UNIT 1 GORDON ALLPORT: A DISPOSITIONAL THEORY OF PERSONALITY

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1.0 INTRODUCTION

According to Allport "The basic principle of behaviour is its continuous flow" [1961,p.33]. Allport's major personality concepts have to do with motivation-with what makes a person 'go'. At the same time a person' "stream of activity" has both a 'variable portion 'and a 'constant portion'. Allport describes his constant portion with his concept of *trait*, and the variable portion with what he calls *functional autonomy*, or the tendency for a behaviour to continue to be performed for reasons that differ from the reasons that originally motivated it. Both –the trait and functional autonomy –are motivational; many traits have motive power, and functional autonomy explains adult motivation. Whether traits or functional autonomy, Allport talks about *dynamics* of personality.

1.1 OBJECTIVES

On completion of this unit, you will be able to:

- Define Personality in terms of Allport's approach;
- Explain the various traits that contribute to personality;
- Enumerate the different traits and differentiate between the various traits;
- Define functional autonomy of motives; and
- Analyse various factors contributing to mature personality.

1.2 DEFINITION OF PERSONALITY

Personality is the dynamic organisation within the individual of those psychophysical systems that determine his unique adjustment to his environment.[ALLPORT,1937,P.48]

The term *dynamic organisation* refers to important points: Not only is personality constantly developing and changing, but there is within the person some kind of central organisation that holds the components of personality together and relates them to each other.

The term *psychophysical systems* implies that person is not just a hypothetical construct formed by the observer but a real phenomenon composed of mind and body elements fused into 'a personality unity' [Allport, 1937, p.48].

Characteristics in Allport'definition signifies the uniqueness of the single person. No two people are alike in this personological systems. Finally, behaviour and *thought* means everything a person does. Personality expresses itself in some way in virtually all observable human actions.

While defining personality, Allport clearly makes a distinction between *character* and *temperament*. Character means some code of behaviour in terms of which people or their acts are evaluated e.g. a person may be described as having a 'good' or' bad' character. Temperament refers to those dispositions that are closely linked to biological or physiological determinants. Here, heredity plays an important role, which is the raw material, along with intelligence and physique, out of which personality is made.

1.3 CONCEPT OF TRAIT AND PERSONAL DISPOSITIONS

Allport defines trait as a neuro psychic structure having the capacity to render many stimuli functionally equivalent, and to initiate and guide equivalent (meaningfully consistent) forms of adaptive and expressive behaviour.[Allport, 1961,p.347]

In simpler terms, a trait is a predisposition to act in the same way in a wide range of situations. For example, if a person is basically shy, s/he will tend to be quiet and reserved in many different situations, that is sitting in a class room, eating at the cafeteria, etc.

Traits are psychological entities that render many a stimuli as well as many responses functionally equivalent. In other words, many stimuli may evoke the same response, or many responses (feelings, perceptions, interpretations, actions) have the same functional meaning in terms of the trait.

Allport [1966] published an article entitled "Traits Revisited" in which he proposed eight basic defining characteristics of trait. They are as follows:

1) A trait has more than nominal existence. Personality traits are a very real and vital part of everyone's existence. Everyone possesses certain 'generalised action tendencies'. For example, aggressiveness, honesty, etc. These personal

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characteristics are real and actually exist inside people. To cite an example from real life situation, imagine a person always telling the truth even at the cost of apprehending one's own intimate friend.

- 2) A trait is more generalised than a habit. Traits account for the relatively permanent and general features of our behaviour. While habits refer to more specific tendencies and are less generalised in terms of the situations which may arouse them or the responses which they evoke. For example a child may brush his teeth twice daily. This is a habit. But over the years the child may learn to brush the hair, wash and iron clothes, clean the room and many such activities which are all learned over a period of time and not necessarily habits. All these habits woven together may form the trait of personal cleanliness.
- 3) A trait is dynamic or at least determinative in behaviour. Traits do not lie dormant waiting to be aroused by external stimuli. Traits motivate people to engage in behaviours that are conducive to expressing their traits. To give an example, a student with high sociable trait does not just sit around and wait to attend parties, but actively seeks out parties so that the sociability trait can be expressed. Thus, traits guide and direct a person's actions.
- 4) A trait's existence may be established empirically. Traits cannot be observed directly, but it is possible to verify their existence. To give an example, repeated actions of the subject, case histories or biographies, or statistical techniques that determine the degree of coherence among separate responses.
- 5) A trait is only relatively independent of other traits. No trait is independent of the other. They overlap. There is no rigid boundary separating one trait from another. The personality is comprised of a network of overlapping traits only *relatively* independent of one another.
- 6) A trait is not synonymous with moral or social judgement. Personality is important, not character. Many traits like loyalty, greed, etc. are bound by social demands and socio cultural factors.
- 7) A trait may be viewed in light of either the personality that contains it or its distribution in the population at large. To give an example, take for instance, the trait of shyness which has both unique and universal aspects. It is unique for the person because it influences a person'life, while as the trait can be studied universally by constructing a reliable and valid "shyness scale" and determine how people differ on it.
- 8) Acts or even habits that are inconsistent with a trait are not proof of the nonexistence of the trait.

Not everyone shows the same degree of integration with respect to a given trait. Also, the same person may possess contradictory traits. Lastly, there are instances where social situations, rather than personality traits are the prime movers of behaviour.

Self Assessment Questions			
1) Define Personality in terms of Allport's theory.			



2)	What do you understand by "traits"?
3)	What are the basic characteristics of traits?

1.4 TYPES OF TRAITS

Traits are determining tendencies or predispositions to respond consistently over time and across situations. All port proposed that traits may be classified into a three-fold and somewhat overlapping category system according to the degree to which they pervade and influence individual behaviour.

- 1) Cardinal Trait: If a trait is extremely pervasive, that is, if almost all of a person's activities can be traced to its influence, it is a cardinal trait. The meaning may be grasped by considering many trait adjectives derived from history and fictional characters. To give an example when someone is being referred to as being a Ghandhian, the cardinal disposition of being 'non-violent' is being inferrred.
- 2) Central Trait: Less pervasive but still quite generalised disposition of the individual. These are also called the building blocks of personality. To cite an example, a person being outgoing, sociable, etc. In other words, central traits are those tendencies that a person often expresses, which people around the person can readily discern.
- 3) **Secondary Trait:** Dispositions which are less conspicuous, less generalised, less consistent and less relevant as compared to cardinal or central traits. These are called secondary traits. To give an example, food preferences of an individual. However it must be remembered that to know of the secondary traits of a person, the person must be known quite intimately in order to discern the secondary traits.

1.4.1 Common Traits versus Individual Traits

Allport [1937] also distinguished between *common* traits and individual traits. The former (also called dimensional or nomothetic traits) includes any generalised disposition to which most people within a given culture can be reasonably compared. For example, social attitude, anxiety, value, and the like are generalised disposition and the majority of people within the particular culture could be measurably compared with one another on those common traits and dimensions.

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Traits never occur in any two people in exactly the same way.

Thus, those characteristics peculiar to the individual which do not permit comparisons among individual are referred to as individual traits. These are also called as personal dispositions or morphological traits and these traits always operate in unique ways within each person, and this category of traits most accurately pinpoints the personality structure of any given individual, that is the organised focus of his life. The true personality surfaces only when the individual traits are examined which can be obtained from such resources as a persons' case history, diary, letters, and other such documents.

Sel	f Assessment Questions	
1)	What are the various types of traits?	
2)	Define common traits.	
3)	Define individual traits.	
4)	How does one differentiate between common and individual traits?	

1.5 THE PROPIUM: DEVELOPMENT OF SELFHOOD

One thing that motivates human beings is the tendency to satisfy biological survival needs, which Allport referred to as opportunistic functioning. He noted that opportunistic functioning can be characterised as reactive, past-oriented, and biological.

Allport also felt that opportunistic functioning was relatively unimportant for understanding most of human behaviour, as he was of the view that most behaviours of individuals is motivated by something very different. This different aspect is the one that helps express one's unique self. This type of something motivating the functioning of a person in terms of expressing of the self was termed by Allport as propriate functioning. Allport also said that most of what persons do in life are a matter of being who the persons are, what are their individual qualities, etc. Propriate functioning can be characterised as proactive, future-oriented, and psychological.

Propriate comes from the word 'proprium', which is Allport's name for that essential concept, the self. He had reviewed hundreds of definitions for that concept and came to feel that, in order to be more scientific, it would be necessary to dispense with the common word self and substitute something else. However despite the word proprium was considered a good substitute, this term never could actually substitute self and 'self' continue to be used to represent the individual's unique features that motivate the person's behaviour.

To get an intuitive feel for what propriate functioning means, think of the last time you wanted to do something or become something because you really felt like doing or becoming that something that would be expressive of the things about yourself that you believe to be most important. Remember the last time you did something to express your self, the last time you told yourself, "that's really me!" Doing things in keeping with what you really are, that's propriate functioning.

1.5.1 The Proprium Defined

Putting so much emphasis on the self or proprium, Allport wanted to define it as carefully as possible. He considered proprium from two basic view points, viz., phenomenological and functional.

Phnomenological means the self is considered in terms of what it experiences. Allport suggested that the self is composed of all the aspects of a person experiencing, that is what the person sees as most essential or important and not incidental or accidental. It also means warm as against being cold in terms of emotions, and central which means that the self is the central part and not peripheral of the self.

Allport considered the self as having seven functions, as given below:

- 1) Sense of body
- Self-identity
- 3) Self-esteem

- 4) Self-extension
- 5) Self-image
- 6) Rational coping
- 7) Propriate striving

Table below shows the propriate functions of personality in order of their sequential appearance in the developing individual.

Table: Developmental Stages of the Proprium by Allport

Stage	Aspects of personality	Definition
1	Sense of bodily self	Awareness of bodily sensations. First aspect of proprium that evolves during the first year of life. Infants become aware of sensations coming from muscles, tendons, and joints etc. These recurrent sensations constitute the bodily self.
2	Sense of Identity	Continuity of self despite changes taking place. Second aspects of proprium evolves through language, the child recognises him/herself as a distinct and constant point of reference. By learning one's name, clothing, toys etc. helps in strengthening the sense of identity.
3.	Sense of self esteem	Pride in one's accomplishments. Self-esteem is the feeling of pride that results when a person accomplishes things on one's own. This aspect of propium emerges during the third year of life. It depends on the child's success in mastering tasks and his urge to explore and manipulate the environment.
4.	Sense of self extension	Self comes to include relevant aspects of the social and physical environment. This evolves during 4 to 6 years of age, when children realise that their physical bodies also belongs to certain aspects of their environment, including people. Children learn the meaning of "mine"
5.	Self Image	Aspirations of the person begins to reflect the goals and expectations of significant others. It evolves around 5 or 6 years. It is the time the child realises what is expected of him/her by significant others. The child begins to distinguish between the 'good me' and the 'bad me'

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6.	Sense of self as rational coper	Abstract reasoning and logic applied to solving everyday problems. This occurs between 6 and 12 years of age, when the child realises that s/he has the rational capacity to find solutions to life's problems and thereby cope effectively with reality demands. Reflective and formal thinking appears
7.	Propriate striving	Unified sense of self and planning for long range goals. Allport[1961] believed that the core problem of an adolescent is the selection of career and other life goals. Pursuing long range goals, having a sense of directedness and intentionality in striving for defined objectives, imparting to life a sense of purpose etc. are part of and essence of propriate striving. Realisation of propriate striving requires a unified sense of selfhood. And hence, this occurs only in adulthood, when all aspects of self are consolidated

Sel	f Assessment Questions
1)	Define Proprium and describe the same.
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2)	What are the verious stages of development of the propriate?
2)	What are the various stages of development of the proprium?
3)	What is meant by propriate functioning?

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4)	How is propriate functioning different from propriate striving? Explain	
		l
5)	What are the 7 functions of self? Describe with examples	

1.6 FUNCTIONAL AUTONOMY

Functional autonomy of motives

Allport didn't believe in looking too much into a person's past in order to understand his present. This belief is most strongly evident in the concept of functional autonomy. This concept states that the motives for a certain behaviour today are independent (autonomous) of their origins. For instance a person might have wanted to become an Information Technology specialist, because of the person getting first rank and getting prizes in it. However as of today the motive is different. That is, the person is n IT specialist because that itself is giving the person all that needs to be achieved. To take another example, a person might have developed a taste for pizzas, due to some reason, but that is actually not important, what is important is that the person likes pizzas as of today and that is what the person is now and that matters.

Allport thus did not believe in looking too much into a person's past in order to understand the present. This perhaps led to the term functional autonomy in which a person's motives today are independent (autonomous) of their origins.

The concept of *functional autonomy* of motives provides the necessary base for a theory of motivation. It simply means that adult motives are not related to past motives. The past is past, there are no strings attached. In other words, the reasons why an adult now engages in some behaviour are independent of whatever reasons that might have originally caused her/him to engage in that behaviour.

Allport suggested that much of adult behaviour is caused by functionally autonomous motives. For example, he pointed to the case of a young student who first undertakes a field study in college because it is required, because it pleases his parents, or because it comes at a convenient hour. As he starts working he finds himself absorbed in the topic, perhaps for life. The original motives with which he started on the project is no more present. What was a means to an end becomes an end itself.[1961,p.235]



1.6.1 Types of Functional Autonomy

Allport [1961] differentiated between two types of functional autonomy, viz., (i) preservative functional autonomy (ii) Propriate functional autonomy.

The first, preservative *functional autonomy* refers to feedback mechanisms in the nervous system that are governed by simple neurological principles. These mechanisms become neurologically self-maintaining over time and help to keep the organism on track. E.g. eating and going to bed at the same time each day. The main feature is repetitious activity.

The second, *propriate functional autonomy* refers to the acquired interests, values, attitudes and intentions of the person. It is the master system of motivation that imparts consistency to the person's striving for a congruent self image and a higher level of maturity and growth. People may not be constantly rewarded to sustain their efforts. Thus, it represents the striving for values and goals, and the sense of responsibility that people take for their lives.

Sel	f Assessment Questions					
1)) Define functional autonomy of motives and elucidate the concept					
2)	Discuss the different target of fact tional outer area and highlight the					
2)	2) Discuss the different types of functional autonomy and highlight the differences.					
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1.7 THE MATURE PERSONALITY

Allport [1961] believed that the emergence of personal maturity is a continuous and lifelong process of *becoming*. The behaviour of a mature person is functionally autonomous and is motivated by conscious processes. While the behaviour of immature persons is dominated by unconscious motives stemming from childhood experiences, Allport concluded that the psychologically mature adult is characterised by six attributes, namely

- 1) Has a widely extended sense of self
- 2) Has a capacity for warm social interactions
- 3) Demonstrates emotional security and self acceptance

- 4) Demonstrates realistic perception, skills and assignments
- 5) Demonstrates self insight and humour
- 6) Has a unifying philosophy of life.

Each of these are explained in detail in the following paragraphs:

- 1) The mature person has a widely extended sense of self: Truly mature persons can get 'outside' of themselves. They actively participate in work, family and social relationships, hobbies, political and religious issues, or whatever else they experience as valuable.
- 2) The mature person has a capacity for warm social interactions: There are two kinds of interpersonal warmth, that is, intimacy and compassion. The intimate aspect of warmth is seen in a person's capacity to show deep love for family and close friends. Compassion is reflected in a person's ability to tolerate differences (concerning values or attitudes) between the self and others, which allows the person to show profound respect and appreciation for the human condition and a sense of kinship with all people.
- 3) The mature person demonstrates emotional security and self-acceptance: Mature adults have a positive image of themselves and are thus able to tolerate frustrating or irritating events as well as their shortcomings without becoming inwardly hostile. They also deal with their emotions, like, depression, anger, guilt, in such a way that they do not interfere with the well-being of others.
- 4) The mature person demonstrates realistic perception, skills, and assignments: Healthy people see things as they are, not as they wish them to be. They are in direct contact with the reality. They do not distort it perceptually to fit their needs and fantasies. Healthy people possess appropriate skills for their work, provisionally setting aside personal desires and impulses while task takes a priority.
- 5) The mature person demonstrates self-insight and humour: Mature adults have an accurate picture of their own strengths and weaknesses. Humour is an important aspect in self insight because it prevents unnecessary self glorification and just plain phoniness. Humour is the ability to laugh at the things one cherishes (including oneself) and still cherish them.
- 6) The mature person has a unifying philosophy of life: Mature person can "put it all together", with a clear, consistent, and systematic way of seeing meaning in their lives. A person needs to have a value system that will present him a dominant goal or theme that makes his life meaningful. Different people may develop different central values around which their lives will revolve. A mature person has a set of deeply held values which serve as a unifying foundation of his/her life. A unifying philosophy of life therefore provides a kind of overriding value orientation that gives meaning and significance to everything the person does.

1.8 APPLICATION: THE STUDY OF VALUES

The unifying philosophy of a mature person is founded upon *values*, that is, basic convictions about what is and is not of real importance in life. Believing that a person's efforts to find order and meaning in life are governed by values,



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Allport identified and measured basic value dimensions. He helped to develop a personality test, the *Study of Values*. Allport's model is based on the work of Eduard Spranger, a European psychologist.

In his book *Types of Men*, Spranger outlined six major value types. These values are found in varying degrees in all people. People construct the unity of their lives around them (Allport,1961). Thus, no person falls exclusively under any one value category. Rather, different value combinations are more or less salient in the lives of different people.

For Allport, these values are best described as deep level traits. They are described as:

- i) The Theoretical
- ii) The economic
- iii) The aesthetic
- iv) The social
- v) The political
- vi) The religious.

Let us consider each of these in some detail

- i) **The Theoretical:** The person is primarily concerned with the discovery of *truth*. Such a person is characterised by a rational, critical, and empirical approach to life. The person is highly intellectual and tends to pursue a career in science or philosophy.
- ii) **The Economic:** The economic person places highest value on whatever is *useful or pragmatic*. Such a person is highly 'practical' and is keenly interested in making money.
- iii) **The Aesthetic:** This person places the highest value on *form and harmony*. Every single experience is given importance from the point of view of grace, symmetry, or fitness.
- iv) **The Social:** The highest value of the social type is *love of people*. Such a person is likely to view the theoretical, economic, and aesthetic attitudes as cold and inhuman, and thus would regard love as the only suitable form of relationship.
- v) **The Political:** The main interest of the political person is *power*. Such people look out for personal power, influence, and renowned above all else.
- vi) **The Religious:** This person is mainly concerned with understanding the world as a *unified whole*. The religious person seeks unity and higher meaning in the cosmos.

Allport assessed individual differences in the relative strength of these six values by means of the *Study of Values* scale. Developed and standardised with college students, the test consists of 45 questions and requires 20 minutes to complete. The reliability and validity data support the utility of the test. Average scores on the six values differ in the expected directions for different occupational groups, as for example, in the case of business students they score poorly on the aesthetic value, and theology students score poorly on the religious value.(Allport et al.,1960). The test reflects Allport's belief that values are an essential part of an individual's personality.

1.9 LET US SUM UP

Gordon Allport regarded the explanation of an individual's uniqueness as the paramount goal of psychology. He viewed personality as the dynamic organisation of those internal psychophysical systems that determine a person's characteristic behaviour and thoughts. He considered trait as the most significant unit of analysis for understanding behaviour.

Traits account for a person's behavioural consistency over time and across situations. They may be classified as cardinal, central, or secondary, according to the degree of pervasiveness within a personality. He also made distinction between common and personal dispositions. The former are generalised traits to which most people within a given culture can be compared, whereas the latter refer to characteristics peculiar to a person which do not permit comparisons with others.

The overall construct that unifies traits and provides direction for the person's life is termed the proprium, or self as known, that contributes to an inward sense of unity. Another concept is of functional autonomy. This principle asserts that adult motives are not related to the earlier experiences in which they originally originated. There are two types of functional autonomies, preservative functional autonomy (feedback mechanisms in the nervous system) and propriate functional autonomy (the person's acquired interests ,values, attitudes, and intentions). The latter allows for the development of the truly mature person.

1.10 UNIT END QUESTIONS

- 1) How important is Allport's concept of "propium" in describing the total personality?
- 2) What do you think of Allport's concept of "functional autonomy?"
- 3) How well do Allport's six characteristics of a mature personality fit your own idea of what constitutes a healthy personality?
- 4) What are the various values put forward by Allport?

1.11 GLOSSARY

Bodily self : That aspect of the propiym based on the person's

perception of his /her body. Allport considered it to

be a lifelong anchor of self-awareness.

Cardinal disposition: A characteristic so pervasive that virtually all a

person's activities can be traced to its influence.

Central disposition: A characteristic that influences the person's

behaviour in a variety of settings; central traits are the "building blocks" of personality structure.

Character : Term used to refer a moral standard or value system

against which a person's actions are evaluated.

Common trait : Any generalised disposition against which most

people within a given culture can reasonably be

compared(nomothetic trait).

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Dispositional perspective: An approach to personality emphasising the enduring qualities or traits that reside within the person and that render the person's behaviour consistent

overtime and across situations.

Functional autonomy: Process whereby a given form of behaviour becomes

an end or goal in itself despite the fact that it may originally have been adopted for another reason. What was formerly a means to an end becomes an

end itself.

Individual trait : A trait unique to the individual (personal disposition).

Propriate striving: The person's motivation to enhance self through the

pursuit of important, long-range goals. Such motivation will increase the the level of tension.

Propium : All aspects of a person that make him unique. It

represents creative, forward moving and positive

quality of human nature.

Psychophysical

system

An important aspect of Allport's definition which suggests that both mental and physical factors must be considered when we seek to understand human functioning.

Secondary disposition: A trait that has little or no influence on behaviour,

as for example, a specific food preference.

Self as a rational coper: A person's realisation that s/he can cope effectively

wiyh reality demands and achieve personal goals.

Self esteem : The favourableness of a person's self-image.

Self extension : The person's feelings about his /her material

possessions.

Self identity : The person's recognition of self as a distinct and

constant point of referencerelative to others.

Self image : The diversitry of roles a person plays in order to gain

the approval of others and to manage their

impressions of who and what the person is.

Self objectification: The ability to view oneself objectively and to

recognise one's strength and weaknesses.

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UNIT 2 RAYMOND CATTELL: A TRAIT THEORY OF PERSONALITY

Structure

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Cattell's Trait Theory of Personality2.2.1 The Formula for Personality
- 2.3 Categories of Traits
- 2.4 Role of Herdity and Environment
- 2.5 Constitutional versus Environmental –Mold Traits
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- 2.7 Common versus Unique Traits
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2.0 INTRODUCTION

Cattell's theory seeks to explain the complicated transactions between the personality system and the more inclusive sociocultural matrix of the functioning organism. He suggested that an adequate theory of personality must take into account the multiple traits that comprise the personality, the extent to which these traits are genetically and environmentally determined, and the ways in which genetic and environmental factors interact to influence behaviour. He is also of the opinion that an appropriate theory of personality must take into account the multiple traits that comprise the personality, the extent to which these traits are genetically and environmentally determined, and the ways in which genetic and environmental factors interact to influence behaviour. In this unit we will be studying the details regarding Cattell's Trait theory of personality, its definitions, the dynamics underlying the theory etc.

2.1 OBJECTIVES

After completion of this unit, you will be able to:

- Define Cattell's theory of personality;
- Describe the characteristic features related to trait theory;
- Explain the various methods and measurement instruments of trait;
- List out the categories of traits; and
- Explain the functions of traits and their influence on personality.

2.2 CATTELL'S TRAIT THEORY OF PERSONALITY

Raymond Cattell was born in 1905 and died in 1998. He was educated in Britain and he obtained his doctorate from University of London and after which he worked as director, child guidance clinic for 5 years. He came to the US to work with E.L.Thorndike and developed officer selection methods. He established an Institute for Personality and Ability testing. He taught at University of Illinois for 30 years and more and went to Hawai in 1978 and until death he was teaching in the University of Hawaii.

Cattell thought that clinicians observations were not a scientific basis for understanding or classifying personality. He used inductive method of scientific inquiry to develop his theory of personality. That is, he gathered large amount of data and used factor analysis on the data looking for clusters.

For Cattell personality was that which permitted a prediction of what a person will do in a given situation. The underlying basic factors of a person's personalities was termed by him as source traits. He used factor analysis and found common clusters of surface traits. These clusters were termed by Cattell as Source traits. He gathered data about the individual from the liferecord etc., took self reports and used the Questionnaire data and used tests and obtained test results which all put together with source traits gave the personality of an individual.

Cattell has identified 35 primary traits of which 23 characterised normal individuals and 12 characterised abnormal individuals. He developed a scale called 16 PF which was designed to assess 16 different source traits associated with normal behaviour.

Cattell said that humans are innately driven by ergs, which means goals were created because of hunger, curiosity, anger, fear, or other basic motivations which are found in both humans and primates.

Cattell distinguished two types of intelligence viz., (i) Fluid intelligence (ii) Crystallised intelligence. According to him, Fluid intelligence allows the persons to learn new things regardless of past experience, whereas the crystallized intelligence is the ability to solve problems based upon previous experience. Cattell believed that intelligence was primarily an inherited trait.

Cattell was of the view that personality has to be considered in terms of not only traits but also various other variables including attitudes. Cattell defined attitude as the desire to act in a specific way in response to a specific situation. Attitudes are interconnected within the Dynamic lattice, that is dynamic lattice is Cattell's attempt to display graphically his theoretical analysis of the relationship between the mind's instinctive driving forces and their overlying semantic and attitudinal superstructure. The specific attitudinal connections within the dynamic lattice are controlled by susidiation chains, that is some attitudes are subordinate to other attitudes. The subsidisation chain helps determine when specific attitude will produce a specific behaviour.

Environmental factors were considered essential by Cattell to determine personality and behaviour.

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Ergs are goals created because of hunger, thirst etc. The organism is motivated to get food when hungry. These are called ergs.

Socially created goals are called socially shaped ergs and Cattell gave it the term socially shaped ergic manifolds. In short form it was called SEM. Cattell used SEM to help explain the contribution of the environment to human behaviour.

SEM's are socially acquired and can satisfy several ergs at one time. Because SEMS are socially acquired, they vary in number and type by culture.

SEM's get their energy from the ERG's.

Humans are innately driven by *ergs*, which are goals created by curiosity, anger, hunger, fear, and many other basic motivations.

Through research Cattell developed list of ergs which are for instance, Food-Seeking, Mating, Gregariousness, Parental Protectiveness, Exploration, Safety, Self-Assertion, Pugnacity, Narcissistic Sex, and Acquisitiveness.

Some of the major socially shaped ergic models are profession, family and home, spouse, religion. Together with attitudes, ERHGs and SEMs interact to produce behaviour.

According to Cattell, if you can systematically identify their attitudes, ERG's and SEM's, you should then be able to reliably predict future behaviour.

Cattell's trait theory of personality attempts to explain the interaction between the genetic and personality systems and the socio cultural milieu within which the organism is functioning. It delves deep into the complicated transactions between the personality system and the more inclusive sociocultural matrix of the functioning organism. According to him these traits are genetically and environmentally determined, and the ways in which genetic and environmental factors interact decide the behaviour of the individual. Cattell opines that an appropriate theory of personality must take into account the multiple traits that comprise the personality. The theory should be able to indicate the ways in which genetic and environmental factors interact to influence behaviour. He believes that an appropriate theory of personality functioning and growth must be based on systematic research methods and precise measurements. Multivariate statistics and factor analysis are his preferred methods of personality study.

Self Assessment Questions			
1) Describe in detail Cattell's trait theory of personality.			

2)	What are the two types of Intelligence as put forward by Cattell?	
3)	Define and describe ERGs and SEMs	
4)	How does Cattell use ERGs and SEMs in his theory of Personality?	

2.2.1 The Formula for Personality

According to Cattell [1965], personality is that which permits us to predict what a person will do in a given situation. With the help of mathematical analysis of personality, he suggests that the prediction of behaviour can be made by a *specification equation*. The formula used by Cattell to predict behaviour with any degree of accuracy is given below:

$$\mathbf{R} = \mathbf{f} (\mathbf{S}, \mathbf{P})$$

Where R refers to the nature of a person's specific response, f refers to the unspecified function, S refers to the stimulus situation at a given moment in time and P refers to the Personality structure.

To be more specific, this formula signifies that the nature of a person' specific response(R), meaning what the person does or thinks or verbalises, is some unspecified function(f) of the stimulus situation(S) at a given moment in time and also of the individual's personality structure(P).

The specification equation shows that the person's specific response to any given situation is a function of all the combined traits relevant to that situation. Here each trait is interacting with situational factors that may affect it.

Cattell also accepts that it is difficult to predict a person's behaviour in a given situation. In order to increase predictive accuracy, the personality theorist must

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consider not only what traits a person possesses but also the many nontrait variables such as for example, the person's moods and particular social roles called for in the situation and related aspects.

It is also necessary to weigh each trait according to its relevance to the situation in question. For example, if the person were in emotionally arousing situation, the trait of anxiety would be assigned a high weight in predicting the person's response. Thus, the equation is an oversimplification of Cattell's trait theory, yet, this general formula conveys Cattell's strong belief that human behaviour is determined and can be predicted.

2.3 CATEGORIES OF TRAITS

According to Cattell, behaviour is determined by the interaction of traits and situational variables, but his major organising concept of personality resides in his descriptions of the various kinds of traits he has identified. Traits are relatively permanent and pervasive tendencies to respond with consistency from one situation to another and from one time to another. Traits are hypothetical mental structures inferred from behaviour which predispose the person to behave uniformly across various circumstances and across time. Traits reflect the person's stable and predictable characteristics and are by far the most important of Cattell's concepts.

Cattell (1965,1978) relies heavily on factor analysis to investigate the structural elements of personality. He concludes that traits can be classified in several ways (Cattell also uses the term *factors*) such as (i) surface traits (ii) source traits (iii) constitutional traits (iv) Environmental mold traits (v) ability trait (vi) temperament (vii) dynamic traits (viii) common traints (ix) Unique traits. Let us take up these traits and see how they function.

characteristics that all seem to 'hang' together. For instance, the observed characteristics of inability to concentrate, indecisiveness, restlessness etc., may cluster together to form the surface trait of neuroticism. Here, the trait of neuroticism is observed by a cluster of overt elements that seem to go together. It does not derive from any single factor or element. Surface traits do not have a unitary basis and are not consistent overtime and hence, they are not given much value for behavioural accountability.

On the other hand, *source traits* are the basic, underlying structures which constitute the building blocks of personality. They represent the unitary dimension or factors that ultimately determine the consistencies in each person's observed behaviour. Source traits exist at a "deeper" level of the personality and are the causes of behaviour in diverse domains over an extended period of time.

After extensive factor analytic research, Cattell[1979] concluded that there are approximately 16 source traits that constitute the underlying structure of personality. These were put forward by him as (i) warmth (ii) Reasoning (iii) Emootional stability (iv) Dominance (v) Liveliness (vi) Rule Consciousness (vii) social boldness (viii) Sensitivity (ix) vigilance (x) Abstractness (xi) Privateness (xii) Apprehension (xiii) Openness to change (xiv) Self reliance (xv) Perfectionism (xvi) Tension.

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16 PF (Sixteen Personality Factor Questionnaire), designed by Cattell consists of the above 16 personality trait factors. It is a self report scale that has proved to be quite useful and popular in both applied and research settings. Cattell considered personality traits to have multi level hierarchical structure. In his research Cattell tried to find out the primary traits of personality and found that these primary traits came together in meaningful groupings and formed broader global traits. These global traints were termed by him as secondary traits.

For example the first global trait he found was the introversion extraversion. It resulted from the natural affinity of five primary traits that defined different reasons for an individual to move toward people and away from prople. Cattell stated that that there was a natural tendency for these traits to go together in the real world, and thesed represented important social behav ioural domain. The primary traits that constituted the extraversion introversion dimension were:

- Warmth (Factor A): the tendency to move toward others seeking closeness and connection because of genuine feelings of caring, sympathy, and concern (versus the tendency to be reserved and detached, and thus be independent and unemotional).
- **Liveliness** (**Factor F**): the tendency to be high-energy, fun-loving, and carefree, and to spontaneously move towards others in an animated, stimulating manner. Low-scorers tend to be more serious and self-restrained, and to be cautious, unrushed, and judicious.
- **Social Boldness** (**Factor H**): the tendency to seek social interaction in a confident, fearless manner, enjoying challenges, risks, and being the center of attention. Low-scorers tend to be shy and timid, and to be more modest and risk-avoidant.
- Forthrightness (Factor N): the tendency to want to be known by others—to be open, forthright, and genuine in social situations, and thus to be self-revealing and unguarded. Low-scorers tend to be more private and unself-revealing, and to be harder to get to know.
- Affiliative (Factor Q2): the tendency to seek companionship and enjoy belonging to and functioning in a group (inclusive, cooperative, good follower, willing to compromise). Low-scorers tend to be more individualistic and self-reliant and to value their autonomy.

In a similar manner, Cattell and his colleagues found that four other primary traits consistently merged to define another global factor called as Receptivity or Openness (versus Tough-Mindedness). This factor was made up of four primary traits that describe different kinds of openness to the world and these were identified as

- Openness to sensitive feelings, emotions, intuition, and aesthetic dimensions (Sensitivity – Factor I)
- Openness to abstract, theoretical ideas, conceptual thinking, and imagination (Abstractedness Factor M)
- Openness to free thinking, inquiry, exploration of new approaches, and innovative solutions (**Openness-to-Change Factor Q1**) and
- Openness to people and their feelings (Warmth Factor A).



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Another global factor, **Self-Controlled** (or conscientious) versus Unrestrained, resulted from the four primary factors that came together. These were as given below:

- Rule-Consciousness (Factor G) involves adopting and conscientiously following society's accepted standards of behaviour
- **Perfectionism** (**Factor Q3**) describes a tendency to be self-disciplined, organised, thorough, attentive to detail, and goal-oriented
- **Seriousness (Factor F)** involves a tendency to be cautious, reflective, self-restrained, and deliberate in making decisions; and
- **Groundedness** (**Factor M**) involves a tendency to stay focused on concrete, pragmatic, realistic solutions.

Because the global factors were developed by factor-analysing the primary traits, the meanings of the global traits were determined by the primary traits which made them up. In addition, the global factors helped in understanding the meaning and function of each of the primary traits. Thus, the two levels of personality are essentially inter-connected and inter-related

Sel	Self Assessment Questions		
1)	Define and elucideate $Rs = f(S,P)$.		
2)	What are the different categories of traits?		
3)	What is a source trait and a surface trait?		
4)	Put forward the 16 personality factors. How did Cattell arrive at these traits?		

2.4 ROLE OF HERDITY AND ENVIRONMENT

Cattell has tried to determine the relative contributions of heredity and environment to the development of traits.

He devised a statistical technique for this purpose and called it *multiple abstract* variance analysis(MAVA). This test estimates not only the presence or absence of genetic influence but also the degree to which traits are due to genetic or to environmental influences[Cattell,1960].

MAVA involves gathering data on the resemblances between identical twins raised in the same family, non-twin siblings raised in the same family, identical twins raised apart, and non-twins siblings raised apart.

Results from MAVA technique (based on personality tests administered to assess a particular trait) suggest that the importance of genetic and environmental influences varies widely from trait to trait.

For example, Cattell's data indicate that about 65 to 70 percent of the variation in scores on measures of intelligence and assertiveness can be accounted for by genetic factors, whereas the genetic influence on traits such as conscientiousness and neuroticism is half that. Cattell estimates that about two-thirds of personality is determined by environmental influences and one—third by heredity.

Along with immediate situational factors, Cattell believes that much of people's behaviour is determined by the groups to which they belong (such as families, peer groups, school, and the like). Just as people can be described in terms of their traits, so can traits be used to describe social groups with which people are associated.

The trait dimensions along which groups can be objectively described are called their *syntality*.

Using factor analysis Cattell[1949]studied the syntality of various religious, school, and peer groups. He also studied several traits that compose the syntality of entire nations (Cattell et al., 1952). The major traits found to identify the syntality of countries included size, morale, affluence, and industriousness.

2.5 CONSTITUTIONAL VERSUS ENVIRONMENTAL – MOLD TRAITS

Source traits can be divided into two subtypes-depending on their origin.

Constitutional traits derive from the biological and physiological conditions of the person. For instance, recovery from cocaine addiction may cause a person to be momentarily irritable, depressed, and anxious. Cattell would suggest that these behaviours result from changes in the person's physiology and thus reflect constitutional source traits.

Environmental-mold traits are determined by influences in the social and physical environment. These traits reflect learned characteristics and styles of behaving and form a pattern that is imprinted on the personality by the individual's environment. Thus, a person who is raised in a rural setting behaves differently from a person, who grows up in an urban area.

2.6 ABILITY, TEMPERAMENT AND DYNAMIC TRAITS

Source traits can further be classified in terms of the modality through which they are expressed.

Ability traits determine the person's skill and effectiveness in pursuing a desired goal. For example, intelligence, musical aptitude.

Temperament traits relate to other emotional and stylistic qualities of behaviour. For example, people may either work quickly or slowly on a task. Cattell considers temperament traits to constitutional source traits that determine a person's emotionality.

Dynamic traits reflect the motivational elements of human behaviour. These are traits that activate and direct the person toward particular goals. Thus, a person may be characterised as ambitious, power-oriented, or interested in acquiring material possessions.

2.7 COMMON VERSUS UNIQUE TRAITS

A *common trait* is one that is shared in varying degrees by all members of the same culture. For example, self-esteem, intelligence, and introversion.

Unique traits are those that are shared by few or no other people. Unique traits are especially observed in the areas of interests and attitudes.

Cattell gives much significance on the use of factor analysis to identify the major traits of personality. Cattell draws his data from three basic sources: life record data(L-data), self-rating questionnaire data(Q-data), and objective test data(OT-data).

L-data, involves the measurement of behaviour in actual, everyday situations such as school performance or interactions with peers.

Q-data, refers to the person's self-ratings about his/her behaviour, feelings or thoughts.

Such information reflects the person's introspections and self-observations (For example, Sixteen Personality Factor Questionnaire).

Such data is prone to faking.

Finally, *OT-data* are derived from the creation of special situations in which the person's performance on certain tasks may be objectively scored. For example, responding to a Rorschach test. Such data is resistant to faking.

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2)	What do you understand by the terms common and unique traits?
3)	Define and describe L data, Q data and OT data. How are these contributing to personality?

2.8 LET US SUM UP

Cattell's trait theory views personality as that which permits us to predict what a person will do in a given situation, as expressed in the equation R=f(S,P).

Traits are hypothetical constructs which predispose the person to behave consistently across circumstances and time.

He sees the essence of personality structure as consisting of approximately 16 source trait factors.

Source traits can be divided into constitutional or environmental-mold traits.

Ability, temperament, and dynamic traits represent additional categories of trait classification. He also makes a distinction between common and unique traits.

Cattell uses three types of data to identify source traits:

- i) life records(L-data),
- ii) self-rating questionnaires(Q-data),and
- iii) objective tests(OT-data).

The Sixteen Personality Factor Questionnaire(16 PF) was devised by Cattell to measure source traits using self-report data.

He also developed a statistical tool called multiple abstract variance analysis to estimate the relative contributions of heredity and environment to a given trait.

He estimates that one-third of personality is determined by genetics and twothirds by environmental influences.

Finally, he has studied how the syntality or defining characteristics of groups influence personality.

2.9 **UNIT END QUESTIONS**

- Define Cattell's trait theory of personality 1)
- How do Allport and Cattell differ in their approaches to classify personality traits?
- 3) How does Cattell conceptualise "trait". To what extent, if any, he agrees that traits interact with situations to determine behaviour?
- 4) Give details of 16 PF as put forward by Cattell.
- 5) Define ability, temperament and dynamic traits.

Sixteen Personality

Factor Inventory(16PF)

- 6) Describe with suitable examples common and unique traits.
- What is syntality and how does Cattell use the same in explaining group traits?

8) What are the various type	bes of traits? Discuss with suitable examples.
2.10 GLOSSARY	
Ability trait	: A trait that determines the person's effectiveness and skill in the pursuit of goals.
Constitutional trait	: A source trait that is rooted in biological and physiological condition of the person and very resistant to change.
Dynamic trait	: A trait that activates and directs the person toward particular goals in a given situation.
Environmental mold trait	: A source trait learned through experience with the environment.
Factor analysis	: This is a Statistical procedure used to determine those psychological variables or test responses that cluster together within a matrix of intercorrelations. Factor analysis was used by Cattell and Eysenck to identify the underlying traits of personality structure.
Factor loading	: Correlation between a single item and the factor to which it is being related.
L-data	: Measures of behaviour in everyday life situations or ratings of such behaviour (e.g., interactions with peers).
OT-data	: Measures of a person's performance on tasks that may be objectively scored(e.g., responses to an inkblot).
Q-data	: Personality data obtained from self-report questionnaires(e.g., the 16 PF).

: Self-report test developed by Cattell to measure

the 16 source traits of personality.

Source trait : Underlying structures that constitute the core or basic building blocks of personality, that is source traits are revealed through factor

analysis in Cattell's system.

Specification equation : Formula to indicate that a person's response is

a consequence of the stimulus situation at a given moment as well as all the traits relevant

to the situation.

Temperament trait : A constitutional source trait influencing the

person's emotional or stylistic quality of

behaving.

Trait theory : Theoretical conception of personality that

postulates the existence of underlying dispositions or characteristic that initiate and direct behaviour. Traits are typically inferred from overt behaviour or self-report measures.

2.11 SUGGESTED READINGS AND REFERENCES

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UNIT 3 HANS EYSENCK: A TRAIT-TYPE THEORY OF PERSONALITY

Structure

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- 3.1 Objectives
- 3.2 Type Theory of Personality
- 3.3 Sheldon's Somatotype Personality
- 3.4 Ayurvedic Body Types (Doshas)
- 3.5 Jungian Personality Types
- 3.6 Type A and Type B Personalities
- 3.7 Block's Personality Types
 - 3.7.1 Strengths and Limitations of Personality Types
- 3.8 Eysenck's Trait Type Theory
 - 3.8.1 Hierarchical Taxonomy
 - 3.8.2 Three Dimensions of Personality
 - 3.8.3 Causal Aspects
- 3.9 Neurophysiological basis of Traits and Types
 - 3.9.1 Extraversion and Cortical Arousal
 - 3.9.2 Neuroticism and Visceral Activation
 - 3.9.3 Psychoticism and Gonadal Hormones
- 3.10 Basic Personality Types
- 3.11 Measurement of Personality3.11.1 Differences between Introverts and Extraverts
- 3.12 Let Us Sum Up
- 3.13 Unit End Questions
- 3.14 Glossary
- 3.15 Suggested Readings and References

3.0 INTRODUCTION

The type theories are slightly different from the trait theories. While type theories are discontinuous the trait theories are in a continuum. According to Eysenck the goal of psychology is to predict behaviour. In this Eysenck concurs with the view of Cattell who also believed that the goal of psychology is to predict behaviour. Eysenck's approach is more theoretically anchored than is Cattell's. He suggests that not more than three *supertraits* (which he calls *types*) are needed to account for most of human behaviour (Cattell accounts to at least 16 traits or factors of personality). Eysenck places far more importance on genetic factors in personality development than does Cattell, but he also does not completely ignore the environmental or situational influences on personality. The present unit delves deep into the Eysenck's theory of personality. It provides definition, description and the dynamics of the theory.

3.1 OBJECTIVES

After reading this unit, you will be able to:

- Define personality types;
- Differentiate between type and trait theories;
- Explain Eysenck's theory of personality; and
- List out the applications of this theory.

3.2 TYPE THEORY OF PERSONALITY

Personality type theory aims to classify people into distinct categories, that is this type or that. Personality types are synonymous with "personality styles".

Types refer to categories that are distinct and discontinuous. For example, a person may be humorous or drab type. That is the person is either this type or that type. This is important to understand, because here it is either or of a type. There is a discontinuity between the types. The person is humourous or not. On the other hand in the trait theory the traits are ciontinuous in that the trait concerned can be placed in a continuum and can coexist with other traits also. This distinction between type and trait theory is to be kept in mind.

One example of the difference between types and traits, could be considered in terms of the introversion factor. Introversion can be viewed in the personality trait approach as:

- That one can be anywhere on a continuum ranging from introversion to extraversion, with most people clustering in the middle, and fewer people towards the extremes.
- In the case of introversion as a type, the person can be either an introvert or an extravert.

Some of the well known and popular theories of personality type include the following:

- 1) The four humours based personality types
- 2) Sheldon's personality types
- 3) Ayurvedic body types
- 4) Jungian types based on temperament
- 5) Type A and Type B personalities
- 6) J.Block's three personality types.

The above types are being considered below in greater detail.

The Four Humors based personality types

The ancient Greeks between 2000 BC to 0 AD, classified four types of humors in people based on the excess of one of the bodily fluids. Some of the names associated with this view are that of Hippocrates, Galen etc. Each of the humors corresponded to the individual's character. These are presented in the table below:





Theories of Personality-II

Table: Types of Character as related to humor and fluids of the body

Character	Humour	Fluid	Corresponding trait in the Big 5
Irritable	Choleric	Yellow bile	Agreeableness
Depressed	Melancholic	Black bile	Neuroticism
Optimistic	Sanguine	Blood	Openness to experience
Calm	Phlegmatic	Phlegm	Neuroticism

From the above it is seen that persons with choleric humor and dominance of yellow bile witll have an irritable personality. The person with black bile will be melancholic in humor and the personality associated with this is one depressed personality. Thus humors and bodily fluids made up the type of personality an individual has.

3.3 SHELDON'S SOMATOTYPE PERSONALITY

William Sheldon identified three main types of personality called as somatotype in which he called three types of personality viz., endomorph, ectomorph and mesomorph. Endomorph is also referred to as viscerotonic and refers to a relaxed character, sociable, tolerant, comfort loving, and peaceful. Such person's body build is plump and buxom. The mesomorph type of personality is generally an active type, assertive, vigorous and combative and their body is muscular. The ectomorph is a quiet type, fragile, restrained, non assertive, sensitive with a body that of lean, delicate and poor muscles. No one person is purely of a particular type. There is always a combination of the personality types. Hence Sheldon further classified a person's somatotype and giving a rating of 1 to 7 on each of the three body types. In this scale 1 indicated very low and 7 indicated very high and in between there were more or less of the types of personality identified.

To give examples, one could state that a stereotypical basket ball player will be ectomorph (7), endomorph (1) and mesomorph (1). On the other hand a wrestler like Mohammed Ali will be endomorph (1), mesomorph (7) and ectomorph (1). More specifically a common man walking on the street would be for instance a lanky individual will have ectomorph (5), endomorph (2) and mesomorph (3). An example of a person of average height who is moderately muscular will be endomorphic (4), mesomorphic (5) and ectomorphic (3) . An example of a person with a heavy build, will be ectomorphic (3), mesomorphic (3) and endomorphic (5).

Sheldon measured the proportions of hundreds of juvenile delinquent boys and concluded that they were generally mesomorphs.

Body types have been criticised for very weak empirical methodology and are not generally used in psychology. The use of somatotyping is more often seen in alternative therapies and Eastern psychology and spirituality.

Self Asssessment Questions		
1) Discuss the Type theory of personality.		

Hans Eysenck: A Trait-Type Theory of Personality

2)	What are the characteristic features of type theory of personality? How is it different from trait theory?	
3)	Elucidate Sheldon's somatotype personality.	
4)	Give examples of endomorphic, ectomorphic and mesomorphic type personality.	

3.4 AYURVEDIC BODY TYPES (DOSHAS)

In Ayurvedic medicine there are three main metabolic body types called as 'doshas' and these three doshas are 'Vata', 'Pita' and 'Kapha'. These are given in the table below:

Table: Ayurvedic doshas, character and shape.

Ayurvedic Doshas (Sheldon Somatotype)	Character	Shape
Vata (Ectomorph)	Changeability, unpredictability, variability in size, shape, mood, and action. Moody, enthusiastic, imaginative, and impulsive. Quick to grasp ideas and good at initiating things but poor at finishing them. Energy fluctuates, with jagged peaks and valleys, Able, tolerant, comfort-loving, peaceful	features, joints, and veins, with cool, dry skin. Eat and sleep erratically. Prone to anxiety, insomnia, premenstrual syndrome (in women), and

Ayurvedic Doshas (Sheldon Somatotype)	Character	Shape
Pita (Mesomorph)	Relatively predictable. quick, articulate, biting intelligence, and can be critical or passionate with short, explosive tempers. Efficient and moderate in daily habits, eats and sleeps regularly.	Medium build, strength, and endurance. Well proportion and easily maintains a stable weight. Often fair haired, red or blond, ruddy complexion. Tends to sweat heavily and are warm and often thirsty. Prone to acne, ulcers, hemorrhoids, and stomach ailments.
Kapha (Endomorph)	Relaxed. Slow to anger, slow to eat, slow to act. They sleep long and heavily. Tends to procrastinate and be obstinate.	Solid, heavy, and strong, with a tendency to be overweight, slow digestion and somewhat oily hair, and cool, damp, pale skin. Prone to high cholesterol, obesity, allergies, and sinus problems.

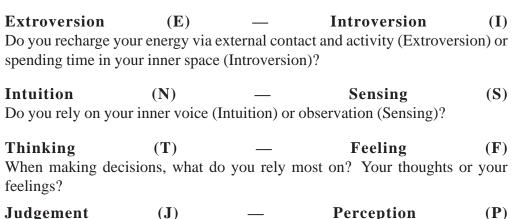
Table constructed from information at http://www.newyorkbodyscan.com/ayurvedic-medicine.html

3.5 JUNGIAN PERSONALITY TYPES (MYERS-BRIGGS AND THE FOUR TEMPERAMENTS)

Jungian psychological types are probably the most widely used and amongst the best-known in everyday life. Jung viewed the ultimate psychological task as the process of individuation, based on the strengths and limitations of the psychological type.

Myers-Briggs developed the Myers-Briggs Type Indicator, a commercially available questionnaire, which is widely used in business, training, etc. This provides information and exercises for better understanding of one's own personality type and that of others with whom the individual interacts and works.

Underlying all these typologies are four personality functions:



Do you tend to set schedules and organise your life (Judgement), or do you tend to leave the options open and see what happens (Perception)?

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Using the letters above, it is possible to have a unique 4 letter code to indicate each of the 16 Jungian personality types, e.g., I am an INTJ. (Introvertive, Intuitive, Thinking and Judging type of personality.)

Keirsey has renamed and reconceptualised the Jungian types, but they relate very closely to the Jungian types. Keirsey refers to "temperaments" rather than personality.

3.6 TYPE A AND TYPE B PERSONALITIES

Meyer Friedman, gave this term. He was a cardiologist and his patients were made to wait in a sitting room where he had put some sofas. He found that interestingly the patients who were very tense and impatient sat at the edge of the sofas and these areas had become worn out. He hypothesised that his patients were driven, impatient people, who sat on the edge of their seats when waiting. He labelled these people "Type A" personalities. Type A personalities are workaholics, always busy, driven, somewhat impatient, and so on. Type B personalities, on the other hand are laid back and easy going. This tetrm is used quite often in both scientific research and in common parlance.

Sel	elf Assessment Questions		
1)	What are the different Ayurvedic type personality?		
2)	How will you compare this with Sheldon's somatotype?		
3)	What are Jungian personality types?		
4)	Explain Myer Briggs 16 personality types.		

3.7 BLOCK'S PERSONALITY TYPES

- J. Block (1971) identified 3 personality types based on his work with adolescent boys. The three types were, for instance
- i) Well-adjusted or Resilient person: adaptable, flexible, resourceful, interpersonally successful.
- ii) Overcontrolling: this is a maladjusted type, uptight, and difficult to deal with person.
- iii) Undercontrolled: another maladjusted type, impulsive, risky, delinquent or even criminal behaviour; unsafe sex etc.

While type theories of personality remained popular for a period of time, these theories were criticized as being too simple and that which did not take into consideration the multidimensional aspects and the continuous nature of the personality traits. Despite criticisms against type theories of personality, there are yet certain strengths in these types of personality theories even though considerable weaknesses have been identified.

3.7.1 Strengths and Limitations of Personality Types

Type theory in general has been criticised as over simplistic because it overlooks the multi dimensional and continuous nature of personality traits.

Individual differences may be qualitative but not quantitative. In other words, there may be a difference in the qualities of personality traits that people possess rather than how much of a trait that one possesses. So measurement of these aspects in quantitative terms is rather difficult.

A key strength of the personality type approach, is its simple applicability and person centered relevance. For example one may be able to complete personality type profiles for helping improve how people get along in relationships and at work.

Sel	Self Assessment Questions		
1)	What are Type A and Type B personality types?		
2)	What were the three personality types put forward by J.Block?		

3.8 EYSENCK'S TRAIT-TYPE THEORY

Eysenck, Hans Jurgen 1916-97, was a British psychologist. He was known for his theory of human personality. He suggested that personality is biologically determined and is arranged in a hierarchy consisting of types, traits, habitual responses, and specific responses. Eysenck did not believe in Freudian psychoanalysis as he considered it rather unscientific.

1.8.1 Hierarchical Taxonomy

According to Eysenck Personality can be studied from either temperamental or cognitive aspects, or both He focussed on the temperament aspect of personality in his PEN model. For better understanding of the PEN model, therefore, the study should begin with its description or taxonomy of personality or temperament.

As Eysenck (1991) states, "In any science, taxonomy precedes causal analysis" (p. 774). In the course of taxonomy (classification), any organisms can be organised into groups based on characters and their relationships. Eysenck describes in plain terms how taxonomy in the study of personality can be achieved using the correlational technique called factor analysis:

In the case of personality study the organisms concerned are human beings, the characters are traits, measured by experiment, by rating, by self-rating, or in some other way. Traits can be correlated over subjects, or subjects over traits, giving us groups of people showing similarity over traits, or groups of traits, cohering as factors over people. We can then look at the traits (or people) having the highest factor loadings in order to better identify the trait clusters. (Eysenck, 1991, p. 775)

Individual differences in personality or temperament are analysed in terms of traits, which can be defined as theoretical constructs based on "covariation of a number of behavioural acts" (Eysenck & Eysenck, 1985, p. 12). However, Eysenck (1991) further supposes that traits themselves intercorrelate and make up higher-order factors or superfactors, which Eysenck calls "types."

As a result, the PEN (Psychoticism Extraversion and Neuroticism) model proposes a hierarchical classification of personality containing four levels.

At the very bottom level of the hierarchy are behaviours such as talking with a friend on a single occasion.

At the second level are habits such as talking with friends on multiple occasions, which are comprised of recurring behaviours.

The third level of the hierarchy is that of traits or factors such as sociability, which are comprised of intercorrelated sets of habits.

At the top of the hierarchy are superfactors or dimensions of personality such as extraversion, which are intercorrelated sets of traits or factors.

Eysenck suggests three such superfactors: extraversion (E), neuroticism (N), and psychoticism (P). These three superfactors or dimensions of personality are orthogonal to each other, which means that they do not correlate with each other (Eysenck & Eysenck, 1985).



Theories of Personality-II

The PEN model is based on the principle of "aggregation," in which measures will have higher reliability if they are comprised of many items (Eysenck, 1990). That is, each superfactor in the PEN model is comprised of many different factors, habits, and behaviours, and thus reliability of measurement is increased.

The superfactors of extraversion, neuroticism, and psychoticism at the top level of the hierarchy are stable, whereas behaviours such as talking with a friend on a single occasion at the bottom of the hierarchy are changeable across time and situation. In this respect, the distinction between levels is very important for the analysis of personality in the PEN model.

3.8.2 Three Dimensions of Personality

Eysenck strongly advocates that there are only three major dimensions or superfactors in the description of personality: extraversion-introversion; emotional stability versus instability, or neuroticism; and psychoticism versus impulse control (Eysenck & Eysenck, 1985).

In the PEN model, these dimensions or superfactors are based on "constitutional, genetic, or inborn factors, which are to be discovered in the physiological, neurological, and biochemical structure of the individual" (Eysenck & Eysenck, 1985, pp. 42-43).

Each person does not necessarily have either 100 percent or zero percent of extraversion, neuroticism, or psychoticism. An individual may show some degree of these superfactors on the continuum. A person may have high extraversion, moderate neuroticism, and low psychoticism. Eysenck suggests after studying psychosis:

- Psychotic symptoms and illnesses do not form completely separate diagnostic entities.
- 2) Psychosis is not a separate diagnostic entity which is categorically separated from normality
- 3) This continuum is co-linear with the concept of psychoticism, embodied in the P scale of the EPQ.

On this continuum, a person with high extraversion is sociable, popular, optimistic, and rather unreliable, whereas a person with low extraversion is quiet, introspective, reserved, and reliable. A person with high neuroticism is anxious, worried, moody, and unstable, whereas a person with low neuroticism is calm, even-tempered, carefree, and emotionally stable. A person with high psychoticism is troublesome, uncooperative, hostile, and socially withdrawn, whereas a person with low psychoticism is altruistic, socialised, empathic, and conventional (Eysenck & Eysenck, 1985).

3.8.3 Causal Aspects

Based on a three-dimensional description of personality, the PEN model further attempts to provide causal explanation of personality. The PEN model looks for psychophysiological, hormonal, and other biological mechanisms responsible for the personality dimensions, so that the theory can be tested by scientific experiments. Eysenck and Eysenck (1985) clearly contend that "no theory would be considered valid that did not make testable and verified predictions" (p. 187). Consequently, Eysenck (1990) proposes the arousal theory, by modifying his inhibition theory to explain the causal roots of the three dimensions of personality.

Hans Evsenck: A Trait-

Sel	f Assessment Questions	Type Theory of Personality
1)	Elucidate the Trait Type theory of personality by Eysenck.	
2)	What is meant by Hierarchical Taxonomy? How is personality types conceived of by Eysenck in terms of the taxonomy?	
3)	What are the three dimensions of personality?	
4)	Define and describe the causal aspects of personality according to	
4)	Eysenck.	

3.9 **NEUROPHYSIOLOGICAL BASIS OF TRAITS AND TYPES**

According to Aleksandrov and Shchukina (1992), the neurophysiological indices of neurotic patients with different types of individual character and their dynamics are important factors of personality. They took 107 patients with different patterns of neuroses, who underwent group psychotherapy (a personality-oriented (reconstructive) variety).

Analysis of the dynamics of the neurophysiological characteristics, made during group psychotherapy, supported the clinical data on varying curability of neurotic

patients with different types of character accentuations. For instance, Patients with the hysteroid type character accentuation appeared more resistant to psychotherapy.

Eysenck also made an attempt to specify a neurophysiological basis for each of his three personality super traits or types. According to him, the super trait Introversion-extraversion is closely related to levels of *cortical arousal* as indicated by electroencephalographic recordings.

Eysenck(1982) used the term arousal to denote a continuum of excitation, ranging from a lower extreme (e.g., sleep) to an upper extreme (e.g., state of panic). He was of the view that introverts are over aroused and thus are highly sensitive to incoming stimulation. For this reason, they avoided situations that are apt to overwhelm them.

Extraverts are under aroused and thus are highly insensitive to incoming stimulation and thus they constantly seek out situations that are apt to excite them.

Eysenck hypothesized that individual differences in stability vs neuroticism reflected the degree to which the autonomic nervous system reacts to stimuli. He linked this dimension with the limbic system, the brain's visceral or feeling system, which influences motivation and emotional behaviour.

He pointed out that persons high on neuroticism tend to react more quickly to painful, novel, disturbing, or other stimuli than do more stable persons. Such persons also exhibit a more persistent reaction (even after the stimulus has disappeared) than do highly stable persons.

Eysenck's neurophysiological interpretation of the dimensions of personality is closely related to his theory of psychopathology. He was of the view that the symptoms or disorders that befall a person are related to the combined impact of personality traits and nervous system functioning. For instance, the person who is high on the dimensions of introversion and neuroticism is more prone to develop anxiety disorders such as phobias, obsessions, and, compulsions. On the other hand, the person who is high on the extraversion and neuroticism dimensions is at a risk for psychopathic (antisocial) disorders.

Eysenck stated that psychological disorders do not automatically occur as a result of genetic predisposition. These genetic predispositions when interact with the environment or a certain situation produce psychological disorders.

3.9.1 Extraversion and Cortical Arousal

According to the arousal theory, Eysenck (1990) provides a biological explanation of extraversion in terms of cortical arousal via the ascending reticular activating system (ARAS).

Activity in the ARAS stimulates the cerebral cortex, which, in turn, leads to higher cortical arousal.

Cortical arousal can be measured by skin conductance, brain waves, or sweating (Eysenck, 1990).

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Because of the different levels of ARAS activity, "introverts are characterised by higher levels of activity than extraverts and so are *chronically more cortically aroused* than extraverts" (Eysenck & Eysenck, 1985, p. 197, emphasis added).

Based on the Yerkes-Dodson law, which suggests that arousal and performance have an inverted-U relationship, the arousal theory of the PEN model assumes that "some intermediate level of arousal is optimal for performance" (Eysenck & Eysenck, 1985, p. 199).

3.9.2 Neuroticism and Visceral Brain Activation

Eysenck (1990) also explains neuroticism in terms of activation thresholds in the sympathetic nervous system or visceral brain. The visceral brain is also referred to as the limbic system, which consists of the hippocampus, amygdala, septum, and hypothalamus, and regulates such emotional states as sex, fear, and aggression. It is responsible for the fight-or-flight response in the face of danger. Heart rate, blood pressure, skin conductance, sweating, breathing rate, and muscular tension in the forehead can measure activation levels of the visceral brain.

Neurotic individuals have greater activation levels and lower thresholds within the visceral brain. They are easily upset in the face of very minor stresses. However, emotionally stable people are calm under such stresses because they have lesser activation levels and higher thresholds (Eysenck, 1990).

3.9.3 Psychoticism and Gonadal Hormones

Eysenck (1990) also provides a biological explanation of psychoticism in terms of gonadal hormones such as testosterone and enzymes such as monoamine oxidase (MAO).

Eysenck (1992a) reports that "low platelet monoamine oxydase (MAO) has been found in psychotic patients, and also in their relatives and inpatients who have recovered, suggesting that low MAO activity may be a marker for 'vulnerability'" (p. 774).

All things considered, the PEN model has contributed to the study of personality in three distinctive ways.

- 1) It combines both descriptive and causal aspects of personality in one theory (Eysenck, 1997; Stelmack, 1997). This characteristic clearly distinguishes the PEN model from most other trait theories such as the five-factor model (Costa & McCrae, 1992a, 1992b; Eysenck, 1991, 1992b, 1992c).
- 2) It provides causal explanations in addition to the description of personality.
- 3) The PEN model is supported by more credible evidence than purely descriptive models.
- 4) The PEN model is comprehensive in description by proposing a hierarchy of four levels and by making a clear distinction among those levels.
- 5) Finally, the PEN model becomes most compelling because of its experimental approach to the study of personality, which makes the model more testable. Consequently, the PEN model is likely to generate more specific predictions about personality.



Thus the essence of Eysenck's Trait-Type theory is that

- 1) Elements of personality can be arranged hierarchically.
- 2) Certain supertraits or *types*, such as extraversion, exert a powerful influence over behaviour.
- 3) These supertraits comprised of several component traits, and these component traits either are more superficial reflections of the underlying type dimension, or are specific qualities that contribute to that dimension.

According to Eysenck, traits are composed of numerous *habitual responses*, which, in turn, are derived from a multitude of *specific responses*.

The trait of sociability correlates with such response dispositions as activity, liveliness, assertiveness etc. Taken together, these traits define a super trait or type Eysenck calls *extraversion*.

In considering Eysenck's hiearchichal model of personality structure, it should be noted that the word "type" refers to dimensions of personality that he regards as normally distributed along a continuum. This is almost equivalent to traits. Thus, for example, the type concept of extraversion is a dimension with a low end and a high end along which people may fall at various points between the two extremes. It is not a dimension on which people can be classified as either low or high. Eysenck does not imply discontinuity when he uses the word "type".

Sel	f Assessment Questions
1)	Describe the neurophysiological basis of trait and types.
2)	How does Eysenck explain extraversion in terms of neurophysiological
	explanation
3)	How is Neuroticism explained in terms neurophysiological mechanism?
3)	110w is recuroticism explained in terms neurophysiological mechanism:

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4)	How does Eysenck connect psychoticism to Gomadal hormones. Explain?

3.10 BASIC PERSONALITY TYPES

Eysenck used a variety of methods for gathering information about people in order to delineate their personality. These methods included self-reports, observer ratings, biographical information, assessments of physique and physiology, and objective physiological tests. These data are factor analysed to determine the structure of personality. Initially Eysenck found two basic type dimensions that he labeled as *introversion-extraversion* and *neurotocism-stability* (a factor sometimes called instability-stability).

Eysenck (1976) added a third type dimension of personality, which he called *psychoticism-superego strength*. People high on this super trait dimension tend to be egocentric, impulsive, sensitive to others, and opposed to social customs.

They are often seen as:

- i) troublesome,
- ii) not fitting in well with others, and
- iii) intentionally upsetting other people.

Eysenck suggested that psychoticism is a genetic predisposition toward becoming either psychotic or psychopathic. He regarded psychoticism as a personality continuum along which all people can be located. He also added that this trait is found more commonly in men than in women.

3.11 MEASUREMENT OF PERSONALITY

Eysenck constructed a number of self-report questionnaires to assess individual differences associated with his three super trait dimensions of personality. One of the more popular scale is the EPQ that is Eysenck Personality Questionnaire (EPQ) (Eysenck & Eysenck, 1975). EPQ includes a lie scale aimed at detecting a person's tendency to fake responses to look good. A junior EPQ has been constructed for use with children between the ages of 7 and 15 (Eysenck & Eysenck, 1973).

3.11.1 Differences Between Introverts and Extraverts

Eysenck argues that individual differences in behavioural functioning can be discovered through factor analysis and measured through the use of questionnaires and laboratory procedures.

A review of studies (Wilson, 1978) conclude that

1) Extraverts have a greater tolerance for pain than do introverts.

- 2) They engage in more talk and coffee breaks at work than do introverts.
- 3) Excitement enhances their performance whereas it interferes with the performance of introverts.
- 4) Introverts prefer theoretical and scientific vocations(e.g., engineering and chemistry, whereas extraverts tend to prefer people-oriented jobs(e.g., sales and social work).
- 5) Introverts report more frequent masturbation than do extraverts, but extraverts engage in sexual intercourse earlier in life, more often, and with more partners than do introverts.
- 6) Introverts attain higher grades in college than do extraverts.
- Also students who withdraw from college for psychiatric reasons tend to be introverts, whereas those who withdraw for academic reasons tend to be extraverts.
- 8) Introverts show higher arousal levels in the mornings, whereas extraverts show higher arousal levels in the evening.
- 9) Introverts work better in the morning, and the extroverts work better in the afternoon.

One of the most striking differences between introverts and extraverts is in their sensitivity to stimulation. This difference can be easily demonstrated by the "lemon drop test" (Corcoran, 1964). When four drops of lemon juice are placed on a person's tongue, it turns out that introverts secrete almost twice the amount of saliva as do extraverts.

The basis of this finding is related to different patterns of physiological functioning in introverts and extraverts. Eysenck proposes that ascending reticular activating system in the brain stem is responsible for controlling the differences in response to stimulation between introverted and extraverted subjects.

3.12 LET US SUM UP

The trait-type theory of Eysenck is based on factor analysis. His hierarchichal model of personality structure includes the dimensions of types, traits, habitual responses, and specific responses. Types represent supertrait dimensions along which people may be located at various points between two extremes. Eysenck suggests that personality types are dimensional and that most people do not fall into separate categories. Eysenck sees only two major types or traits as underlying personality structure: introversion-extraversion and stability-neuroticism. At a later stage he also added one more dimension that is psychoticism and super ego strength. The differences in these two supertraiots, as well as a third factor called psychoticism-superego strength, are closely related to differences in neurophysiological functioning. Eysenck places far more emphasis on the genetic foundations of traits than does Cattell. However accordfing to Eysenck the genetic predisposition when interacts with the environmental factors produce the requisite behaviours which may be normal or abnornmal.

Eysenck has developed several questionnaires to assess the three major supertraits underlying his hierarchichal model of personality.EPQ is the most important tool to assess the differences between introverts and extraverts.

3.13 UNIT END QUESTIONS

- 1) Discuss the Type theory of personality highlighting the characteristic features
- 2) How does type theory differ from trait theory of personality?
- 3) Discuss and compare the Sheldon somatotype personality with that of Ayurvide body type.
- 4) Discuss Jungian Personality types and indicate how the EPQ was devised.
- 5) Elucidate Eysenck's trait type theory of personality.
- 6) Give neurophysiological explanations for neuroticism, exteraversion and psychoticism.
- 7) How do you measure personality according to Eysenck?
- 8) What are the basic personality types?
- 9) Differentiate between extraversion and introversion personality types.

3.14 GLOSSARY

Extraversion	:	One end of the introversion-extraversion type
		dimension of personality characterised by a
		tendency to be sociable, impulsive, and excitable.

Introversion	:	One end of the introversion-extraversion type
		dimension of personality characterised by a tendency
		to be reserved, controlled, and introspective.

Neuroticism	:	One end of the neuroticism-stability type
		dimension of personality characterised by a
		tendency to be anxious, moody, and depressed.

Psychoticism	:	One end of the neuroticism-stability type
		dimension of personality characterised by a
		tendency to be solitary and insensitive to others.

Stability	:	One end of the neuroticism-stability type
		dimension of personality characterised by a
		tendency to be calm, controlled and unemotional

Superego strength	:	One end of the psychoticism-superego strength
		type dimension characterised by a tendency to be
		empathetic, sensitive, and cooperative.

Supertrait	:	General and continuous trait dimensions, such as
		introversion-extraversion, that exert a powerful
		influence on behaviour.

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UNIT 4 THE BIG FIVE FACTORS: THE BASIC DIMENSIONS OF PERSONALITY

Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Definition of the Big Five Factors
 - 4.2.1 Discovery of the Big Five in Cattell's Variable List
- 4.3 The Big Five Theory
 - 4.3.1 Five Factor Model
 - 4.3.2 Theoretical Perspectives on the Big Five: Description and Explanation
 - 4.3.3 Advantages of the Big Five Structure
- 4.4 Measurement of the Big Five Inventory (BFI)
 - 4.4.1 Big Five Personality Traits in Psychology
 - 4.4.2 Important Characteristics of the Five Factors
 - 4.4.3 Major Proponents of the Big Five and the Lexical Basis
 - 4.4.4 Best Ways to Describe Personality
- 4.5 Let Us Sum Up
- 4.6 Unit End Questions
- 4.7 Glossary
- 4.8 Suggested Readings and References

4.0 INTRODUCTION

Research conducted during the last few decades has converged on the conclusion that infact, there may be only five key or central dimensions of personality instead of many personality dimensions. The trait and type theorists put forward many dimensions of personality and delineated the characteristic features of the traits. Using factor analysis from amongst a large number of dimensions, the researchers identified clusters of dimensions and these formed the personality factors. Thus the Big 5 personality dimensions are identified clusters of personality traits and these can be delineated by a measurement tool (questionnaire). These are being discussed in detail in this unit.

4.1 **OBJECTIVES**

After completing this unit, you will be able to:

- Define the Big 5 factor dimensions of personality;
- Explain the Big 5 factors;
- Analyse the methods by which the five factors were extracted; and
- Describe the methods by which these factors could be measured.

4.2 DEFINITION OF THE BIG FIVE FACTORS

Personality has been conceptualised from many theoretical perspectives. Each has contributed to understanding of individual differences in behaviour and experience. However so many personality scales to measure personality came about as a result of continuing research and one had not overall rationale to use a particular scale.

Thus personality psychology needed a descriptive model, a taxonomy of its subject matter. One of the goals of taxonomie is to bring a number of specific instances within a domain so as to understand it in a simple way. Thus in personality the taxonomy will help to study specified domains of personality characteristics, instead of examining separately thousands of particular attributes that make individuals unique.

The Big Five personality dimension is the result of finding a general taxonomy and these dimensions do not represent a particular theoretical perspective but derived from people's description of themselves and others in their natural language. The Big Five instead of replacing the earlier systems, serves as an integrative mechanism and represents the various and diverse systems of personality description in a common framework.

Allport and Odbert's classifications provided some initial structure for the personality lexicon. Since taxonomy has to provide a systematic framework for distinguishing, ordering and naming individual differences in people's behaviour and experience, they took a list of a large number of personality traits used in common parlance. The size of that list was so huge that Cattell (1943) began with a subset of 4500 trait items. Using semantic and empirical clustering procedures Cattell reduced the 4500 items to a mere 35 variables. He used these small set of variables to identify 12 personality factors which eventually became a part of his 16 PF questionnaire.

4.2.1 Discovery of the Big Five in Cattell's Variable List

Cattell's work gave impetus to many research investigations and many were involved in the discovery and clarification of the Big Five dimensions. First, Fiske (1949) constructed simplified description from 22 variables of Cattell. The factor structure were obtained from self ratings etc. They worked out a correlational matrix from different samples and found clusters which they called the Big five.

This five factor structure has been replicated by many in lists derived from Cattell's 35 variables. These factors were initially labeled as (i) Extraversion or Surgency (ii) Agreeableness (iii) Conscientiousness (iv) Emotional stability versus neuroticism and (v) Culture. These factors came to be known as the Big Five . These five dimensions represent personality at the broadest level of abstraction, and each dimension summarises a large number of distinct, more specific personality characteristics.

Following Fiske's research, there were attempts by other researchers including Norman (1967), Smith (1967), Goldberg (1981), and McCrae & Costa (1987).

The "big five" are broad categories of personality traits. While there is a significant body of literature supporting this five-factor model of personality, researchers do not always agree on the exact labels for each dimension. However, these five categories are usually described as follows:

Extraversion: This is also called as Surgency. The broad dimension of Extraversion encompasses specific traits as talkative, energetic, and assertive. More specifically these include characteristics such as excitability, sociability, talkativeness, assertiveness, and high amounts of emotional expressiveness.

Agreeableness: This factor includes traits like sympathetic, kind, and affectionate. It also includes attributes such as trust, altruism, kindness, affection, and other prosocial behaviours.

Conscientiousness: This includes traits like organised, thorough, and planful tendencies. Common features of this dimension include high levels of thoughtfulness, with good impulse control and goal-directed behaviours. Those high in conscientiousness tend to be organised and mindful of details.

Neuroticism: This is sometimes reversed and called Emotional Stability. This dimension includes traits like tense, moody, and anxious. Individuals high in this trait tend to experience emotional instability, anxiety, moodiness, irritability, and sadness.

Openness to Experience: This is also called as Intellect or Intellect/Imagination. This dimension includes traits like having wide interests, and being imaginative and insightful. Those high in this trait also tend to have a broad range of interests.

These dimensions represent broad areas of personality. Research has demonstrated that these groupings of characteristics tend to occur together in many people. For example, individuals who are sociable tend to be talkative. However, these traits do not always occur together. Personality is complex and varied and each person may display behaviours across several of these dimensions.

Each of the Big Five factors is quite broad and consists of a range of more specific traits. The Big Five structure was derived from statistical analyses of which traits tend to co-occur in people's descriptions of themselves or other people. The underlying correlations are probabilistic, and exceptions are possible. For example, talkativeness and assertiveness are both traits associated with Extraversion, but they do not go together by logical necessity. One could imagine somebody who is assertive but not talkative (the "strong, silent type"). However, many studies indicate that people who are talkative are usually also assertive (and vice versa), which is why they go together under the broader Extraversion factor.

For this reason, one should be clear about the research goals when choosing the measures. If it expected that one has to to make finer distinctions (such as between talkativeness and assertiveness), a broad-level Big Five instrument will not be enough. One may have to use one of the longer inventories that make facet-level distinctions (like the NEO PI-R or the IPIP scales. or one could supplement a shorter inventory (like the Big Five Inventory) with additional scales that measure the specific dimensions that you are interested in.



It is also worth noting that there are many aspects of personality that are not subsumed within the Big Five. The term *personality trait* has a special meaning in personality psychology that is narrower than the everyday usage of the term. Motivations, emotions, attitudes, abilities, self-concepts, social roles, autobiographical memories, and life stories are just a few of the other "units" that personality psychologists study.

Some of these other units may have theoretical or empirical relationships with the Big Five traits, but they are conceptually distinct. For this reason, even a very comprehensive profile of somebody's *personality traits* can only be considered a partial description of their *personality*.

4.3 THE BIG FIVE THEORY

Let us see the difference between the terms *Big Five*, *Five-Factor Model*, and *Five-Factor Theory*.

The **Big Five** are, collectively, a taxonomy of personality trait. It is a coordinate system that maps which traits go together in people's descriptions or ratings of one another.

The Big Five are an empirically based phenomenon, not a theory of personality. The Big Five factors were discovered through a statistical procedure called factor analysis, which was used to analyse how ratings of various personality traits are correlated in humans.

The original derivations relied heavily on American and Western European samples, and researchers are still examining the extent to which the Big Five structure generalises across cultures.

4.3.1 Five Factor Model

The Five-Factor Model is a term used often instead of the "Big Five." In scientific usage, the word "model" can refer either to a descriptive framework of what has been observed, or to a theoretical explanation of causes and consequences.

The Five-Factor Model (i.e., Big Five) is a model in the descriptive sense only. The term "Big Five" was coined by Lew Goldberg and was originally associated with studies of personality traits used in natural language.

The term "Five-Factor Model" has been more commonly associated with studies of traits using personality questionnaires. The two research traditions yielded largely consonant models and in current practice the terms are often used interchangeably. A subtle but sometimes important area of disagreement between the lexical and questionnaire approaches is over the definition and interpretation of the fifth factor, called Intellect/Imagination by many lexical researchers and Openness to Experience by many questionnaire researchers.

4.3.2 Theoretical Perspectives on the Big Five: Description and Explanation

Over the years many perspectives on the concept of the Big Five dimensions have been presented. As is known the Big Five were first discovered in lexical research to provide taxonomy of trait items and thus the factors were initially

interpreted as dimensions of trait or attribution. Further research showed that the dimensions have external /predictive validity and all five of them show equal heritability. Since the Big Five dimensions refer to real individual differences, one must find out as to how these differences are conceptualised.

Several theories conceptualise the Big Five as relational constructs. In Interpersonal theory the theoretical emphasis is on the individual in relationships. According to Sullivan (1953) the Big Five describe the enduring patterns of recurrent interpersonal situations that characterise human life. However, Wiggins and Trapnell (1996) are of the view that interpersonal motives are important and thus they interpret all the Big Five dimensions in terms of their interpersonal implications.

Socioanalytic theory by Hogan (1996) focuses on the social functions of self and other perceptions and he points out that traits are socially constructed to serve interpersonal functions. As trait terms are about reputation that is the individual considers how others view them, the possibility of the person distorting the self reports and questionnaires is high. Thus self deceptive bias enters and one does not get the true picture of the individual's personality.

The evolutionary theory on the Big Five states that humans have evolved "difference detecting mechanisms" to perceive individual differences that are important for survival and reproduction(D.M. Buss & Shackelford, 1997). Buss views personality as one where the Big Five traits represent the most salient and important dimensions of the individual's survival needs. This theory emphasises both person perception and individual differences and point out that the Big Five summarises the centrally important individual differences.

McCrae and Costa (1996) view Big Five as causal personality dispositions. Their five factor theory (FFT) explains the Big Five taxonomy. According to FFT, the Big GFive imensions have a substantial genetic base and hence derive from biological structures and processes. According to this theory, personality traits are basic tendencies that refer to the underlying potentials of the individual. On the other hand attitudes, roles, relationships and goals are characteristic adaptations that reflect the interaction between the basic tendencies and environmental demands. While basic tendencies remain stable across life, the adaptations undergo considerable changes.

Another theory is the comparative approach to personality that studies individual differences in both human and non humans. Thus there are a diverse theories regarding the Big Five dimensions from purely descriptive to biologically based causal concepts. These perspectives however are not mutually exclusive. Research in areas like behaviour genetics, molecular genetics, personality stability and change, and accuracy and bias in interpersonal perception will help in building and refining a comprehensive theory of Big Five.

4.3.3 Advantages of the Big Five Structure

The Big Five structure has the advantage of everyone being able to understand definitions and meanings used in describing this concept. Several of the dimensions of the Big Five especially Extraversion and Neuroticism have been explained both from physiological and mechanistic perspectives. In one sense, the Big Five differentiate domains of individual differences that have similar



surface manifestations. The Big Five structure is a major step ahead in that it captures the commonalities amongs most of the existing systems of personality description, and provides an integrative descriptive model.

Five-Factor Theory includes a number of propositions about the nature, origins, and developmental course of personality traits, and about the relation of traits to many of the other personality variables mentioned earlier. Five-Factor Theory presents a biological account of personality traits, in which learning and experience play little if any part in influencing the Big Five.

Five-Factor Theory is not the only theoretical account of the Big Five. Other personality psychologists have proposed that environmental influences, such as social roles, combine and interact with biological influences in shaping personality traits. For example, Brent Roberts has recently advanced an interactionist approach under the name **Social Investment Theory**.

Finally, it is important to note that the Big Five are used in many areas of psychological research in ways that do not depend on the specific propositions of any one theory. For example, in **interpersonal perception** research the Big Five are a useful model for organising people's perceptions of one another's personalities. I have argued that the Big Five are best understood as a model of reality-based person perception. In other words, it is a model of what people want to know about one another (Srivastava, 2010).

Regardless of whether you endorse any particular theory of personality traits, it is still quite possible that you will benefit from measuring and thinking about the Big Five in your research.

4.4 MEASUREMENT OF THE BIG FIVE INVENTORY (BFI)

Big Five Invantory (BFI) is a self-report inventory designed to measure the Big Five dimensions. It is quite brief for a multidimensional personality inventory (44 items total), and consists of short phrases with relatively accessible vocabulary. A copy of the BFI, with scoring instructions, is reprinted in the chapter as an appendix (the last 2 pages). It is also available through Oliver John's lab website. No permission is needed to use the BFI for noncommercial research purposes (see below).

What are other ways of measuring the Big Five?

The BFI is not your only option for measuring the Big Five...

The International Personality Item Pool, developed and maintained by Lew Goldberg, has scales constructed to work as analogs to the commercial NEO PIR and NEO-FFI scales (see below). IPIP scales are 100% public domain - no permission required, ever.

Colin DeYoung and colleagues have published a 100-item measure, called the Big Five Aspect Scales (BFAS), which scores not only the Big Five factors, but also two "aspects" of each. The BFAS is in the public domain as well.

If you want items that are single adjectives, rather than full sentences (like the NEO) or short phrases (like the BFI and IPIP), you have several options. For

starters, there is Lew Goldberg's set of 100 trait-descriptive adjectives (published in *Psychological Assessment*, 1992). Gerard Saucier reduced this set to 40 Big Five mini-markers that have excellent reliability and validity (*Journal of Personality Assessment*, 1994). More recently, Saucier has developed new trait marker sets that maximize the orthogonality of the factors (*Journal of Research in Personality*, 2002). Saucier's mini-markers are in the public domain.

The NEO PI-R is a 240-item inventory developed by Paul Costa and Jeff McCrae. It measures not only the Big Five, but also six "facets" (subordinate dimensions) of each of the Big Five. The NEO PI-R is a commercial product, controlled by a for-profit corporation that expects people to get permission and, in many cases, pay to use it. Costa and McCrae have also created the NEO-FFI, a 60-item truncated version of the NEO PI-R that only measures the five factors. The NEO-FFI is also commercially controlled.

If you need a super-duper-short measure of the Big Five, you can use the Ten Item Personality Inventory, recently developed by Sam Gosling, Jason Rentfrow, and Bill Swann. But read their journal article first (it is on Sam Gosling's web page). There are substantial measurement tradeoffs associated with using such a short instrument, which the article discusses.

As mentioned earlier, the **IPIP scales**, Saucier's **mini-markers**, and the **Big Five Aspect Scales** are all in the public domain and may be used for any purpose with no restrictions.

Additionally, the **BFI** (which is copyrighted by Oliver P. John) is freely available to researchers who wish to use it for research (not commercial) purposes. More details are available on Oliver John's lab website. If you cannot find your questions answered there, you can contact Laura Naumann (naumann@berkeley.edu) for further information.

4.4.1 Big Five Personality Traits in Psychology

The "Big Five" Personality Dimensions

Extroversion: activity and energy level traits, sociability and emotional expressiveness.

Agreeableness: altruism, trust, modesty, prosocial attitudes.

Conscientiousness: Impulse control, goal directed behaviour.

Neuroticism: emotional stability, anxiety, sadness, and irritability

Openness: Breadth, Complexity, and depth of an individuals life.

These five dimensions have been used to account for variance in: i) Academic Achievement (ii) Work Performance (iii) Well Being Juvenile Delinquency (iv) The Big Five Personality Traits in Psychology (v) The person's Personal Dimensions Affect All Aspects of Life

One does not need a Myers Briggs Personality Test to know if your personality type is working for or against you! Here are the Big Five Personality Traits and how they work.

The Big Five Personality Traits affect the person's health, relationships, goals, achievements, professional success, and even the spiritual life. The person's whole

life is affected both positively and negatively by the Big Five Personality Traits!

The fundamental five personality characteristics - called the "Big Five Personality Traits" among psychologists - were once thought to remain the same since childhood. Now, experts believe the Big Five Personality Traits change over time.

The five-factor model is comprised of five personality dimensions (OCEAN): Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. The five dimensions are held to be a complete description of personality.

A competing model with three dimensions based on psychophysiology is the **PEN Model**. Extraversion and Agreeableness are only rotations of the dimensions in **Interpersonal Theory**.

A trait is a temporally stable, cross-situational individual difference. Currently the most popular approach among psychologists for studying personality traits is the five-factor model or Big Five dimensions of personality. The five factors were derived from factor analyses of a large number of self- and peer reports on personality-relevant adjectives and questionnaire items.

4.4.2 Important Characteristics of the Five Factors

The following are some of the important characteristics of the five factors:

- 1) First, the factors are dimensions, not types, so people vary continuously on them, with most people falling in between the extremes.
- 2) Second, the factors are stable over a 45-year period beginning in young adulthood (Soldz & Vaillant, 1999).
- 3) Third, the factors and their specific facets are heritable (i.e., genetic), at least in part (Jang, McCrae, Angleitner, Riemann, & Livesley, 1998; Loehlin, McCrae, Costa, & John, 1998).
- 4) Fourth, the factors probably had adaptive value in a prehistoric environment (Buss, 1996).
- 5) Fifth, the factors are considered universal, having been recovered in languages as diverse as German and Chinese (McCrae & Costa, 1997).
- 6) Sixth, knowing one's placement on the factors is useful for insight and improvement through therapy (Costa & McCrae, 1992).

The differences between two empirically related yet conceptually distinct models, the Big Five and the five-factor model, are summarised below.

4.4.3 Major Proponents of the Big Five and the Lexical Basis

Goldberg

FFM: McCrae and Costa

Lexical basis

Lexical hypothesis—those individual differences that are most salient and socially relevant will come to be encoded as terms in the natural language.

Five Factor Model (FFM): Theoretical contexts—traits are situated in a comprehensive model of genetic and environmental causes and contexts.

Position on causation

Big 5: Phenotypic and no stance on causation.

Five Factor Model (FFM). Biosocial, genetic as well as environmental.

Naming of factors

Big 5: Surgency, Agreeableness, Conscientiousness, Emotional Stability, and Intellect.

Five Factor Model (FFM). Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience (OCEAN).

Measurement Model

Big 5: Circular measurement, that is, many items have non-zero correlations (loadings) on two factors rather than just one.

Five Factor Model . Hierarchical measurement , that is, lower-level facets combine to form higher-level domains.

Questionnaires

Big 5: Big Five Markers (recently, International Personality Item Pool, or IPIP).

FFM. Revised Neuroticism, Extraversion, Openness Personality Inventory (NEO-PI-R).

Type of Questionnaire Items

Big 5. Adjectives (recently, sentence stems).

FFM. Sentences.

Saucier and Goldberg (1998) presented evidence that nearly all clusters of personality-relevant adjectives can be subsumed under the Big Five.

One of the shortcomings of the Big 5 is that though very useful, it must be stated that there are several important personality traits that lie beyond the Big Five.

In addition, theoretical reasons suggest the importance of other personality traits that are poorly captured by terms in the natural language, such as impulsive, sensation-seeking etc.

Furthermore, traits may be only a limited means of studying a "psychology of the stranger", that is, they may include only the personality relevant information that would be apparent about someone about whom one knew very little else. Thus it leaves other important constructs such as narrative life story etc., uncovered.

4.4.4 Best way to Describe Personality

What are the best ways to describe an individual's personality? One might list all of the things that individuals do all day every day of their lives, but that would take too long and be far too detailed to be of much use.

Alternatively, one might use more abstract attributes as a way of summarizing the major ways that individuals differ from each other. Every language has



hundreds of words that refer to the ways that individuals differ. The English language includes at least 20,000 words of that sort (for example, talkative, agreeable, hard-working, nervous, intelligent).

Perhaps those terms that make it into a language and then stay there for centuries are those that people have found to be most useful for describing themselves and others. This "lexical hypothesis" is the basis of much modern research on the structure of human personality traits.

The terms that are descriptive of personality can be used by individuals to describe themselves and others.

For example, one could ask a question, "How talkative is Ram?" The answer could be in a continuum, viz., Not at all (1) A little bit (2) Somewhat (3) Moderately (4) and Extremely (5).

In general, one can measure the extent of similarity between pairs of personality terms with a statistic called the "correlation coefficient." Based on the intercorrelations among all pairs of personality terms, one can then group the terms into categories or clusters using a statistical procedure called "factor analysis." The result of research using those statistical techniques is a tentative answer to the important scientific question: "How many different relatively independent kinds of terms are there in that specific language?"

In many languages, it has turned out that the magical number is something like five or six. In English and other northern European languages like German and Dutch, there has seemed to be five major dimensions or "factors" to represent the majority of personality-descriptive terms in that language. This "Big-Five" factor structure has become a scientifically useful taxonomy to understand individual differences in personality traits.

The Big Five factors

- 1) The first is Extraversion versus Introversion, which includes traits such as Active, Assertive, Energetic, Gregarious, and Talkative versus their opposites.
- 2) A second factor is called Agreeableness, which includes traits such as Amiable, Helpful, Kind, Sympathetic, and Trusting versus their opposites.
- 3) A third factor has been labeled Conscientiousness, which includes such traits as Dependable, Hard-working, Responsible, Systematic, and Well-organised versus their opposites.
- 4) A fourth factor contrasts traits related to Emotional Stability, such as Calm, Relaxed, and Stable, with opposite traits such as Afraid, Nervous, Moody, and Temperamental.
- 5) And, finally, there is a constellation of traits related to Intellect and Imagination, such as Artistic, Creative, Gifted, Intellectual, and Scholarly versus their opposites.

Most personality-related words in many modern languages can be classified by their locations in the five-dimensional space provided by the Big-Five factors. Terms are scattered throughout this five-dimensional space, with most terms being blends of two or three of the Big-Five factors. As a consequence, this five-

factor model provides a rich framework for classifying personality traits, and measures of those five broad dimensions have proven to be extremely useful for describing individual persons. Indeed, measures of the Big-Five factors have proven to predict educational and occupational attainment, marital success, good health habits and medical outcomes, and even longevity versus mortality.

Many researches believe that these dimensions are indeed the basic ones. This is indicated, by the fact that these dimensions are ones to which most people in many cultures refer in describing themselves(Funder & Colvin,1991). If the big five dimensions of personality are really so basic, then it is reasonable to expect that they will be related to important forms of behaviour.

Many studies indicate that this is the case. Where people stand on the big five dimensions is closely linked to important outcomes, such is their success in performing many jobs(e.g., Hogan, Hogan & Roberts, 1996). Many psychologists now view the big five basic dimensions as truly basic, there is *not* total consensus on this point. For example, Eysenck (1994), believes that there only three basic dimensions-extraversion, neuroticism and psychoticism.

Other psychologists (e.g.,Block,1995) believe that the methods on which the big five dimensions are based (largely the technique of factor analysis) are inadequate. Lastly many psychologists view the big five as providing important insights into the key dimensions of personality.

4.5 LET US SUM UP

The controversy regarding the number of basic personality traits has taken an interesting turn in recent years .Costa & McCrae have examined all possible personality traits. The findings indicate a set of five factors. They are pften called Big-Five Factors. These factors include: extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. This model represents an important theoretical development in the field of personality. It has been found useful in understanding the personality profile of people across cultures. While it is consistent with the analysis of personality traits found in different languages, it is also supported by the studies of personality carried out through different methods. Thus, it is now considered to be the most promising empirical approach to the study of personality.

4.6 UNIT END QUESTIONS

- 1) What are the big –five dimensions of personality? Describe each dimension ind detail.
- 2) Discuss Eysenck's three major trait dimensions of personality as largely responsible for a significant portion of human behaviour.
- 3) Discuss the various theoretical perspectives of the Big 5.
- 4) Discuss how individual variations along each trait dimension reflect differences in neurophysiological functioning?
- 5) How was Big 5 discovered?
- 6) Who are the major proponents of Big 5? Discuss the lexical basis of Big 5.



4.7 GLOSSARY

Extraversion : one of the big-five dimensions of

personality;ranges from sociable, talkative and enthusiastic at one end to sober, reserved, and

cautious at the other.

Agreeableness : one of the big-five dimensions of personality;

ranges from good natured, cooperative, trusting at one end to irritable, suspicious, uncooperative

at the other.

Conscientiousness : one of the big-five dimensions of personality;

ranges from well-organised, careful and responsible at one end to disorganised, careless,

and unscrupulous at the other.

Emotional Stability : one of the big-five dimensions of personality;

ranges from poised, calm ,and composed at one end to nervous, anxious, and excitable at the

other; also called neuroticism.

Openness to Experience: one of the big-five dimensions of personality;

ranges from imaginative, witty. And intellectual at one end to down-to –earth, simple, and narrow

in interests at the other.

4.8 SUGGESTED READINGS AND REFERENCES

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