results can be used to appraise body build, nutritional status and the posture.
In the human motor performance was a composite of many of variables. One of which is the structure of the body and the specific measurements of the Limb Lengths, Circumference, Breadths and the Body Build indices can reveal relationship between the anthropometry long legs to the length and mass of the body is build to jump.

Physique will be useful in choosing a suitable physical and mental activity for an individual because of the fact that according to physique they have too many mechanical advantages.

Longer legs are helpful to take the necessary long strides over hurdles without the loss of time that jumping entails.

Tall structure and long lower extremities have been noticed in all games and events such as volleyball, basketball, high jump, pole-vault and goal-keeping where jump is involved. The height and reach of the players make better performance in these games and events.

observation. In other words, it was his intention that psychology should be completely objective. Since experience is private, subjective, he said, that it should not be included in the scope of psychology. Thus there was a swing from almost exclusive preoccupation with the analysis of experience to an almost exclusive preoccupation with the analysis of experience to a campaign for the abandonment of experience.

As we have seen, all mental activities involve the neuro-muscular system. The sense organs, the brain, the spiral 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 emotion. Often emotion 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 emotion, 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 emotion. There is on the one hand the interest in the general laws of human emotion 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 emotion.

We have studied different aspects of man: man the perceiver, man the needful, and man the adaptive. But it has always been clear that this tripartite division is merely one of convenience – for analytic purposes – and that man, functioning in his social and physical world is an indivisible unity who perceives and desires and learns simultaneously. We now turn to the task of synthesis – to – the task of describing the whole man.

One of the first things to become apparent as we turn our attention to the whole man is that he manifests himself in infinite variety. There has never been a person exactly like you, and there never will be. And one of the major
factors which distinguish you from your neighbour is the way your perceptual, motivational, and learning processes are organized into unique patterns of capacities: intelligence, abilities, talents, and aptitudes. It is this patterning and synthesis which helps makes you, you; which make you Jim McGraw, or Shirley Cohen, or Tony Morales instead of Mr. any man.

The study of the abilities of man has been intimately tied up with intelligence testing. Literally millions of people, representing different ages, economic groups, cultures, nationalities and races have been subjected to intelligence testing of one kind or another. There are individual tests (where one person at a time is tested) and group tests (where hundreds of people at a time are tested); speed tests (where the scores are determined by the rapidity with which correct answers can be given) and power tests (where the difficulty of the task successfully completed determines the score); verbal tests (requiring verbal responses to questions) and performance tests (involving such nonverbal responses as stringing variously coloured beads in a specified order.

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 sportmen 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 sportmen with respect to some psychological characteristic. It is also essential to know what type of emotional problems like 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 sportmen. In view of this, five psychological variables namely visual reaction time, auditory reaction time, extraversion, neuroticism and competitive anxiety were selected and the relationship of disjunctive reaction time, both visual and auditory with extraversion, neuroticism and competitive anxiety was examined in the present study.

The great majority of empirical research in sport personality has utilized assessment devices which embody the factor theory as their main premise. As expressed by Cattell (1973), the factor theory searches for consistencies in behaviour. It is assumed that internal dispositions or traits are relatively stable
and so enduring that they override environmental or situational influences. This infers that questions cold be asked in any situation and the responses to generalized to a sport situation. Thank for example he broad category of anxiety. Is knowing that a person low on an omnibus inventory of anxiety enough to conclude that he will never exhibit anxiety; are there no situations in which his heart rate may increase a little. The situation position as exemplified in Mischel's [1969] social learning theory, appears to go too far to the other extreme, entering into open debate with personalize. This paradigm can be regarded as the antithesis of the factor theory and maintains that behavioural variation is primarily a function of the situation in which a person is placed.

Emotion is open to observation. It can be studied in the same way in which other phenomena in the universe can be studied. But among human beings there is also experience alongside with emotion. The child who has learnt to speak will not only with draw his hand when he is pricked with a pin; he also shouts that it is hurting him. The pinprick not only leads to withdrawal, which is an observable emotion, it also leads to an experience, which is expressed in the statement that the is suffering pain. This experience is not open to observation by others; it is private, it is personal. Only the person experiencing can make an assertion about it. The ancient thinkers were generally concerned with the study and analysis of these experiences. These are the mental activities that we are conscious of. We not only experience them we are also aware of them. But every mental neuromuscular system is involved in all mental activity. A few decades ago the psychologist Watson tried to limit the scope of psychology to the near observation of human emotion so that other persons concern it only with phenomena open to observation. In other words, it was his intention that psychology should be completely objective. Since experience is private, subjective, he said, that it should not be included in the scope of psychology. Thus there was a swing from almost exclusive preoccupation with the analysis of experience to an
almost exclusive preoccupation with the analysis of experience to a campaign for the abandonment of experience.

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Form these taste we have accumulated much useful information. We can fairly quickly and reliably determine where a person stands in relation to any reference group of his fellows, and on the basis of this we can predict a number of things about his performance in various situations. But the
question of what it is we are testing, the question of what is “intelligence”, remains unanswered.

Intelligence is a concept variously used and variously defined. Some people define it as the ability to adapt to new circumstances, others as the ability to learn, and still others as the capacity to deal with complex and abstract material.

Different psychologists have championed these (and other) definitions of intelligence, and much research has been addressed to these questions. However, none of this research has resulted in a clear definition of intelligence. For this reason many psychologists today have reached the point where they no longer ask “What is intelligence?” They have decided that they can do a useful job in measuring intelligence without defining it. In this respect they are doing what the early physicists did when they studied heat. Long before the physicists could agree on a sound definition of heat they have invented reliable thermometers to measure changes in temperature and with these instruments they were able to discover many important physical laws.

Standardization of intelligent tests. But all of the above statements are relative to the group on which the test was standardized. To say that the “average” ten-year old can pass certain items of an intelligences test implies, of course, that we have previously tested a representative sample of the entire population of ten year old children. This procedure is called standardizing the test items. The problem of obtaining a sample truly representative of the entire population is beset with difficulties. If the unrepresentative of the entire population of children the intelligence test was standardized on a sample which did not adequately include children of the lower economic groups, merely use this test to measure the I.Q. for these children. This is but a reflection of the fact that the I.Q. is a relative score, not an absolute score.

Adult I.Q.’s We have seen that intelligence, as measured by our available tests, does not grow at the same rate after puberty as it does prior to
that age this means, of course, that the concept of I.Q. cannot have the same meaning for an adult as it does for a person younger than about 16. In order to use the I.Q. unit for adults, several simplifying assumptions have been made. In computing a Stanford – Binet I.Q. for anyone over the age of 15 the person is given a chronological age of 15 no matter how old he really is. This is done because it is assumed that the average adult has stopped growing in intelligence at that age.

Since the Stanford-Binet test has been standardized on children and very young adults (up to the age of 18) many psychologists do not consider it an adequate test for older adults. In response to these difficulties a number of tests have been developed especially for adults. Among the most commonly used of these is the Wechsler Adult Intelligence Scale which consists of two parts – a verbal part and a performance part, each consisting of five kinds of items. The verbal part includes information, comprehension, vocabulary, memory span for digits forwards and backwards, arithmetical rezoning, etc. The performance scale includes tasks involving object assembly (putting together cut out parts to complete a figure such as a human profile – very much like a jig – saw puzzle), picture completion, picture arrangement, etc. It is of interest to note that the correlation between the Stanford – Binet and the Wechsler Adult Intelligence Scale is about 85.

By way of summary, in selecting items to differentiate the more intelligent from the less intelligent children, intelligence test constructors usually follow several guiding principles in the first place, the content of the items must, on the fact of it, be “intellectual” in nature; secondly, items must discriminate between children of different ages, such that percentage of children passing the item must increase with increase in age. Other considerations also have been taken into account the items should be reasonably easy to administer and score, should sample a wide variety of tasks, and should reflect the experiences common to all children.
The use of such items when standardized on representative samples enables us then to convert the raw scores earned on intelligence tests into age scores and I.Q. scores. When this is done we find that intelligence shows a fairly constant developmental growth up to the age of approximately 14 years. This can be taken as a “known group” validation of the intelligence test. But this very fact makes for difficulties in using the I.Q. concept when measuring adult intelligence.

The bicycle but to preserve status with the gang, go to school, or show off. Physical training is an older but still used term to describe the training of the physical components of the body without any necessary reference to the purposes which are significant in modern education. It should not be confused with physical education. They are not synonymous, as we shall see in the chapters which follow.

Nor should the term physical education be allowed to imply a separation from the mental and thus perpetuate the unfortunate but traditional notion that man exists as mind and body, and that education is concerned with only one, or at the most two, of these parts. The concept of man as a unified being makes confusion on this score unnecessary. The physical education is most importance part of the score in human life. The natural movement of active plays or influence of everyone who are working in the field of physical education.

It has been said frequently that people in the United States are among the most sports-loving in the word. Each year millions play and other millions watch. It is common for a person to be a spectator at a contest one day and a participant the next. He may watch a baseball game, play golf, take in a tennis match, or fish, all on the same week end. There is no great class of spectators and another of participants. Many millions are skilled at both and gain from both certain elemental satisfactions.
4.2 Discussion of Results

Generally, psychological attributes often have reciprocal consequences, viz., either success or failure in performance. However, this definitely helps in coping with more number of demanding situations in games and sports. Therefore, a sportsman encounters success/failure very often but how successfully he/she copes up with it and the strategies used to cope with it is reflected his attitude towards life, self and others and thus the behavior. Thus, in sports, psychological factors play an important role in determining the performance level (Grange and Kerr, 2010; Schilling and Hyashi, 2001). Further, a study conducted by Crespo (2002) demonstrated impact of psychological factors on sports performance. Considering this idea, the present study has been conducted to see the psychological status of mental health, emotional intelligence and personality of state level Basketball and Volleyball players.

The results reveal that 50% of the Basketball players in Maharashtra possessed higher state of mental health and rest 50% had lower state of mental health. Appearance of such result infers that the Basketball players playing at state level need to improve mental health. On the contrary, 90% of the Volleyball players possessed high mental health and rest 10% of them had lower level of mental health. Logically it is plausible that the state of mental health is perhaps influenced by the nature of the game. In fact, the Basketball is a fastest game, whereas the Volleyball is comparatively slow. Since the Basketball is very fast, the players of this are perhaps more akin to experience anxiety and stress (Ostoiic, Mazic and Dikic, 2006) that might have contributed to poor level of mental health. Considering such logic, it is the Volleyball players who can have a comparatively better level of mental health, which has been evident in the result of this study. Thus, the null hypothesis – “HO1: There would be no statistically significant difference in
mental health between the state level male Basketball and Volleyball Players” as formulated in this study has been refuted and finally proved that Volleyball players had comparatively better mental health than the Basketball players.

In the case of emotional intelligence, the result indicates that majority (70%) of the Basketball players possessed high level of emotional intelligence; whereas 30% of them had lower state of emotional intelligence. In fact, Basketball is a very tough game where intellectual decisions facilitate the performance and for this a Basketball player need to improve his emotional stability during performance (Delextrat and Cohen, 2008). It is amazing to note that 100% of the Volleyball players possessed high level of emotional intelligence, where none found lower level of emotional intelligence. The appearance of such result has been supported by earlier researchers (Kioumourtzoglou et al., 2000; Newby and Simpson, 1996). This, in turn, helps to access the better level of emotional intelligence among the Basketball players as compared to the Volleyball players. Thus, based on this interpretation, the null hypothesis – “HO2: There would be no statistically significant difference in emotional intelligence between the state level male Basketball and Volleyball Players” has also been refuted. Finally, the result infers that the level of emotional intelligence differs between Basketball and Volleyball players, and Volleyball players had comparatively better emotional intelligence than the Basketball players.

The results on personality status revealed that about 49% of the Basketball players possessed a good level of personality; whereas 51% had poor state of personality. However, 60% of Volleyball players possessed a good personality level, whereas 40% of them had poor personality status. Although both the Basketball and Volleyball players need to improve good personality, the personality status of Volleyball player was found superior to the Basketball players. In fact, personality plays an important factor in sports
(Auweele et al., 2001; Cooper, 1969; Eysenck, 1995; Liwei and Leahy, 1993), the personality profiles of Basketball and Volleyball players are not known. However, the result of this study infers that the Volleyball players had better personality than the Basketball players. Such result appeared so far may be due to the fact that Volleyball players possessed proper mental health and emotional maturity, which might have helped them to develop good personality than the Basketball players. On the basis of this result, the null hypothesis – “HO3: There would be no statistically significant difference in personality between the state level male Basketball and Volleyball Players” has been refuted. This indicates that personality level differs between the players of Basketball and Volleyball. Moreover, Volleyball players had good personality than the Basketball players.

To summarize, the result finally infers that the state level Volleyball players had better level of mental health, emotional intelligence and personality than the Basketball players.