



UNIT-IX: PSYCHOLOGY AND SPORTS

Contents

- Personality; its definition and types – Trait and Types (Sheldon and Jung Classification) and Big Five Theory
- Motivation, its type and techniques
- Exercise Adherence; Reasons to Exercise, Benefits of Exercise
- Strategies for Enhancing Adherence to Exercise
- Meaning, Concept and Types of Aggressions in Sports

Learning Outcomes

At the end of the unit, students will be able to:

- classify different types of personality and its relationship with sport performance.
- recognise concept of motivation and identify various types of motivation.
- illustrate various strategies of motivation used in sports.
- various reasons to exercise and its associated benefits.
- identify strategies for promoting exercise adherence.
- differentiate types of aggression in sports

Discussion

Read an excerpt from a leading newspaper regarding news for requirement of sports psychology in Indian Sports.

BCCI for hiring psychologists to arrest stress

TNN | Mar 11 NEW DELHI: The Indian Cricket Board has discussed plans to ask its state units to hire good sports psychologists who can help young players handle pressure better and ensure lesser drop-outs from the game. With India losing several talented Under-14 and Under-16 level players every year due to family and academics pressures, BCCI also wants to make the hiring of psychologists compulsory at state academies for age group players.

According to a board official, "India is losing a lot of talent at the age-group levels, The stake-holders of the game are all concerned and they want a system in place to tackle this problem. It is common these days to see talented players leaving the game after one or two bad seasons. As you go higher, the talent pool is reduced. "This shouldn't happen," thus the idea of hiring psychologist was discussed. adding that the cricket drop outs should stop at all levels.

<https://timesofindia.indiatimes.com/sports/cricket/news/bcci-for-hiring-psychologists-to-arrest-stress/articleshowprint/57587522.cms> 1/1



**Discuss in your group**

- What causes a person to persist or to give up?
- What is the person thinking and feeling while engaged in the activity?
- What can be the reasons for drop-out of talented athletes from sports?
- How can a Sports Psychologist help young players handle pressure better?
- Can different motivation techniques help athletes towards continued sports participation?

Present your ideas to the class

9.1.1 Personality: Concept and Definitions

Reading the news clipping, did you wonder why a psychologist would be required to prevent athletes from dropping out, even though they have achieved success? Are we able to identify athletes who have the talent or skill to continue with sports participation but still lack the determination to continue in sports? If we were asked to analyse reasons why some sportspeople succeed despite all odds, surely, we will come up with adjectives like determined, persistent, courageous, dynamic, robust, etc. Is there something more which can be added to describe these athletes – eg., consistent or possessing a stable pattern of behaviour? Sports psychologists have tried to answer these by relating them with various theories of personality. Understanding personality has been an area of interest which is as old as our civilization. Even before the present day scientific and systematic research to explain personality developed, philosophers across the globe tried to analyse characteristics which were unique to an individual and why people differed in various ways. However, the concept of personality is still evolving and covers such a large range of phenomenon, that it is very difficult to include all the aspects of personality in one definition.

The word **personality** is derived from the Latin word *persona*, the mask used by actors in the Roman theatre for changing their appearance for performing in-front of their audience according to the given role. The actor performed as per the script or story wearing a particular mask. The audience also expected them to act in a particular manner on seeing the mask. However, it didn't mean that the actors possessed the desired qualities of the character in themselves. Therefore, the concept of personality came to refer to an individual's characteristic way of responding to other individuals and situations. When we observe people around us, we are able to describe their actions and responses to different situations based on the combination of their individual thoughts, characteristics, behaviour, attitude, ideas and habits. We may represent them as shy, happy, courageous, aggressive etc. These characteristics are a representation of different components of personalities. Therefore, we can view personality as the relatively stable and unique characteristics of an individual across different situations and varied period of time.





Thus, Personality is a body of habits, traits, attitudes and ideas of an individual which are organized externally into roles and statuses. They relate internally to motivation, goals and various aspects of selfhood. In fact, personality is a composite total of all that a person is. It is the totality of one's behaviour towards one's own self as well as others and includes everything about the person, his/her physical, emotional, social, mental and spiritual make-up.

In sports also, it is important to understand athletes and their unique and relatively stable characteristics in different situations and conditions. It is essential to know how a particular athlete responds to the situational demands of the training as well as competitions. No two athletes behave in a similar manner; they may behave differently in a common situation. Some athletes may not like to take a command from a coach but may respond positively towards acceptable alternatives like cooperative learning from coaches. Sports psychologist may also be interested to learn which type of people opt for a particular type of sports or exercise program. To understand this, let us overview personality from various approaches and theories propounded by eminent psychologists from across the world. These theories represent various contrasting views and perspectives on the origin and nature of human uniqueness. Each theory may have vast differences but offers wide range of insight that can add towards effective understanding of personality of an individual.

Personality, thus, can be defined as the characteristic set of behaviours, cognitions and emotional patterns that evolve from biological and environmental factors. It is the integration of those systems and habits that represent an individual's characteristic adjustment to his environment. According to Robert A Baron, "Personality is an individual's unique and relatively stable pattern of behaviour, thoughts and feelings." Matt Jarvis (2006) in his book presented a general definition of personality offered by Pewin (1993) "Personality represents those structural and dynamic properties of an individual or individuals as they reflect themselves in characteristic responses to situations". It is the integration of those systems and habits that represent an individual's characteristic adjustment to his environment."

Carl Jung (1933)¹: Personality as an attitude refers to a predisposition to behave in a certain manner.

William Herbert Sheldon (1942)²: offered a topology of personality based on three major morphologies or body types (Endomorph, Ectomorph, Mesomorph), each associated with a different temperament of an individual.

Cattell (1950)³: Personality is "that which permits a prediction of what a person will do in a given situation."

Guildford (1959)⁴: Personality is an 'individual's unique pattern of traits.'

Allport (1961)⁵: Personality is the dynamic organization within the individual of those



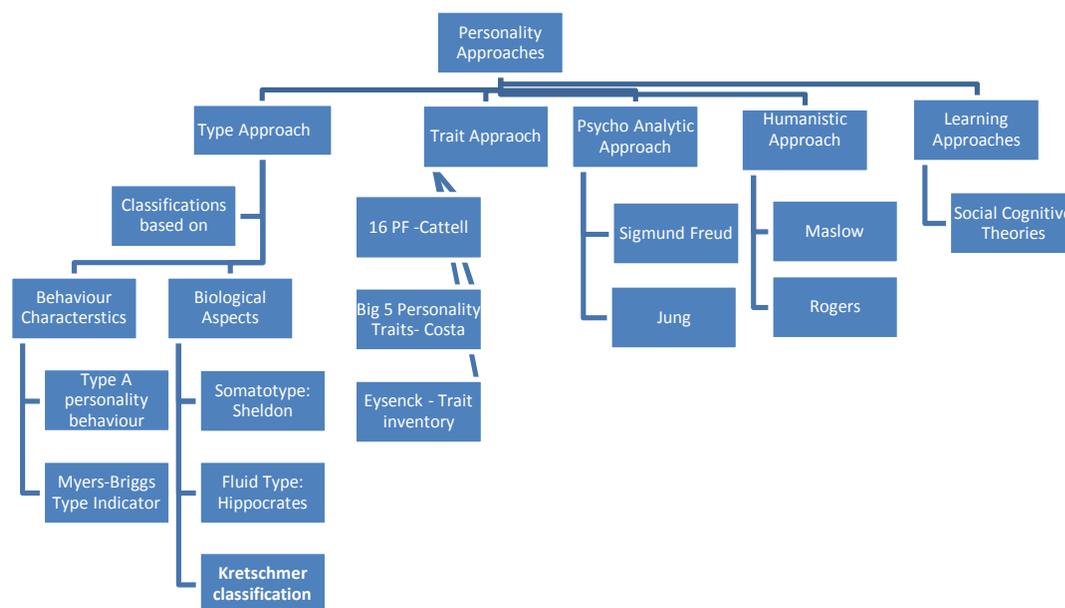


psychological systems that determine his unique adjustment to his environment.

Eysenck (1953)⁶: Personality is defined as more or less stable and enduring organization or a person’s character, temperament, intellect and physique which determine his unique adjustment to the environment.

Robert A Baron (2008)⁷: Personality is defined as individual’s unique and relatively stable pattern of behaviour, thoughts and feelings.

9.1.2 Personality Types



Some of the Personality Types and Traits mentioned here could be used for research as Extension Activities or as Project Work

Over the years, with the progress of research and development of literature in the field of personality by various psychologists, it is essential to understand the various approaches for getting a better perspective and understanding of personality.

Personality type refers to the psychological classification of different types of people. Personality types are distinguished from **personality traits**, which come in different degrees. There are many theories regarding personality types, and each theory contains several and sometimes many sub theories. For example, according to type theories, there are two types of people, introverts and extroverts. According to trait theories, introversion and extroversion are part of a continuous dimension with many people in the middle. The major theories include dispositional (trait) perspective, psychodynamic, humanistic, biological, behaviourist, evolutionary, and social learning perspective. However, many researchers and psychologists do not clearly subscribe to any one particular perspective, but instead take an





heterogeneous approach. There is also a substantial emphasis on the applied field of personality testing. In psychological education and training, the study of the nature of personality and its psychological development is usually reviewed as a prerequisite.

Since no one particular theory or approach covers the complete aspects of personality, the approach for explaining 'personality' includes mainly, the 'Type' approach which consists of classification or comprehending of personality type based on a set of behaviour characteristics with similarities as done by Myers and Briggs type indicator, Friedman and Rosenman Type A personality behaviour etc., as well as on the basis of body type classification by Kretschmar, or somatotype by William Sheldon, and the fluid type classification as explained by Hypocrites.

In the Indian context also, the famous Ayurveda book **Charak Samhita** classifies individuals into three types known as *vat*, *pitta*, *kapha* on the basis of three humoral elements are referred as *tridosha*. Each of these elements are associated with the basic nature of an individual referred to as *prakriti*. The Indian literature also refers to personality typology based on *trigunas* meaning three qualities:

- (a) *Sattva Guna*;
- (b) *Rajas Guna*;
- (c) *Tamas Guna*.

The *Sattva Guna* consists of qualities related to "spirituality". When *Sattva Guna* is dominant, a person has an inherent desire to be good and caring. Cleanliness, truthfulness, discipline, constructive thought and self-control are the motive force of sattvic action. *Rajas Guna* gives rise to passion and desire. Such a person veers towards greed, activity, undertaking of works, restlessness, gratifications, dissatisfactions, and envy. A person who is *Tamasic* possesses characteristics associated with laziness, inactivity, destructive behaviour, arrogance, anger etc.

Trait approach, on the other hand, focusses on specific psychological attributes based on the concept of individuals differing in 'unique' and 'stable' characteristics. Trait refers to a characteristic that is unchanging and predictable. For example, shyness is a trait that is usually stable in an individual's personality. Some traits are innate – the infant possesses a basis for developing the trait at birth, while others are acquired through learning, such as the tendencies toward tidiness or untidiness. Some researchers like Eysenck, Cattell as well as Allport and others support inherent traits as "cardinal" and proposed a theory of personality based on biological factors, arguing that individuals inherit a type of nervous system that affects their ability to learn and adapt to the environment. Sigmund Freud and Neo-Freudians like Jung, who described the structure of personality in three part-id, ego, super ego, put forward the psycho-dynamic theory of personality that assumes there is an interaction between nature (innate instincts) and nurture (parental influences). The





Humanistic approach of Maslow and Carl Rogers focuses more on human experiences and innate capacities for self-directed changes. They are mainly concerned with an individual's innate drive toward self-actualization—a state of fulfilment in which a person is achieving at his or her highest level of capability. The learning approach to personality through social cognitive theory offered by Bandura and various others like Skinner emphasizes the role of learning and human experiences on consistency and uniqueness in behaviour over time and across situations. They also focus on behaviour as a response to change in environment and conditions, and not merely dependent on personality traits.

In modern sports, interaction perspective regarding personality is an extremely popular and widely adopted approach towards understanding of behaviour. It defines behaviour as function of personality and situational factors acting together. According to the interaction theory behaviour in any situation is a function of both personality and external factors. While personality and situation cannot influence the behaviour independently, but their interaction influences a particular behaviour. For example, a player with high hostility trait may not indulge in aggressive behaviour if he or his team is winning with a large margin, or an athlete with composed traits may reflect neurotic tendencies of anxiety if faced with the challenge of scoring the winning run of the last ball of a knockout round match. Similar forcing influence of situation on behaviour can be observed in various sports environment, where the athletes' behaviour is not influenced by their core traits; instead it is determined by the rewards and threats associated with the particular situation.

9.1.3 Trait Theory

Trait, in psychology, refers to the ways in which we generally describe the characteristics of an individual as part of his personality. The descriptive terms such as extrovert, introvert, sincere, honest, loyal, truthful, impulsive, quiet, conservative, hesitant, dominant, apprehensive are examples of personality traits. Trait approach is one of the most vital areas of study in psychology that helps identify a person's personality.

Trait has two main assumptions:-

- (a) every individual has certain unique characteristics or traits which are stable and consistent under various conditions,
- (b) every individual is different due to Her/He unique characteristics or traits.

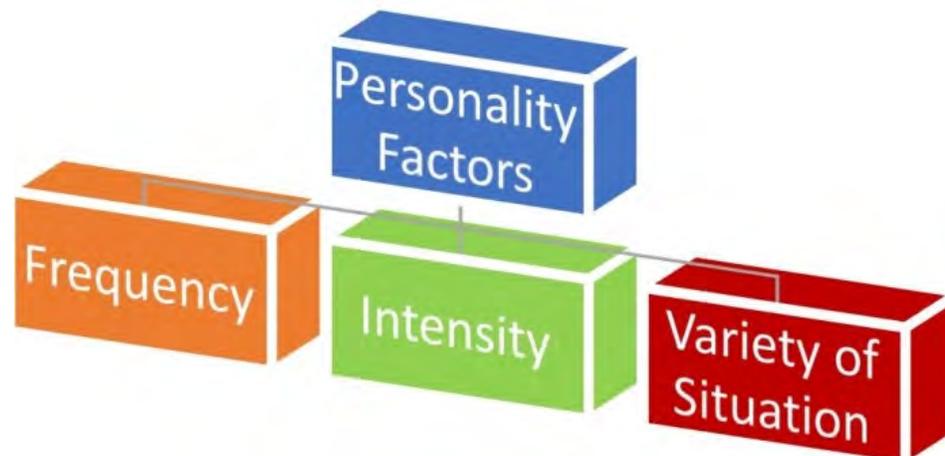
Therefore, trait can be defined as a stable and unique characteristic that causes a person to respond to a given situation in a certain way. Trait theories indicate that the personality of an individual consists of traits which are always constant regardless of the situations. An individual as a whole does not have just a single trait, but a variety of traits form the





personality of an individual. These personality traits are unique and differ from one individual to another.

Assessment of trait can be based on three factors.



- (a) Frequency;
- (b) Intensity and
- (c) Variety of situation.

Frequency refers to repetition of similar behaviour consistently over a period of time, **intensity** refers to reflecting the behaviour at an extreme level, and **variety of situation** refers to repetition of similar behaviour over different situations.

It means, we can describe individual's personality based on trait approach according to the reflection of similar characteristics under variety of conditions to be reflected in their behaviour at an extreme level. For example, if an athlete is sociable, in most situations the athlete will be effectively cooperative and will reflect strong team work inside as well as outside the sporting arena. Thus, trait approach attempts to identify primary characteristics of people. A trait is considered as a relatively enduring attribute or quality on which one individual differs from another. They include a range of possible behaviours that are activated according to the demands of the situation.

Supporting such a theory was Gordon Allport (1936), an initial modern trait theorist who worked towards explaining personality traits. He proposed that individuals possess a number of traits, which are dynamic in nature. They determine behaviour in such a manner that an individual approaches different situation with similar plans. The traits integrate stimuli and responses which otherwise look dissimilar. According to him, personality of an individual can be studied through a distinction between the common traits and the personal disposition. It can be classified into three categories.





1. **Cardinal Traits** – which dominate behaviour of a person; may be developed later in life but rare;
2. **Central Traits** – consisting of characteristics found among everyone and acts as basic building blocks that shape most of our behaviours and lay foundation of an individuals personality;
3. **Secondary Traits**- characteristics or traits which are in plentiful but need stimuli, therefore reflected only in certain circumstances.

9.1.4 Sheldon Personality Type

In the 1940s William Herbert Sheldon classified people according to body types. He claimed that a body type could be linked with the personality of the person. According to Sheldon's theory, a fat person with a large bone structure tends to have an outgoing and more relaxed personality while a more muscular body-typed person is more active and aggressive. A slim or scrawny person with thin muscles is usually characterized as being quiet or fragile. He split up these body/personality types into three categories called **somatotypes**.

- (a) **Endomorph** who are rounded and soft, were said to have tendency towards a 'viscerotonic' personality, (ie., Relaxed, comfortable, Social, peaceful, loving);
- (b) **Mesomorph** who are square and muscular, were said to have a tendency towards a 'somatotonic' personality (ie., Active, dynamic, assertive); and
- (c) **Ectomorph** who are thin and fine-boned, were said to have a tendency towards a 'cerebrotonic' personality (ie., Introvert, thoughtful, sensitive, inhibited).

Extension Activity

Assess your own personality

Here are a number of personality traits that may or may not apply to you. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

1 = Disagree strongly

2 = Disagree moderately

3 = Disagree a little

4 = Neither agree nor disagree

5 = Agree a little

6 = Agree moderately

7 = Agree strongly





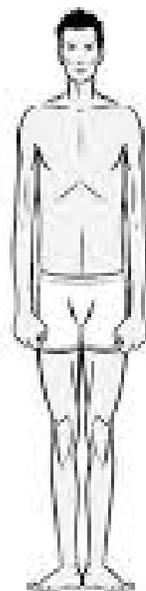
When I participate in Sports, I feel

1. Enthusiastic and Energetic	1	2	3	4	5	6	7
2. Critical, quarrelsome, suspicious of my teammates	1	2	3	4	5	6	7
3. Dependable, disciplined and well-organised	1	2	3	4	5	6	7
4. Anxious about my performance	1	2	3	4	5	6	7
5. Open to new ideas and suggestions.	1	2	3	4	5	6	7
6. Cautious while engaging with others	1	2	3	4	5	6	7
7. Cooperative with my team mates	1	2	3	4	5	6	7
8. Disorganized, careless about my equipment	1	2	3	4	5	6	7
9. Calm and collected about the outcome	1	2	3	4	5	6	7
10. Rigid and unwilling to try out new ideas	1	2	3	4	5	6	7

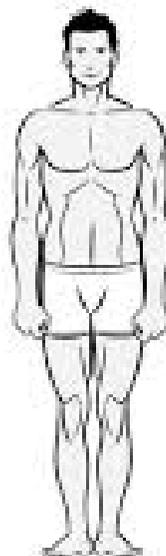
Answer the following:

1. If you were to change one aspect of your personality, what would you like to change and why? If not, why not?
2. Which aspect of your personality would you never want to change? Discuss with a friend.

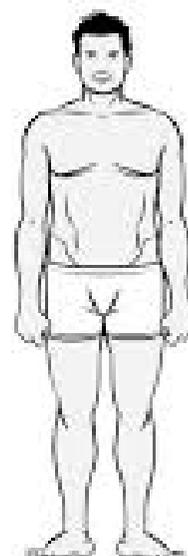
For answers to Personality assessment, see last page of the Unit.



Ectomorphe



Mesomorphe



Endomorphe





Body Type	Physiological Characteristics	Psychological Characteristics
ENDOMORPH	Pear-shaped Round, fat and thick Wide hips and narrow shoulders High fat percentage Under-developed muscles	Relaxed Tolerant Comfortable Sociable Humorous Fun-loving Even-tempered
ECTOMORPH	Thin Under weight Narrow chest and abdomen Narrow shoulders and hip Less fat percentage	Creative Artistic Thoughtful
MESOMORPH	Muscular, wedge-shaped body Broad shoulders Narrow hips Less fat percentage	Active Combative Dominant Courageous

Endomorph

An endomorphic somatotype, also known as *viscerotonic* type, is characterised by the social temperament type. The psychological characteristic traits of this somatotype include being relaxed, peaceful, comfortable, affectionate, loving, tolerant, and sociable. They are fun-loving, good-humoured, even-tempered people and they love food. The endomorph is physical 'round', with wide hips and narrow shoulders that give them a pear-shaped appearance because of extra fat on their body.

Ectomorph

An ectomorph somatotype is also known as the *cerebrotonic* type. This personality type is characterised as an intelligent temperament. The psychological characteristic traits of this somatotype include intelligence, and emotional restraint. These people are introverts. Physically, they are always skinny, thin with narrow shoulders and hips with little fat on their body. Their personality tends to be self-conscious, socially anxious, quiet, reserved but artistic and thoughtful. They always keep to themselves and are afraid to branch out.

Mesomorph

The mesomorph, known as the *somatotonic* type, is characterised by predominance of body over social and intellectual temperament. Physically they are well built with a muscular body, with broad shoulders and a narrow waist. These individuals have very little fat on their body. Psychologically, the mesomorphs are active, combative, dominant, adventurous and courageous. They are not afraid to break out and do new things with new people. They are assertive and prefer vigorous activity and display a keen interest in physical activities.





Heath Carter Model of Somatotype applicable in sports

In each of the three categories (Endomorph, Mesomorph, Ectomorph), athletes can be classified on a scale from 1 to 7. The three numbers together give a somatotype number, with first score representing Endomorph score first, then Mesomorph and finally Ectomorph. For example, 1-7-1 reflects dominant endomorph body type or 4-4-4 reflects a balanced body type between the three, many researchers have tried to identify the body types of athletes and relate with suitable sports.

9.1.5 Jung's Classification of Personality Types

Carl Gustav Jung, a Swiss psychiatrist and a disciple of Sigmund Freud, was once a great admirer of Freud's view on psychoanalysis and worked with him for five years. However, he started developing contradictory views on some of the major assumptions or findings of Sigmund Freud and later followed a separate professional path. Therefore, many times, Carl Jung is referred to as a Neo-Freudian also.

Characteristics of Introverts & Extroverts	
Introvert	Extrovert
Interested in their own self	Highly socialized
Reserved	Broad-minded
Self-aware and introspective	Expressive and enjoy centre of attention
Take pleasure in reading, writing	Meet unknown people easily
Tend to shy away from public	Bold, outgoing and optimistic person
Think before acting	Action oriented

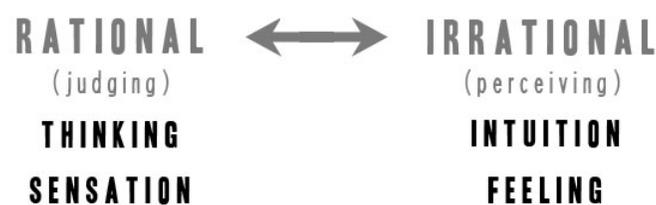




Later he published a book *Psychology Typen* (Psychology Types) in 1921 and presented his own theory of personality by classifying personality based on two important aspects.

First is personality attitude (introvert and extrovert) and second is personality functions (Sensing, Intuitive, Thinking, Feeling). He can be credited for being the first to introduce the concept of introversion and extroversion to the world of psychology. It was not a designed to label type of people, instead the purpose was to demonstrate the complexity of human typology and its consequences. Let us understand Jung's topology based on personality attitude and personality functions:

1. Personality Attitude: which is distinguished as Extrovert or Introvert.
2. Personality Functions: which can be classified as four distinct function namely; Feeling, Intuiting; Judging or Sensing. The four functions are divided into what Jung called rational (or judging) and irrational (or perceiving) functions. Thinking and sensations are rational, according to Jung, while intuition and feeling are irrational.



Introvert: In Jung's theory, introverts are people who are predominantly interested in their own mental self. They are typically seen as more reserved or reflective and prefer to be withdrawn from external reality. They opt to live in their own inner world of feelings and thoughts and often take pleasure in solitary activities such as reading, writing, or meditating. They prefer to create their own virtual and imagery world, due to which they tend to shy away from in public interactions and social connects and are less vocal with people around them, due to this, they like to be reserved and within themselves. They are more analytical before speaking.

Extrovert: In Jung's theory people with an extrovert personality are the total opposite of those with an introvert personality. They prefer the outer world of things, hence are found to be more broad-minded, are highly socialized, hence can meet unknown people easily. They are very bold, outgoing and optimistic person.





The Eight Preferences				
<i>Where you prefer to focus your attention</i>	E	EXTRAVERSION People who prefer extraversion tend to focus their attention on the outer world of people and things	I	INTROVERSION People who prefer introversion tend to focus their attention on the inner world of ideas and impressions.
<i>The way you prefer to take in information.</i>	S	SENSING People who prefer sensing tend to take in information through the five senses and	N	INTUITION People who prefer intuition tend to take in information from pattern and the big picture and focus on future possibilities.
<i>The way you prefer to make decisions</i>	T	THINKING People who prefer thinking tend to make decision based primarily on logic and on objective analysis of cause and effect.	F	FEELING People who prefer feeling tend to make decision based primarily on values and on subjective evaluation of person-centered concern.
<i>How you prefer to deal with the outer world</i>	J	JUDGING People who prefer Judging tend to like a planning and organized approach to life and prefer to have things settled.	P	PERCEIVING People who prefer perceiving tend to like a flexible and spontaneous approach to life and prefer to keep their options open

Extroverts tend to enjoy human interactions and to be enthusiastic, talkative, assertive, and gregarious. They take pleasure in activities that involve large social gatherings, such as parties, community activities, public demonstrations, and business or political groups. They also tend to work well in groups.

Personality Functions: Whether a person is an introvert or extrovert, she/he has a preferred pattern to deal with the situations. There can be four basic way or function used by people:





1. **Feeling:** Feeling is a preference for making decisions based on values and effects on people rather than logic. People use their emotional aspects to understand the situation and deal according to it.
2. **Thinking:** The capacity to decide objectively based on the evidence and applicable principles is defined as thinking. People evaluate the information received with logic and rationale for dealing with outer world.
3. **Sensing:** Sensing refers to a preference for perceiving the world through facts, evidence, data and details. People use their senses to seek information. They are good at looking and listening to understand the world around them.
4. **Intuitive:** Intuition refers to a preference for perceiving the world through concepts, theories and abstractions. People use their perception and intuitions to understand the situation, people around them, sometime its referred as sixth sense of an individual.

According to Jung, the two attitudes of extraversion and introversion cannot be demonstrated in isolation. It need to be associated with one of the four functions. When the two attitudes (Extrovert and Introvert) combine with four functions (Sensing, Intuition, Thinking, Feeling), they form eight mental functions-in-attitude or personality types. Let us briefly view each of the eight combinations of personality types.

Extroverted Thinking	Extroverted thinking involves segmenting; organizing for efficiency; systematizing; applying logic; structuring; checking for consequences; monitoring for standards or specifications being met; setting boundaries, guidelines, and parameters; deciding if something is working or not. Sorting out different colours and styles; thinking about the consequences. Extroverts who are thinkers are able to see the world through complex and solid ideas but these complex ideas are often handed down or moved on by others. These people often work in fields related to Math and Science.
Introverted Thinking	Introverted thinking involves analysing; categorizing; evaluating according to principles and whether something fits the framework or model; figuring out the principles on which something works; checking for inconsistencies; clarifying definitions to get more precision; analysing options for using principles. Introverts who think see how the world works in a subjective and creative way. This analysis is based on internal knowledge. These people often work in science fields as well.





Extroverted Feeling	<p>Extroverted feeling refers to connecting; considering others and the group-organizing to meet their needs and honor their values and feelings; maintaining societal, organizational, or group values; adjusting to and accommodating others; deciding if something is appropriate or acceptable to others.</p> <p>These people base their judgements on factual, known information. They form their assessments on social values and beliefs. These people often work in business fields and politics.</p>
Introverted Feeling	<p>Introverted feeling means valuing; considering importance and worth; reviewing for incongruity; evaluating something based on the truths on which it is based; clarifying values to achieve accord; deciding if something is of significance and worth standing up for.</p> <p>They base their feelings on emotions, feelings and beliefs. These people often work in the art field.</p>
Extroverted Sensing	<p>Extroverted Sensing refers to experiencing the immediate context; taking action in the physical world; noticing changes and opportunities for action; accumulating experiences; scanning for visible reactions and relevant data.</p> <p>These individuals look at the world and interpret reality. They see what is going and go with it. They are not influenced by other opinions. These people often work as taste-testers or proof-readers.</p>
Introverted Sensing	<p>Introverted Sensing involves reviewing past experiences; "what is" evoking "what was"; seeking detailed information and links to what is known; recalling stored impressions; accumulating data; recognizing the way things have always been.</p> <p>Introverts at times look for a hidden message or meaning to something. They do not just look at something and see it being there without a reason. These meanings are based on internal reflection. These people often work in the art field as well.</p>
Extroverted Intuitive	<p>Extroverted Intuition refers to interpreting situations and relationships; picking up meanings and interconnections; being drawn to change "what is" for "what could possibly be"; noticing what is not said and threads of meaning emerging across multiple contexts.</p> <p>These people base their meanings of things on facts rather than feelings. They are usually inventors.</p>

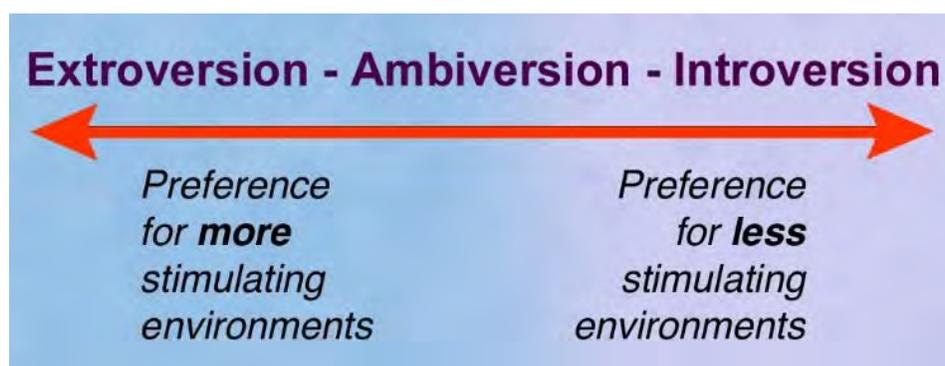




Introverted Intuitive	<p>Introverted Intuition leads people to foreseeing implications and likely effects without external data; realizing "what will be"; conceptualizing new ways of seeing things; envisioning transformations; getting an image of profound meaning or far-reaching symbols.</p> <p>Introverted Intuitives usually base their decisions on their inner desires. They find warmth through subjective ideas. These people usually work as artists or religious figures.</p>
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Ambivert

While explaining personality through the term Introvert and Extrovert, there is reference of a third term called Ambivert which is a relatively new term. Jung did not use the word to explain that there is no such thing as a pure introvert or extrovert. This concept was supported by many other later psychologists. Ambiverts reflect a blend of traits from the introvert as well as the extrovert along with having some specific strengths. Thus, an ambivert can be defined as someone who falls in the middle of the introvert/extrovert continuum. An ambivert is moderately comfortable with groups and social interaction, but also relishes time alone, away from a crowd. In simpler words, an ambivert is a person whose behaviour changes according to the situation she/he is in.



9.1.6 Big Five Theory of Personality

Another important trait approach which can provide essential insights into the key elements of personality is of the Big Five Factor personality model offered by Paul Costa and Robert McCrae. The five personality traits also known as the Five Factor Model of Personality and sometimes referred as OCEAN. The five domains or traits represented by the acronym OCEAN, are Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.





Let us try to understand the attributes of each of the five personality factors on a continuum leading from high reflected characteristics at one end to low reflected characteristics at the other .

Openness to Experience (Imaginative vs Narrow Interest):

Openness refers to dimension of personality which ranges from being imaginative, humorous, intellectual, creative, curious, having broad interests, open to ideas at one end to being closed to experience, suspicious and rigid at the other. In sports, athletes or Individuals scoring high on Openness are characterized by reflection of demonstrating new ideas and skill execution initiatives along with wide variety in ideas.

EXTRAVERSION (Enthusiastic vs Reserved)

Extraversion refers to dimension of personality which ranges from having enthusiasm, energy, positive emotions, talkativeness, assertiveness at one end to being reserved, sober and cautious at the other. An individual who scored high on extraversion is characterized by high sociability, is outgoing and has a tendency to seek stimulation in the company of others. Those who score low on extraversion prefer solitude or smaller groups, prefer activities alone, and avoid large social situations. Not surprisingly people who score high on both extraversion and openness are more likely to participate in adventure and risky sports due to their curious and excitement seeking nature.

CONSCIENTIOUSNESS (Organized vs Easy-going)

Conscientiousness refers to well-organised, careful, responsible, hardworking and dependable individuals at one end to being relaxed and easy going, spontaneous, disorganized and careless. Numerous studies have found to have a positive correlation between conscientiousness and cognition, individuals high on conscientiousness have been





found to perform better in academics as well as in the sports arena wherever planning, organising skills and decision-making abilities are essential to the task.

AGREEABLENESS (Friendly vs Un-Cooperative)

Agreeableness refers to compassionate behaviour of an individual. Dimensions of agreeableness range from being good-natured, cooperative, trusting at one end to being suspicious, irritable and uncooperative at the other. It is also a measure of a person's helpful and friendly behaviour nature and reflects whether that person is generally friendly and nurturing or not. People who score low on agreeableness tend to be antagonistic towards others and are described as rude and unkind.

NEUROTICISM (Composed vs Nervous)

Neuroticism focusses on the emotional stability on an individual. This trait refers to dimensions of personality which range from being poised, calm and composed at one end to nervous, anxious and excitable at the other. Individuals reflecting high neuroticism are characterized by the tendency to experience unpleasant emotions, and are often found to demonstrate impulsive and hostile behaviour. In contrast, people who score low in neuroticism tend to be calm and even-tempered. Athletes' sports performances are highly influenced by neurotic characteristics and modern findings supports exercise and physical activity as an alternate therapy to manage neurotic behaviours.

BIG 5 Traits	Behaviour for High Score	Behaviour for low score
OPENNESS	Curious, Imaginative, Intellectual, Creative, Open to trying new things, Focused	Dislikes change, Does not enjoy new things, Resists new ideas
	on tackling new challenges, Thinks about abstract concepts	Not very imaginative, Dislikes abstract or theoretical concepts
CONSCIENTIOUSNESS	Well-Organised, careful, responsible, self-disciplined	Disorganised, careless, relaxed, easy going
EXTRAVERSION	Active, optimistic, sociable, interactive, affectionate	Sober; reserved, cautious,
AGGREEABLENESS	Good Natured, friendly, helpful, trusting, cooperative	Irritable, suspicious, rude, uncooperative
NEUROTICISM	Insecure, nervous, anxious, excitable	Calm, composed, poised, Hardy, Secure





I. Tick the correct answers

1. Endomorph body type according to Sheldon is
 - (a) a round body
 - (b) a pear-shaped body
 - (c) a wedge-shaped body
 - (d) a lean and thin body
2. Which body type can be characterized by a round body and jovial personality?
 - (a) endomorph
 - (b) ectomorph
 - (c) mesomorph
 - (d) graphomorph
3. A person who is bold and outgoing is an
 - (a) Introvert
 - (b) Extrovert
 - (c) Ambivert
 - (d) Somatotype

II. Answer the following questions briefly.

1. Define Personality?
2. What does OCEAN represent according to Big Five Theory of Personality?
3. Comment upon Allport's Theory of Personality.

III. Answer the following questions in 150-200 words.

1. Differentiate between Introvert and Extrovert personality?
2. What are the types of personality traits according to the Big Five Theory? Explain with their importance in physical education and sports.

9.2.1 Motivation

Let us re-visit our initial discussion once again. Why did some athlete keep playing without worrying about pain, discomfort of training, injury or even academic pressure? On the other hand, why did many talented athletes stop participating after initial failures?

Let us consider the two important questions.

1. What motivates a player to behave in a certain way?





2. How to motivate an athlete to perform better?

To answer the questions above, let us start from understanding of the concept 'motivation'. The term 'Motivation' is derived from Latin word *Movere* meaning 'to move'. The basic reason for any human activity is nothing else but motivation. Motivation is the driving force that spurs a person to action. It can be explained as a process to initiate, guide and maintain behaviour over time as defined by Robert Baron (2008). Motivation can also be defined simply as the direction and intensity of effort. Truly, motivation is a process of inspiring, guiding the organism to move in a particular direction.

From the above definitions, we can understand motivation is influenced by two factors: Objective and Direction. The first factor 'objective' explains the 'why' of an action or behaviour, whereas the second factor 'Direction' explain 'what' of an action or behaviour. The 'why' or objective for a behaviour helps to find the reason for initiating a behaviour. The motives or drives to arouse and initiate an action or behaviour may be different for different individuals. The direction is about 'what' an individual wants to do, 'what' they plan to achieve. If either objective or direction is lacking for an action or behaviour, ultimately the quality of action or achievement suffers. It means, to achieve the desired goal you need to have a purpose or desire which activates you towards initiating a task in a particular direction and seeking behaviours to be persistent with enough fuel and energy till the goal is achieved. This leads us to find which are the various motivating forces which energize us towards selection of meaningful tasks with tangible goals that make an individual persist at a task till new skills are developed or performance mastery has been achieved as perceived with reasonable expectations. Hence, we can safely conclude that motivation is one of the determinants of behaviour. Instincts, drives, needs, goals, and incentives come under the broad cluster of motivation.

What then is 'motivation'? Psychologists now use the concept of need to describe the motivational properties of behaviour. A need is lack or deficit of some necessity. The condition of need leads to drive. A drive is a state of tension or arousal produced by a need. It energises random activity.





When one of the random activities leads to a goal, it reduces the drive, and the organism stops being active. The organism returns to a balanced state. Study the diagram given below.

What is it, then, that arouses the organism to action? How does one get this drive? The answer can be found in the two terms 'Intrinsic' and 'Extrinsic' motivation. **Intrinsic motivation** involves doing something because it's personally rewarding to you. It emerges from within and is directly linked with the natural instincts based on feelings of joy and satisfaction. **Extrinsic motivation**, on the other hand, involves doing something because you want to earn a reward or avoid punishment. Thus, extrinsic motives involve outside forces. Let us find out more about the type of motivation and see how motivation is an important aspect in sports and exercise psychology.

Do you know?

A motivation A state of lacking any motivation to engage in an activity, characterized by a lack of perceived competence and/or a failure to value the activity or its outcomes.

Intrinsic Motivation When you pursue an activity for the pure enjoyment of it, you are doing so because you are intrinsically motivated.

Extrinsic Motivation refers to behaviour that is driven by external rewards such as money, fame, grades, and praise.

9.2.2 Intrinsic and Extrinsic Motivation

Intrinsic Motivation: The word *intrinsic* is derived from the French word '*intrinsicque*' which means inward. Intrinsic is also referred as internal motivation which drives an individual from within to naturally pursue actions that provide fun, pleasure, fulfilment or challenge. If an individual's behaviour reflects a desire to pursue an action for enjoyment, or the individual continues the activity in a consistent manner because it provides a feeling of satisfaction, these can be identified as intrinsic motivation factors towards the directed behaviour. Intrinsic motivation includes satisfaction of needs felt by the individual which comes from inside or within and is directly linked to the individual's instincts or urges. Intrinsically motivated individuals are fully self-determined and characterized by naturally getting interested in the activity to seek enjoyment, novelty and challenge in performing the action or activity. Thus, in intrinsically motivated behaviours, the reward is the activity itself. Just as we have biological needs that we're driven to pursue in order to live and be healthy, we also have psychological needs that must be satisfied in order to develop and thrive. These include the need for competence, autonomy, and relatedness. Along with satisfying these underlying psychological needs, intrinsic motivation also involves seeking out and engaging in activities that we find challenging, interesting, and internally rewarding without the prospect of any external reward. Participation in sports as a natural urge is an example





of internal motivation if participation is directly associated with natural impulse of the athlete to play and participate in actions that create joy and happiness. People taking to exercise and exploring their capabilities through suitable and enjoyable tasks and activities is an example of motivation emerging from within and is referred to as *intrinsic motivation*.

Extrinsic Motivation: The word *extrinsic* is derived from the Latin word '*extrinsecus*' which means *outward*. Just as its meaning suggests, extrinsic motivation is that in which the source of satisfaction does not come from within and the behaviour is not due to natural urges or impulses. Instead, the behaviour or action is influenced by external forces or drives. The reasons for action are not part of an individual's character, but are due to urges from outside such as prize, money, praise, or even punishment. An individual participates or engages in activities because those tasks are linked with various external rewards such as trophies or promotions and they are obliged to continue with the task even if it is not in their natural character, because the driving force is not interest but rewards. Since external factors guide the behaviours and actions, therefore extrinsic motivation it is also considered as controlling form of motivation. Participation in sports to win a medal or prize instead of an innate urge is an example of extrinsic motivation. In sports, extrinsic motivation is reflected when athletes train or learn new skills not because of natural impulse but for various external rewards associated with medals, trophies, certificates and recognitions.

Extension Activity

Talk to a friend who is an athlete and try to find what motivated him to participate in sports. Read the below mentioned responses and identify the statements which most closely suit your friend's reason to participate:

1. Doesn't know why he plays and that he doesn't see any particular benefit associated with it.
2. To learn new skill of the sports.
3. To gain skill mastery and perfection.
4. Find joy and happiness in participation.
5. Perform to obtain a reward or trophy in the championship.
6. To make the coach happy for getting the best athlete ward in school.
7. Participate to avoid pressure from the family.

The response of your friend reflects the following about his motivation.

If YES to:

Item 1: Reflects Amotivation

Item 2, 3, 4: he/ she is Intrinsically motivation

Item 5,6,7: he/ she is Extrinsically motivation





Difference between Intrinsic and Extrinsic Motivation

	Intrinsic Motivation	Extrinsic Motivation
Definition	Driving force to pursue an action for fun, joy or any other inner satisfaction	Driving force to pursue an action due to reward, trophy, money, promotions or praise
Factors	Internal factors like joy, enjoyment	External factors like reward, promotion, praise
Method	Goal Setting strategies, Family and Community support	Associating success with future benefits, awards, promotions and avenues.
Benefits	Long term benefit of maintaining a behaviour	Helpful to initiate or create a drive towards a desired behaviour when internal factors are missing.

9.2.3 Motivation Techniques

Motivation is the process in which the learner's internal energies or needs are directed towards various goal objects in his environment. In other words, it is the driving force which increases the desire to perform better. Every individual has certain basic motives or needs that she/he tries to satisfy. As long as one is satisfied with one's present behaviour and knowledge and finds it adequate to satisfy all her/his needs, she/he will not try to change his behaviour or acquire new knowledge. To learn something new, firstly there must be a goal that attracts us and secondly there must be some obstacle that keeps us away from attaining that goal. The reason is simple, because if there is no obstacle in our way, our present behaviour and the knowledge that we have already acquired would lead us directly to our goals, and in such a situation there would be no need to learn. We modify our behaviour only when there is a need to do so. This enables us to reach the goals that our unsatisfied motives create. Motivation can be generated through various sources like family, friends, relatives, teachers etc. Various motivational techniques can be used to help individuals utilize the available sources available around them with maximum effectiveness. In sports, motivation of athletes is of utmost importance and an essential aspect towards success of any athlete. Let us try to understand some of the techniques used in sports to motivate athletes by helping them to maintain their inner urges to continue training as well by utilizing external factors to supplement their drive to prolong with the desired athlete behaviours essential for sports performance.





The motivational techniques are based on the following mentioned approaches. Understanding of each approach will help in developing unique strategies to motivate athletes towards desired behaviours.



- 1. Cognitive Approach:** The active processing and interpretation of information influences the persistent and purposive drive for action by an individual. It is based on the notion that desired motivation can be achieved by an individual through active processing and interpretation of information. *Expectancy theory* and *Goal Setting theory* is widely used as a cognitive approach for motivation. Expectancy theory explains that people are motivated for the task where the probability of success is higher in comparison to failure. Whereas the goal-setting concept maintains that a stronger drive for actions and behaviour is fuelled by quality of information on time set for task attainment along with task difficulty level and specificity of the task.
 - (a) Time Bound:** The task should be time bound
 - (b) Set Complexity level of task:** Task should be neither too difficult nor too easy
 - (c) Make task Specific:** Task instructions should be precise about what is to be done
 - (d) Define Purpose of task:** Outcome of the task should be clear and defined.
- 2. Pedagogical Approach:** Teaching coaching pedagogies used in sports training for planned outcome is largely responsible in guiding and maintaining the desired behaviour of athletes. Adequate communication and maintenance of positive relationship during training is an essential component influencing the motivation of athletes towards a consistent action or behaviour. Making training enjoyable, engaging athletes in decision making and providing valuable feedback to athletes are essential components to motivation. Let us discuss few techniques of motivation using a pedagogical approach.
 - (a) Guided Discovery Method:** Athletes are highly motivated if allowed to find solutions to the problems by themselves rather than if they are just made to do things as per instruction. Lack of independence in decision making and non-





promotion of cohesive training environment for athletes are major reasons affecting motivation. Cooperative learning with opportunities for athletes to engage in decision making is an effective strategy towards motivation.

- (b) **Valuable Feedback System:** To persuade athletes to push harder for a longer period of time, they must be provided with a strong support system. Assisting athletes with feedback which can provide them with specific direction to move in is an effective means towards effective motivation.
 - (c) **Fun-based Training:** Training should be challenging and task-oriented for optimal performance. However, for providing athletes with enough drive and energy to sustain them, training methods should involve fun and enjoyment for athletes. Adding creativity and innovation to training and the teaching-learning system helps in adding motivation for athletes to persist with continuous demands of training load.
 - (d) **Individualized Training Program (ITP/IEP):** All athletes are unique and respond differently to the vast variety of training demands. Each athlete is a unique individual and should have a training programme designed for their abilities and capabilities and which is within attainable limits of the athletes. Individualized training programmes or individualized education programmes are very essential in sports to help athletes to set their own targets, challenges and difficulty levels which will not only help them to avoid burnout, but also keep them motivated.
3. **Social Support Strategy:** Participation in sports and taking up exercise is greatly influenced by an understanding of the social networking and perception of people around them. Conducive exercise environment, creating drive among people to initiate and maintain sporting behaviour is deeply affected by the societal pressure or support provided to the individual. Positive social support from peer group, family members, and friends helps in developing healthy habits and enough drive to maintain the act of exercising. Initiating group activities and engagement of family and peers in sports participation helps in increased participation in sports and exercise.
4. **Facilitation Approach:**
- (a) **Incentives and Rewards:** Drive towards an action to maintain it for a long term may sometimes need external support. Awards and rewards work effectively as a motivation force for athletes to pursue sports with consistency and continuity.
 - (b) **Valance of Reward:** Many time prizes and awards are used extrinsic sources of motivation to maintain a desired action or behaviour. But, at times, even these may prove to be ineffective. It is essential to understand that external factors like prize money or medals do motivate athletes, but the most important aspect is to





understand the need and expectation of the individual athlete, this is known as 'valence' of the reward or valuing the award. To be motivated, athletes must be awarded by considering what is desired or expected by an individual so that he or she can value that reward. An athlete may like to be rewarded by being made the captain of the team and may value it more than being rewarded with a pay hike.

- (c) **Performance appraisals:** Motivation or the driving force for any desired behaviour to last over a long period of time may need support of being recognised and praised for the current and past endeavours. It creates the drive for future action and pursuit of excellence with confidence among athletes. It encourages them to plan their directions and actions. Regular appraisal of performance should be provided to athletes and appropriate rewards given.
- (d) **Quality Support and Facilitation:** Motivation for an action is influenced by the amount of facilitation made available for athletes, but the impact is larger only if the quality of support is of a high standard. Factors influencing or impacting the desired behaviour of athletes need to be studied, diagnosed and appropriate support needs to be provided to ensure maintenance of behaviour of highest standards.

9.2.4 Motivation and Sports

Motivation is an integral aspect of sports and exercise. The participation of an individual in sports activities or involvement in regular exercise for fitness, health or any other reason revolves around the forces that direct her/him towards that particular task. Therefore, it can be said that motivation is central to sports and exercise studies and is an important area of study in sports psychology. It is of great interest to athletes, coaches and parents. All athletes, coaches, and parents want the best performance in sports and work towards keeping their motivation level at the best by supporting them with all required resources and essentials. Individuals get initiated towards exercise or athletes join sports clubs or academies and continue till achievement of pre-determined objectives due to both internal and external motivation. If an athlete participates in sports for fun and enjoyment, or an individual continues with her/his exercise and fitness regime as it provides a feeling of satisfaction or challenge, these can be identified as intrinsic motivations factors. On the other hand, when an athlete participates in sports due to various incentives like cash, prize, trophies, a job, promotion or even less tangible rewards such as praise and status, these can be identified as extrinsic factors of motivation. Even if the motive for taking exercise or participating in sports is to avoid punishment, it is a form of extrinsic motivation, as it is an external force which influences the participation behaviour of an individual.





Extension Activity

Find out more about these athletes and what spurred them to such heights.



Dhanraj pillay, Hockey: Former Indian captain and a legend in Indian hockey. Khe Ratna and padamshir awardee.



Marry kom, Boxing: Bronze medallist, London Olympics 2012,



Deepa Malik, Parathlete: Arjuna Award Winner. 1st women to win a medal in paralympic Games.



Leander paes, Tennis: bronze medal 1996 Olympics, most doubles win in Davis Cup.

A large number of studies and discussions about conversion of intrinsic motivation into extrinsic or vice-versa and benefits or issues associated with it, and with sports participation and exercise behaviours have shown overlapping or change in motivational factors. The motivation reasons may reflect a shift from the initial intrinsic motivation to extrinsic motivation later or from extrinsic motivation to intrinsic motivation over a period of time due to change in conditions, situation or other personal factors. People many times start with participation in exercise, physical activities and sports as it gives them pleasure, fun, excitement, or they may also go for long distance running, tracking or skiing as these may be challenging for them. While this initial intrinsic motivation as a factor may remain unchanged over a long period of time for some individuals, for others the reasons to pursue the same activity or task may change with a change in situation or need. Later, the same





individual's motivation to participate in sports may be guided by a desire to win awards or professional contracts. When extrinsic motives like awards and rewards replace intrinsic factors as primary reasons for engaging in an activity, it becomes difficult for an individual to decide by herself/himself about when and where to participate in an activity. Her/His behaviours, actions and decisions are determined by external motives and, she/he thus experiences a loss of control. For example, children may start playing cricket for fun and excitement, and may be motivated to practice and compete regularly at sports training centres but may start feeling the burden of meeting the expectation of coaches and parents to succeed, creating a blur between the internal and external motives. This creates a burden on the participants to respond to the expectations to succeed. This conflict between the motives to exercise or participate in sports usually leads to burnout and later to dropping out from sports altogether.

Do you know?

Imagine being told that you will never walk again! That was what doctors told Kieran after they removed a cancerous tumor from his thigh at the age of 10. The operation went badly, so badly in fact, that he woke up screaming in pain from massive nerve damage. Up to then, he had been crazy about gymnastics and was determined to become an Olympic champion. But how could he do that when he could not even walk now and was confined to a wheelchair?

Kieran was going to show them and he started on the long road to recovery. He was 15 months in a wheelchair but he persevered and was back in the gym. But within a few months he slipped from the high bar and sustained a terrible head injury. He was so badly injured that frequent blackouts happened when he literally blinked. He missed a whole year at school but the gym was beckoning again. This time though, he had to overcome the challenges of that awful injury. He had to retrain his brain and get back his co-ordination. He returned to school using a walking stick and was cruelly taunted by his classmates.

It then took him three years to get back to where he had been before the awful accident. But he suffered several fractures. Then another blow came when his knee snapped just after he had been selected for the European Championships. Behan has said that was when he was about to give up.

But he never gave up and succeeded in becoming the Challenge World Cup floor champion in 2011, and his greatest moment of glory was when he qualified for the London 2012 Olympics. He had become an Olympic athlete after being through terrible pain, trauma and setbacks. A glorious example of the Olympic spirit.

Motivation as a guiding force to initiate, guide and maintain a behaviour desired for sports participation and performance is well understood but still motivation remains as a challenging task in sports.





Researchers around the world have discussed the methods to maintain or increase motivation of athletes, but little has been done to understand the reasons about why we participate in an exercise or indulge in s activities. Summarizing the conclusions of different research, four motives towards sports and exercise behaviour can be identified.

1. Physical wellbeing;
2. Psychological wellbeing;
3. Performance achievement;
4. Status and Power (assertive achievements).

All the motives mentioned above are intrinsic in nature and point towards the reason for sports participation and exercise as being largely intrinsic in nature. People participate in sports and exercise for various intrinsic motives but external motives can be added wherever or whenever intrinsic motive is reduced.

I. Tick the correct answers.

1. Motivation that drives individuals to naturally pursue actions that provide fun, joy, pleasure or challenge is called
 - (a) Extrinsic Motivation
 - (b) Amotivation
 - (c) Intrinsic Motivation
 - (d) Cognitive Motivation
2. Motivation through reward or praise is known as
 - (a) Intrinsic Motivation
 - (b) Extrinsic Motivation
 - (c) Pedagogical Motivation
 - (d) Facilitation Motivation
3. Which of the following is NOT a feature of Intrinsic Motivation?
 - (a) goals
 - (b) feedback
 - (c) needs
 - (d) attitudes

II. Answer the following questions briefly.

1. Define Motivation.





2. Differentiate between Intrinsic and Extrinsic Motivation.
 3. Write a short note on any two techniques of motivation.
- III. Answer the following questions in 150-200 words.**
1. How can a coach strategize in motivating an athlete to keep performing?
 2. How does motivating a sports person affect games and sports and how do games and sports influence a player's motivation?

9.3.1 Exercise Adherence

"If exercise could be packed into a pill, it would be the single most widely prescribed and beneficial medicine in the nation" – Dr Rober Butler, Former Director, National Institute of Ageing.

What is it that is a common prescription for prevention and treatment of all types of physical ailments, diseases, mental and social disorders faced by humans? There could be no better 'Magic Pill' other than 'exercise'. Let us then try and understand why it is difficult to interest a large percentage of the population in taking this magic pill. And what is it that makes it difficult for people, who start taking this Magic Pill, continue with it for a lifetime. People are less active nowadays, partly because technology has made our lives easier. We drive cars or take public transport. Machines wash our clothes. We entertain ourselves in front of a TV or computer screen. Fewer people are doing manual work, and most of us have jobs that involve little physical effort. We move around less and burn off less energy than people used to. Inactivity has been described as a "silent killer". Evidence is emerging that sedentary behaviour, such as sitting or lying down for long periods, is bad for health.





Not only should you try to raise your activity levels, but you should also reduce the amount of time you and your family spend sitting down. "Previous generations were active more naturally through work and manual labour, but today we have to find ways of integrating activity into our daily lives," says a health expert.

As we get used to a sedentary life, we tend to exercise less. Even if we take up exercise plans or join a Gym, we do not stick to it, but give up after a few months.

Let us examine the importance of exercise and the concept of 'exercise adherence'.

Concept of Exercise Adherence

Purposeful exercise and regular participation in physical activity are among the most important components of lifestyle, especially for older persons. Incorporating regular physical activity in the lifestyle is considered an important behaviour that may yield benefits especially for maintaining physical and psychological well-being. While research has shown older persons who actively participate in a long-term exercise program appear to have a good quality of life, regrettably, majority of the old people around the world lead a sedentary lifestyle with very little knowledge regarding the importance of physical activity. One of the major issues related to participation in an exercise programme is the adherence to such a programme.

The word *adherence* is described by the Oxford Dictionary as ***the fact of behaving according to a particular rule, etc., or of following a particular set of beliefs, or a fixed way of doing something***. Thus, in the simplest term *exercise adherence* refers to ***the extent to which the individual maintains an active involvement in physical exercise and acts in accordance with the advised interval, exercise dose, and exercise dosing regimen despite opportunities and pressures to withdraw***. Exercise adherence, therefore, refers not just initiation but also maintenance of physical activity and exercise behaviour according to individualized need and requirement. It is associated to the 'stickability' factor which is related with quality of any athlete or participants to continue with sports, exercise or any other physical activity without losing the motivation to pursue it further. So, exercise adherence can also be referred as ***a self-regulated, voluntary behaviour directed towards maintaining an exercise routine for a prolonged period of time after initial phase of adoption***. It is important as well as interesting to understand the reasons why people adhere to exercise and the forces that push athletes towards initiating sports participation.

9.3.2 Reason to Exercise

Reason to exercise or exercise determinants point towards the importance of motives of an individual towards initiating and adopting exercise as a part of her/his lifestyle. We find many people around us with different behaviours towards exercise and physical activity and each behaviour can be associated with its own reason for adherence or non-adherence. We





may find many people who have not initiated exercise or even thought of exercise and physical activity in near future, or those who think of starting exercise in the near future but are not able to initiate the programme, and still others who started or initiated an exercise programme but were not able to continue or adhere to it for long and dropped out. Why people find a reason to exercise, participate in fitness and engage in recreation sports can be understood by the following aspects:

1. **Overcoming Social Physique Anxiety:** People in the society are influenced by how other perceive them in-term of their looks, fitness or body shape, weight and size. This leads to adoption of various means and methods to make them lean and fitter. Exercise combined with proper diet can help people attain their goal to be lean and fit thus helping overcoming social physique anxiety with the means of exercise, fitness and recreation sports program engagement.
2. **Reduced risk of disease:** Lifestyle factors does play an important role toward rise of various contemporary health issues. Hypertension, obesity are major health concerns in the modern day due to increase in facilities and urbanization leading to limited physical engagements, lack of physical activity and promotion of sedentary lifestyle. To overcome the sedentary lifestyle, adoption of exercise and fitness are considered to be essential and important.
3. **Recreation :** With change in lifestyle and devotion of more hours on table chair task, engagement in serious academics, focus on professional pathways, individuals are facing with the challenge of finding time and activity for recreation, fun and enjoyment. Recreation sports, fitness and exercise provide fun, enjoyment, recreation along with the physical benefits, thus recreation being considered as an essential reason to exercise.
4. **Mental Relaxation:** There are various means and methods adopted for stress reduction and mental relaxation by people of all segments, demography, age groups. Exercise is one of the most effective ways to cope with stress and depression more economically and with tremendous benefits to the society. Therefore, people participation in exercise for mental relaxation as a reason is relevant.
5. **Socialization:** Often people look for opportunities to engage with community and socialize with friends, peer groups, colleagues etc from their busy life. The engagement with society members are essential to overcome social isolation, tackle loneliness which can affect their mental health and prevent camaraderie spirit among peoples of the society. Especially in the modern lifestyle and with urbanization leading to less time available for social connect, the most effective way to connect socially is through participation in team sports, group exercises program and various other fitness programs. Thus socialization qualifies as a reason for people to engage and experience exercise and sports programs.





9.3.3 Benefits of Exercise

1. **Health Benefits:** There has been evidence of humans working hard and putting in physical effort for their survival and better life since early times. Even today people across the world desire to lead a healthy life and consider health as the most essential aspect of life. With the change in living conditions and transformation in contemporary lifestyle, engaging in physical activity, exercise and sports has a prominence as a chosen activity or preferred behaviour among people to keep themselves healthy. Modern lifestyle has given rise to health issues associated with weight management and cardiovascular diseases, for which engaging in physical activity and exercise is essential. Exercise is the miracle cure we've always had, but for too long we've neglected to take our recommended dose. Our health is now suffering as a consequence. Whatever the age, there's strong scientific evidence that being physically active can help you lead a healthier and happier life. People who exercise regularly have a lower risk of developing many long-term (chronic) conditions, such as heart disease, type 2 diabetes, stroke, and some cancers. Research shows that physical activity can also boost self-esteem, mood, sleep quality and energy, as well as reducing your risk of stress, depression, dementia and Alzheimer's disease.

(a) Reduces risk of Cardiovascular Disease: Exercise and a regular cardio-fitness regime has a significant role in preventing various cardiovascular diseases like hypertension and coronary heart disease. Exercise strengthens the heart and improves circulation. The increased blood flow raises oxygen levels in the body. This helps lower risk of heart diseases such as high cholesterol, coronary artery disease, and heart attack. Regular exercise can also lower blood pressure and triglyceride levels. Exercise can lower blood sugar levels and help insulin work better. This can cut down risk for metabolic syndrome and type 2 diabetes. And if someone already is suffering from one of those diseases, exercise can help her/him to manage it.

(b) Weight Management: Living in a society where physical appearance is important, individuals take to exercise from a desire to keep themselves in shape. Though they may experiment with other methods for losing weight like dieting and calorie control etc., but these methods alone not found to be effective for weight reduction unless regular exercise is not combined with diet control. Along with diet, exercise plays an important role in controlling weight and preventing obesity. To maintain body weight, the caloric intake must equal the energy one burns. To lose weight, one must use more calories than one takes in. Thus, regular physical activity and an active lifestyle are significant methods for effective weight management.





- (c) **Strengthens Bones and Muscles.** Regular exercise helps build strong bones. Later in life, it can also slow the loss of bone density that comes with age. Doing muscle- strengthening activities can help you increase or maintain your muscle mass and strength.
- (d) **Reduces risk of some Cancers.** Exercise reduces risk of cancers like cancers of the colon, breast, uterus, and lungs.
- (e) **Reduces risk of Falls.** For older adults, research shows that doing balance and muscle- strengthening activities in addition to moderate-intensity aerobic activity can help reduce your risk of falling.
2. **Provides Stress Relief:** Modern lifestyle with its work pressure and competitive lifestyle leads to a lot of stress. The physical effects of prolonged stress are numerous, including a greater susceptibility to illness, a lack of energy, problems with sleep, headaches, poor judgment, weight gain, depression, anxiety, and a host of other ills. In fact, chronic stress can be the culprit behind heart disease, type 2 diabetes and an upset stomach. Physical activity, recreational sports and exercise are effective coping strategies for relief from stress and disorders from everyday life. Yoga and aerobic exercise are a good way of combating stress.
3. **Increases Happiness:** It has been evident to find people engaged in physical activity for various extrinsic goals like weight loss, improving physical appearance etc. but there are people who prefer to exercise and engage in physical activities like recreation sports or adventure sports due to their innate nature to experience joy, happiness and satisfaction. During exercise, the body increases the production of endorphins which are known to help produce positive feelings and can improve the mood and make the individual feel relaxed and happy.
4. **Promotes Self-Efficacy:** Self-efficacy is the belief that one is capable of achieving a specific goal. Regular exercise and participation in sports is largely associated with an individual's belief in her/his abilities to complete physical tasks, achieve determined goals and produce challenging outcomes. People with high self-efficacy tend to initiate exercise and physical activity with a positive approach and respond positively to regular engagement in sports and exercise demands. They also demonstrate a greater degree of exercise adherence than others.
5. **Promotes Social Cohesion:** Human beings are social animals who prefer to engage in group activities because it given them opportunity to socialize and interact with other people. As a result, many people engage in exercise behaviour and sports participation. Sports and group exercise programmes also prevent boredom and social isolation by helping participants feel connected with the society and community around them as team mates, opponents or even as spectators. Group cohesion





developed among participants of exercise group and sporting members acts as one of the important reasons for exercise.

6. **Enhances Value Orientation:** Knowledge and understanding about a healthy lifestyle and importance of regular physical activity creates a value orientation among individuals to initiate exercise and later continue with exercise behaviour. Value orientations represent philosophical beliefs. Values inculcated by physical activity and exercise include discipline, enhanced learning process, self-actualization, social responsibility and ecological integration.
7. **Cognitive Benefits:** Regular aerobic activities lead to a positive improvement in attention control and information processing speed. Exercise can improve brain function and protect memory and thinking skills. Exercise increases heart rate, promoting the flow of blood and oxygen to the brain. It can also stimulate the production of hormones that can enhance the growth of brain cells. Exercise has been shown to cause the hippocampus, a part of the brain that's vital for memory and learning, to grow in size. This serves to increase mental function.
 - (a) **Attention Control:** Regular physical activity and exercise help improve attention and concentration among people of all ages. Physical exercise at a moderate level also revealed positive effects and benefits among the participants.
 - (b) **Improves Memory:** Physical activities have been known to enhance intelligence especially among children. Even among the elderly, even a small amount of physical activity delays memory loss. Exercise has been shown to reduce changes in the brain that can cause Alzheimer's disease.
8. **Mental Health Benefits:** A session of jogging or any physical activity has the possibility of mood enhancement and increasing the feel-good factor. Issues associated with depressions, anxiety etc. can be resolved with regular physical activity and exercise.
 - (a) **Exercise as therapy for emotional disorder:** Physical activity is an effective intervention for various mental disorders like depression and anxiety. Exercise therapy has been able to produce improved mood, enhanced self-esteem and thereby, increase productivity.
 - (b) **Fitness as moderator of life stress:** Regular physical activity helps in creating a positive attitude towards work by developing higher ability to cope with stress and tension.
 - (c) **Runners High:** Participating in regular physical activity promotes a high sense of mental alertness, mood upliftment, a feeling of liberation, suppressed discomfort and heightened well-being.





9. **Psychological Well-being:** Participation in regular physical activity, sports and exercise brings positive changes in the mental and physical well-being of an individual. Exercise leads to changes in blood flow to brain, increase in oxygen consumption, reduction in muscular tension, improved metabolism, creating a feeling of wellbeing. Participation in physical activity and exercise promotes positive social interactions, improved self-esteem, feeling of competency, along with an opportunity for fun and joy. All these collectively develop a sense of enhanced well-being among individuals engaged with physical activity.
10. **Personality Enhancement:** Participation in physical activity and exercise has revealed significant influence on personality. Regular participation and long-term engagement in physical activities especially at young age (before maturity) reflects greater extraversion and stability among participants, which are very important characteristics or traits of personality.
11. **Develops Leadership Qualities:** Engagement in an exercise programme and participation in sports provides opportunity for individuals to experience adversities and opportunities to learn from compensating various deficiencies like lack of space, inadequate logistics, adverse conditions and still persist with prolonged activities, so developing qualities of leadership. Sports and exercise opportunities teach individuals to be equally effective in variety of situations and conditions with ability to create variations in similar conditions too, developing another important aspect of a leader.
12. **Special Population:**
 - (a) **Clinical Population:** People with intellectual disabilities of all age groups and have found to derive significant benefits from regular participation in physical activity. Psychomotor activities help them in enhancement their skills in activities related to daily living too.
 - (b) **Elderly Population:** Ageing is a process which is observed to be delayed among the people who are regular participants of physical activity even of an acute nature. Even low intensity bouts of exercise prove to be helpful in slowing down of the ageing process among the elderly.

9.4.1 Strategies for Enhancing Adherence to Exercise

Psychologists and therapists around the world have widely professed the benefits of exercise. Although most people do understand the importance of physical activity and regular exercise, yet a large percentage of them have either not initiated exercise behaviour, or, if a few opted for exercise, they couldn't continue it and dropped out. Therefore, its essential to discuss the strategies for enhancing adherence to exercise.





- 1. Goal setting:** A moderate bout of acute exercise (20-30 min) is considered to be beneficial for improving positive psychological effects of exercise. Exercise performed above lactate threshold (LT) is perceived as unpleasant and the participant may like to discontinue it due to overexertion and discomfort. Therefore, along with setting of SMART – Specific, Measurable, Attainable, Realistic, Time based – goals. It is also essential to make the goals flexible or reversible to prevent drop-outs and help participants engage in prolonged participation with added fun and satisfaction. Studies show that documenting the necessary steps required to achieve your specific goal helps in exercise adherence.
- 2. Adding variety to exercise:** Lack of new variety of exercise may lead to boredom and dropping out. Boredom can be tackled with the addition of a variety of exercises and moves that address the same body issues, without loss of therapeutic benefits. Adding variety to the exercise program through adoption of new strategies, changing methods, using new equipment, re-inventing logistics and adding new members can induce fresh energy to the exercising activity, thus enhance adherence to exercise. Even changing the duration, intensity, frequency along with change in venue and mode of exercising also go a long way in maintaining interest and promoting long-term adherence to exercise behaviour.
- 3. Social support enhancement:** Increasing social support refers to engagement of friends or other members who can contribute towards positive participation in physical activity, exercise and sports because social interaction may help fuel goal achievement and thus produce good results. Creating of a system of buddy partner, youth leader, mentor where members of family, a classmate or a friend or relative can be engaged as a motivator and flag bearer for exercise. This creates a strong social support system for enhanced participation experience for athletes and those who are engaged in exercise behaviour.
- 4. Contract:** While acute bout of exercise has been associated with positive effects, chronic exercise habits or regular exercise behaviour are important for maintaining these benefits. Therefore, promoting participants for signing an intent to comply through a written contract which has specified expectations, responsibilities and contingencies for behavioural changes have found to be more effective in exercise adherence among the participants.
- 5. Reinforcement Interventions:** Positive as well as negative reinforcement approaches have found to be effective in exercise adherence. Use of incentives and rewards for appreciating attendance and participation or awarding with badges have been proved effective in maintaining exercise behaviour among participants as well as motivation from many to initiate and engage in physical activity.





6. **Feedback:** Providing feedback to the participants in physical activity provides much needed direction and energy for prolonging and continuing exercise behaviour. Individualized feedback to the participants on the quality of progress and other positive aspects about them can create higher levels of motivation and prove effective towards exercise adherence.
7. **Process Orientation:** Exercise programmes based on outcome goals or product goals like weight loss, physique and appearance etc. are found to be effective in the initial stages of exercise adoption, but it is difficult to maintain the drive with prolonged exercise behaviour. Helping people to shift from process goals to product goals which are more intrinsic in nature will be more helpful towards becoming lifelong exercisers.
8. **Problem Solving:** This intervention is based around identifying the obstacles and barriers that stand between the participant and her/his physical activity goals. It is important to generate and implement solutions, evaluate the outcomes and choose different solutions if needed.
9. **Health Risk Appraisals:** Health risk appraisals of participants provide them with relevant information about their current health, risk factors and level of fitness. This helps to enhance motivation and can be used to monitor changes over time. It can also help with regards to the goal setting process as areas they need to improve are identified.
10. **Health Education:** It is important that participants seek information from experts on the benefits of exercise, proper exercise techniques and the results that should be expected during exercise. This will ensure that they truly understand why and what they are doing and it will give them the confidence and motivation required to participate in long-term physical activity as well as to prevent injury or discouragement. Research has also expressed the importance of health-care provider's and influence they have over participant's physical activity and the implementation of the aforementioned interventions.

I. Tick the correct answers.

1. Which of the following is effective for prevention of Coronary Heart Disease?
 - (a) Regular Exercise
 - (b) Sedentary Lifestyle
 - (c) Medicine
 - (d) Dieting
2. Which one of the following is NOT a result of regular exercise?
 - (a) Increased bone density





- (b) Increased cholesterol level.
 - (c) Strong immune system.
 - (d) Increased longevity.
3. Normally people do not adhere to a regular exercising programme due to
- (a) lack of proper goals
 - (b) adding a variety of exercises
 - (c) social support enhancement
 - (d) feedback from instructor
- II. Answer the following questions briefly.**
1. Briefly list the benefits of exercise.
 2. Mention the strategies to enhance exercise adherence.
 3. What are the psychological benefits of exercise? Explain.
- III. Answer the following questions in 150-200 words.**
1. Explain the various reasons to exercise.

9.5.1 Aggression

Players convicted of on-field violence	British boxer disqualified after biting opponent during heavyweight bout
We have to delve back to 1988 to find the first example in the English game of a footballer being convicted in a court of law over on-field violence. In this case, Sky Sports' excitable pundit Chris Kamara was the culprit; 'Kammy', then of Swindon Town, caught Shrewsbury Town's Jim Melrose with his elbow, breaking Melrose's cheekbone in the process.	A British heavyweight boxing match ended in chaos after a fighter bit his opponent and was disqualified on Saturday. The 10-round bout between David Price and Kash Ali at Liverpool's MandS Bank Arena came to its abrupt conclusion the 27-year-old Ali grabbed hold of his opponent before falling on top of him. He then bit Price near his rib cage.

Do try to remember any sports match where players have been highlighted in media, newspapers or by commentators for hitting the opponents or abusing the officials, spectators or their own team members and being referred to as displaying unsporting and





aggressive behaviour. Surely, we can recollect various occasions when athletes' behaviour on the field has been aggressive. In cricket, a bowler bowling a bouncer or intimidating a batsman by walking down the pitch towards him threateningly, a batsman's offensive reaction towards the umpire after his dismissal are few examples of aggressive behaviour. Why do athletes become aggressive on or off the field? What are the different behaviour outcomes associated with aggressive behaviour? How can these be reduced? These are the few important questions which most of the teachers, coaches and even parents, who deal with athletes of different age groups are worried about. Let us try to understand the concept of aggression as accepted by the world of psychology and used by sports professionals in the past several years.

Do you know?

Aggression – Aggression is behaviour that is hostile and violates other people's rights.

Reactive aggressive behaviour is unplanned and impulsive, and is usually a response to feelings of anger, fear, or a need to retaliate against someone.

Proactive aggressive behaviour is calculated and planned action that has some motive other than harming someone.

According to the American Psychological Association, aggression is a type of behaviour aimed at causing physical or psychological harm to another. Most psychologists refer to aggression as any behaviour intended to harm or injure any living being who is trying to avoid it. This definition includes three important features. First, aggression is a behaviour that can be seen. It is not an emotion that occurs inside a person, such as anger. Thus, aggression is a behaviour and needs to be distinguished from anger which is an emotional expression towards someone we feel has done something wrong. Anger, again, need not be expressed through harm or destruction, but aggressive behaviour will have an intent to cause physical or mental harm. Second, aggression is intentional. Aggression is not accidental. It is a deliberate behaviour to harm or injure and can be either physical or psychological, i.e., hitting, pushing or abusing someone purposely, with an intent to hurt. Third, the victim wants to avoid the harm.

Sport psychologist Gill (2000) produced a four-part criterion which aimed to help us interpret whether an action is aggressive in sport. His criteria were:

- There must be physical or verbal behaviour.
- It must involve causing harm or injury whether it is physical or psychological.
- It must be directed toward another living thing.
- There must be the intention to cause harm or injury.

Few more definitions of aggression:

Behaviour that results in personal injury or destruction of property. (Bandura, 1973)⁸





Behaviour directed towards the goal of harming or injuring another living being who is motivated to avoid such treatment. (Baron and Richardson, 1994)⁹

The intentional infliction of some form of harm on others. (Baron and Byrne, 2000)¹⁰

During last many years much debate and deliberations have been made in the field of sports and exercise psychology as well as sports sciences towards an acceptable definition of aggression. An acceptable concept of aggression along with its two types of aggression has been cited by Husman and Silva in 1984 as 'hostile' and 'instrumental' aggression to differentiate between two types of aggression.

9.5.2 Types of Aggression

1. **Hostile Aggression:** The term 'hostile' refers to being 'opposed', therefore hostile aggression refers to violent and angry behaviour where the intent and primary goal is to harm the other. A boxer who punches the opponent below the belt with the primary aim of injuring him because he is losing or an athlete who uses abusive words to mentally harm another player who has angered him with better skills are examples of hostile aggression. ***Hostile aggression is a type of aggression that is committed in response to a perceived threat or insult. It is unplanned, reactionary, impulsive, and fuelled by intense emotion as opposed to desire to achieve a goal. Aggressors typically have a sense of a loss of control during outbursts, and characteristically experience physiological hyperarousal.*** Thus, it is also sometimes known as **reactive aggression**. In the examples given above, the intent of action is to physically or mentally harm the other person due to dislike, enmity or due to the person being on the opposing team or side. Along with the intent, the goal is also to harm the other, therefore non-legitimate measures or illegal methods to physically or mentally harm the other person are employed. Another important aspect of hostile aggression is the kind of explanation given by the athletes after the aggressive behaviour. Most of the athletes don't apologise for their behaviour, instead they tend to give self-justification for their act of violent behaviour.

Prospect of Losing Makes Me Aggressive, says Viswanathan Anand

India Today | 21 June 2012

Speaking at a function for young chess players, the world chess champion Vishanathan Anand said, "The insecurity of loosing made me aggressive. I don't show it openly but the prospect of losing to some player is so horrifying your might want an extra bit."

"Against Topalov (in 2010 world championship) I was able to channel that feeling into a willingness to play long games. I was able to feel motivated."

"The hunger is still there to go for the next one," says Anand. "I am often asked how I maintain my motivation even after five world titles. Frankly, I never took to chess





because it was on some kind of a checklist. I will keep playing till I enjoy it. The desire is still there," he said.

(<https://www.indiatoday.in/sports/other-sports/story/viswanathan-anand-chess-world-champion-niit-delhi-110525-2012-07-21>)

- 2. Instrumental Aggression:** The term 'instrumental' refers to 'serve as a means' i.e., aggression is being used just as an instrument to gain advantage or win and not because of anger or enmity. Therefore, instrumental aggression refers to aggressive behaviour meant or used to attain some non-aggressive goals like winning, getting money, prestige or gaining any other advantage. ***Instrumental aggression is harmful behaviour engaged in without provocation to obtain an outcome or coerce others.*** An instrumental aggression does consist of an aggressive intent to harm an opponent physically or psychologically without necessarily being angry. Instrumental aggression is a behaviour directed at the target as a means to an end. For example, elbowing and injuring a player to gain a competitive advantage, or late tackling to stop an opponent from scoring a goal. Another example of instrumental aggression is that of a basketballer playing a foul against an opponent with the purpose of scoring a basket. Instrumental aggression that has no goal to harm is also considered as an aggressive act because of the aggressive intent. Most of the players prefer to offer apologise for their act or behaviour of instrumental aggression.

Development of Relational Aggression

A science brief published in Psychological Science Agenda in August 2013 by APA deals with development of relational aggression associated with young children due to media exposure. The research work after examining different types of aggressive behaviour discussed the two types of aggression. Along with physical aggression like kicking, pushing, it mentions about second type of aggression known as Relational Aggression. According to the study, relational aggressive behaviour has an intent to hurt, harm and injure others using the relationship. It also uses threat of relationship against other individuals through social exclusion, friendship withdrawal, spreading rumours, false news etc. are used as goals for the intent of harming.

<https://www.apa.org/science/about/psa/2013/07-08/relational-aggression>

An important distinction between hostile and instrumental aggression is that instrumental aggression is learned behaviour, where hostile aggression is impulsive. In the majority of situations, neither is an ideal response or solution to your problem.

From the above concept of aggression, we reach a consensus that from the perspective of a sports psychologist, there is no 'good' aggression or 'bad' aggression. Any behaviour with an intent to physically or mentally harm another individual is aggression and is not acceptable





on the sports field. An important concept mentioned by the sports psychologists is *assertive* behaviour. Most athletic events involve interaction between people. There is some interchange of words, feelings and behaviours. While confrontation is often manifest through **assertion** and **aggression**, these two approaches have distinguishing factors and lead to very different outcomes. Assertive behaviour is generally seen as a positive form of expression, whereas aggression is a negative form of expression. Assertive behaviour has its roots in respect for the other individual, while aggression does not; for example, if you voice your opinion through aggressive acts, you are conveying that your feelings are more important. Aggression also is often counter-productive, while assertive behaviour leads to a more positive resolution. Finally, assertive behaviour is all about standing up for yourself and your values in an unthreatening manner, while aggression puts others down.

	Hostile	Instrumental	Assertive
Intent	Harm or Suffering	Harm or Suffering	No harm
Primary Goal	Harm or injure	Win or advantage	Win or Advantage
Process	Non-Legitimate	Non-Legitimate	Legitimate
Emotion	Anger	No Anger	Unusual effort and energy expenditure
Explanation	Self-justification instead of apology	Offer apologies	

Aggression Management : A Challenge in Sports

Behaviour of aggression by players is an area of concern for coaches, parents across the society which need to be minimized if not stopped or curtailed completely. Few of the strategies which could be effective in managing aggression among athletes have been mentioned below:

1. *Social acceptable discharge medium*: Aggression is an inborn drive, according to the drive theory people have the innate instinct to be aggressive and it builds up till it is discharged (catharsis). There need to be opportunities and space for people to displace or express aggression through a socially acceptable means, for example bout of aerobics, swimming, martial arts kicking pads or punching bags.
2. *Positive Reinforcement*: Aggression has a circular effect, one act lead to another because the people especially athletes learn the way to release it. The circle need to be broken by positive reinforcement and not letting it continue. Providing space for players to speak and express their opinion is an effective example.
3. *Negative Reinforcement*: During competitions, any act of violence should not be





tolerated or exempted and must have strict rules of punishment for offending players and the team, whereas fair play point can be awarded for players and teams showing restraints during aggressive situations.

4. *Modelling*: People emulate their heroes and seniors, young players grow up watching them receive awards, prizes and recognitions, therefore try to copy their behaviour to a large extent. Hence aggressive behaviour should not be promoted or appreciated at the top level and by the seniors as it will help in reducing the trickle effect.
5. *Training and role playing*: Athletes can learn to control their hostile feeling along with anger through role play and training with experts. Training is effective in regulating the emotion of anger that leads to hostile behaviour.
6. *External Cues*: Stimulus which puts preference of winning over participation can lead to various hostile as well as instrumental aggression. Coaches, parents must focus and promote participation over performance, appreciate fair play than winning, discuss fun over results.

I. Tick the correct answers

1. Which of the following is a legitimate behaviour?
 - (a) Hostile Aggression
 - (b) Instrumental Aggression
 - (c) Assertiveness
 - (d) Proactive Aggression
2. In instrumental aggression, the main aim is to using aggression.
 - (a) cause harm to the opponent
 - (b) achieve a positive goal
 - (c) express your feeling of jealousy
 - (d) show your hostility to an opponent
3. Aggression is displayed in sports through
 - (a) assertion of views
 - (b) use of abusive words
 - (c) walking away from the opponent
 - (d) strictly following the rules

II. Answer the following questions briefly.

1. What do you understand by aggression in sports?





2. Define hostile aggression.
 3. Define instrumental aggression.
- III. Answer the following questions in 150-200 words.**
1. Differentiate between Hostile aggression, Instrumental aggression and Assertiveness?
 2. Describe various reaction of athletes which can be classified as aggression and assertive behaviours?

Art Integration

Look at the following caricatures. What do they depict?



Working in groups, design a caricature about a sportsperson from India who has displayed *either*

AGGRESSION or ASSERTIVE BEHAVIOUR on the field.

How to make a caricature.

There are three essential elements that transcend style and medium and must be present in a caricature:

Likeness - If you can't tell who it is supposed to be, then it is not successful. All good caricatures incorporate a good likeness of their subjects.

Exaggeration - Without some form of exaggeration, or a departure from the exact representation of the subject's features, all you have is a portrait. The level of exaggeration can vary wildly, but there must be some departure. A straight portrait is not a caricature.

Statement - I believe a caricature must editorialize in some way. The artist must be trying to say something about the subject. It might be something to do with the situation the subject is drawn in, it may just be a play on their personality through expression or body language, it might be as simple as making visual fun of some aspect of their persona or image. Exaggeration itself can accomplish this in some cases. The best caricatures say something more about the subject than that they have a big nose.





Case Study

Read the following Case Study carefully.

A state sports team was winning all the tournaments and was highly praised for its efforts. An interview with the team to find and explore the reasons for its continuous success highlighted the following reasons. As per the report, the team had many new players who were wellorganised, responsible, self-disciplined and precise in their task and contributed to the success of the team. The Captain had been selected by the team members themselves, and he was most interactive, sociable and optimistic on the field as well as off it. This made him a good leader.

The best part of the team was that, all its senior players were helpful and cooperative with their juniors and were always willing to listen to them. The team's coach mentioned few essential elements that had contributed to the team's success. According to him, the ability to motivate people plays a crucial role in the team's success more often than the technical skills, and this is what separates a good coach from an average one. The coach also referred to occasions when players went through the phase of lack of intrinsic motivation. The coach realised that while there are some athletes have an innate drive to constantly strive for success and enjoy their task, there are others who seem to lack internal motivation and need extrinsic factors like rewards, prize, money etc. to create the required drive or required behaviour. The team's psychologist spoke about the aggressive behaviour among the team players against the opponents. It was interesting to listen to various instances where the players had instigated opponents or charged at them violently, in anger, but had later tried to justify their actions.

Sometimes, players were found to be abusing opponents not in anger, but to get an advantage or for the sake of winning, though this behaviour is not acceptable and they were awarded punishments as per the code of conduct and rules of sport.

Read the above story of a sports team and answer the following questions?

1. Which trait best reflected the personality of junior players?
 - (a) Introvert
 - (b) Conscientiousness
 - (c) Neuroticism
2. Which member of the team reflected most of the Extrovert traits?
 - (a) Coach
 - (b) New Members
 - (c) Captain
3. Which type of players were recommended for special training with Sports Psychologist?
 - (a) Extrovert
 - (b) Introvert





- (c) Mesomorph
4. The team sports psychologist is referring to which type of behaviour as non-threatening but confident.
- (a) Assertive
(b) Hostile
(c) Instrumental
5. Which are the two types of motivation discussed in the above story? Which, according to you, is the better form? Why?

Answers to Personality Quiz

1. Extraversion (Q1, Q6R); Agreeableness (Q2R, Q7); Conscientiousness (Q3, Q8R); Emotional Stability (Q4R, Q9); Openness to Experiences (Q5, Q10R).
2. 'R' denote reverse-scored item, recode the reverse-scored items (i.e., recode a 7 with a 1, a 6 with a 2, a 5 with a 3, etc.). The reverse scored items are 2, 4, 6, 8, and 10.
3. Take the AVERAGE of the two items (the standard item and the recoded reverse-scored item) that make up each scale.
4. The maximal score can be 14 and minimum score 1.

Example using the Agreeableness scale: A participant has scores of 5 on item 1 (Extraverted, enthusiastic) and 2 on item 6 (Reserved, quiet). Start with recoding the reverse-score items (ie. Item 2 score was 5) replacing the 5 with 3. Second, take the average of the score for item 7 (eg.6) and the recoded score for item 2. So the Agreeableness score would be: $(6 + 3)/2 = 4.5$.





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