

by some transient conditions like headache, fatigue, worry, etc. In individual tests the administrator has a better chance to detect the influence of transient conditions upon examinees and he is also better able to establish a rapport and obtain cooperation from the examinee.

- (vii) The norms of group test are more dependable and established than the norms of individual tests. Because of ease in data collection, the norms of group tests can be based upon a very large sample, but in case of the individual test norms cannot be based upon a very large sample because of the difficulty and the time-consuming nature of data collection.

4. On the basis of the nature of items

The verbal test and the performance test

Intelligence tests have also been classified on the basis of the nature of items used in tests. The verbal test (or paper-and-pencil test) and the performance test are the natural outcome of such a classification. Verbal test is one in which the instructions and items are reproduced usually through the written language before the examinees. For a verbal test the examinee must be literate because he will have to use a pencil and paper for answering the items. Such tests are also called paper-and-pencil tests of intelligence by laymen. All verbal tests by their nature are group tests. The Army Alpha test and the Army General Classification test are the examples of verbal tests. The Mohsin General Intelligence test, the Joshi General Mental Ability and the Jalota's Group General Mental Ability tests are some examples of verbal tests developed by Indian psychologists.

CHECK YOUR PROGRESS

1. What does the individual difference psychology examine?
2. What are the two factors postulated by Spearman underlying intelligence?
3. What are the seven group factors?
4. What are the three dimensions of SI model?
5. What are the disadvantages of taking a group tests?

5.5 FORMATION OF APTITUDE AND ATTITUDE

Aptitude tests may conveniently be grouped into two categories—multiple aptitude tests and special aptitude tests. Multiple aptitude tests are those which intend to measure several aptitudes, each by an independent subtest. Hence, multiple aptitude tests are not tests but rather batteries of tests. Special

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aptitude tests are those which intend to measure only one aptitude. They appeared earlier than multiple aptitude tests. Among the earliest special aptitude tests was the mechanical aptitude test. Special aptitude tests were developed at the time when the primary emphasis in testing was placed on the general intelligence test and it was thought that for describing the individual measurement of intelligence it must be supplemented by the measurement of special aptitudes like mechanical, numerical, etc. However later researches, particularly the factor, like analytic researches conducted by Thurstone and Guilford revealed that intelligence itself consists of several independent special aptitudes and since then, the emphasis has shifted from the special aptitude test to the multiple aptitude tests. Not only this, several aptitude tests are now easily included in multiple aptitude batteries. In the following sections some of the aptitude tests representative of the above two broad categories are discussed.

5.5.1 Aptitude Tests

Differential aptitude tests

The differential aptitude test or DAT is one of the most common multiple aptitude tests. First published in 1947, the battery has undergone several revisions and restandardization, and presently it is available in its 5th edition done in 1973. The battery has been developed by Benett, Seashore and Wesman and comprises eight subtests—verbal reasoning, numerical ability, abstract reasoning, mechanical reasoning, clerical and speed and accuracy, space relations, spelling, and language usage. The battery is mainly meant for educational and vocational counselling of students from grade 8 through 12. The whole battery has two equivalent forms, S and T, and it roughly takes about three hours to administer. Scores on each subtest are converted into the percentage ranks for their proper interpretation. In addition to eight subscores, a ninth subscore is provided by adding the scores on the verbal reasoning (VR) test and numerical ability (NA) test and, subsequently, the composite score is transformed into the percentile rank. The VR+NA score becomes the index of general scholastic aptitude, which is interpreted as one index of mental ability. The DAT has also been adapted by Indian psychologists to suit local requirements.

General aptitude test battery (GATB)

The nine factors of the GATB are intelligence (G), numerical aptitude (N), verbal aptitude (V), spatial aptitude (S), form perception (P), clerical perception (Q) motor co-ordination (K), finger dexterity (F), and manual dexterity (M). Of the twelve tests developed for measuring these nine factors, eight are verbal tests and four tests are developed for measuring F and M are non-verbal tests requiring simple apparatus for subjects. The tests intended to measure factor G through Q, are available in alternate forms. The scores

obtained on the nine tests of the GATB can be converted into a standard score with a mean of 100 and standard deviation of 20 for their interpretation. The whole battery takes about two hours and thirty seconds in its complete administration. The GATB has been widely used in the employment services, too. The primary limitation of the battery is that all its tests are highly speeded and some important aptitudes have not been included; for example, test of mechanical reasoning has not been included in the battery.

Flanagan aptitude classification tests

The Flanagan aptitude classification test or FACT is another battery of the multiple aptitude tests. The battery has been primarily developed for vocational counselling and employee selection and has been named after its author. The whole battery requires three testing sessions and more than ten and a half hours are required in its complete administration.

Sensory tests

Among the early psychological tests, sensory tests devised by Galton and others to measure intelligence were first in vogue. However, these tests could not gain prominence due to their failure to predict intellectual accomplishment. Researchers on the sensory capacities, however, were continued since that time today, there are sophisticated techniques for measuring visual and auditory sensitivity.

Motor dexterity tests

Motor dexterity tests are tests which measure the coordination of hand, arm and/or leg movement in performing a task. There are several such tests that have been frequently used. The Crawford small parts dexterity test, the Stromberg dexterity test, the Purdue pegboard, the Bennett Hand tool dexterity test and the complex coordination test are some of the examples of motor dexterity tests.

Artistic aptitude tests

The test was developed by Meier in 1929. According to Meier, artistic aptitude consists of six interrelated traits like manual skill, aesthetic intelligence, volitional perseveration, cognitive imagination, perceptual ability and aesthetic judgment.

Musical aptitude tests

For measuring musical aptitude, researches were carried out for nearly forty years at the University of Iowa in the USA under the general guidelines of Seashore. As a consequence, Seashore, Lewis and Sactveit (1993) developed a test of musical aptitude, which was known as the Seashore Measures of Musical Talents. The test consists of six subtests like the pitch test, the loudness test, the rhythm test, the time test, the timbre test and the tonal memory test. The test is meant for students from grade 4 to adults.

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5.6 CREATIVITY AND ITS TESTS

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Creativity is the ability to think about something in novel and unusual ways and to come up with unconventional solutions to problems (Runce, 2004). Intelligence and creativity are not the same (Lubart, 2003; Michael, 1999). Sternberg (2000, 2001), who included creativity in his triarchic theory of intelligence, says that many highly intelligent people produce large numbers of products, but the products are not necessarily novel. He also believes that highly creative people defy the crowd, whereas people who are highly intelligent but not creative often try to simply please the crowd.

Guilford (1967) performed important work in the field of creativity and drew a distinction between convergent and divergent thinking. According to him, convergent thinking involved aiming for a single, correct solution to a problem, whereas divergent thinking involved creative generation of multiple answers to a set problem. In psychology literature, divergent thinking is sometimes used as a synonym for creativity. Other researchers have occasionally used the terms fluid intelligence or flexible thinking which are roughly similar to (but not synonymous with) creativity. Many high intelligent people are not very creative (Sternberg and O'Hara, 2000).

Arthur Koestler (1964), listed three types of creative individual—the artist, the sage and the jester. He introduced the concept of bisociation—that creativity arises as a result of the intersection of two quite different frames of reference.

Graham Wallas, in his work *Art of Thought*, presented one of the first models of the creative process known as stage model. This model explained the process of creativity consisting of five stages, which are as follows:

- (i) **Preparation:** Initial work on a problem to explore the different problem's dimensions.
- (ii) **Incubation:** Unconscious internalized of the problem.
- (iii) **Intimation:** Ability to gets a 'feeling' that the solution is on the way.
- (iv) **Illumination:** Also, called as insight where the creative idea transfers from its preconscious processing into conscious awareness.
- (v) **Verification:** Where the idea is consciously verified, elaborated, and then applied.

Following are some of the characteristics of creative people:

- **Flexible and playful thinker:** Such people display a good deal of intellectual playfulness frequently involve in fantasizing, daydreaming or imagining. They manipulate ideas by easily changing, elaborating, adapting, improving, or modifying the original idea or the ideas of others.

- **Creative people are motivated internally:** They hardly bothered about incentives, they need others attention and favour.
- **Creative people are high subjective:** They are often described as individualistic or do not fear being classified as 'different'.
- **Creative people come up with more ideas:** They generate a large number of ideas or solutions to problems and questions, often offer unusual way out and unique responses.
- **Exhibit heightened emotional sensitivity:** They are very sensitive to beauty, and visibly moved by aesthetic experiences.
- **Adventurous:** They are willing to take risks and are often people who are described as a high risk taker, or adventurous, or speculative.

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5.6.1 Test of Creativity

Tests of creativity measure Divergent thinking (Guilford, 1967). Divergent thinking refers to that aspect of the mental process where the individual expands to many correct solutions of problems on the basis of a small amount of information. In this way, divergent thinking is different from convergent thinking where one seeks to synchronize or reduce several pieces of information to one correct answer. Convergent thinking is mostly measured by the general mental ability test or to give the correct and appropriate response to the given situations. The following subsections discuss the two important tests of creativity.

Torrance test of creativity

The Torrance test of creativity was developed by Torrance (1959, 1962). This test consists of two sections—*verbal and figural*. The verbal section includes (i) ask-and-guess, (ii) product improvement, and (iii) unusual uses. In the ask-and-guess subsection, the examinee is given a picture and asked to describe what had led to the scenes in the picture and what might happen next; in the product improvement subsection, a picture of toy is given to the examinee who is encouraged to suggest changes in the toy so as to make it more fun for playing, and in the unusual cases subsection the examinee is asked to give as many unusual uses as he or she can of a common object. The figural section requires the examinee to draw a picture representing an object and to tell an interesting and exciting story with a picture. Each subset of the figural section gives something to the examinee to start with. For example, he may be given a circle with the instruction to construct as many figures as possible, with the circle as the key part in each figure. The Torrance test can be used with both small children and adolescents. The test is administered individually and orally for children below the fourth grade. On the basis of this test, three scores are given to each examinee; fluency (which indicates total number of acceptable responses), flexibility (which indicates the number of categories in the manual used by the examinee) and originality (which

indicates the number of responses not found in the list of frequent responses). No norms are available and therefore, each examinee's total score is evaluated against a set of common criteria for creative achievement.

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The remote associates test (RAT)

The remote associates test (RAT) is another test for creativity, which has been developed by Mednick and Mednick in 1971. The test is meant for high school students and consists of forty items. The items of the test are such that the examinee is presented with three words and asked to give the fourth word which may be related to each of the three words. Those three words are thought to indicate remote associative clusters and the fourth word a mediating link. One minute time is allowed in each item and thus, the entire test takes about 40 minutes. The serious criticism of the RAT is that its validity is not established. Due to the lack of validity Worthen and Clark (1971) contended that the RAT was a better measure of sensitivity to the structure of language rather than a measure of creative achievement.

CHECK YOUR PROGRESS

6. What are the two categories of aptitude tests?
7. What are the motor dexterity tests?
8. What are the six interrelated traits according to Meier?
9. Name the three types of creative individuals according to Arthur Koestler.

5.7 THE CONCEPT OF PERSONALITY

Personality can be defined as the distinctive and characteristic pattern of thought, emotion and behaviour which make them to interact with the environment. Description of a man's personality is not a simple task. Personality itself is very complex. It consists of manifolds and diverse elements. The elements of personality are called the traits of personality. It is the trait of a person which makes one person's behaviour different from another. Shyness and sociability are the different traits of personality. The traits of personality cannot be directly observed. Personality is the organization of the traits of an individual. The traits are interrelated. The personality of an individual is unified whole of his traits which is dynamic.

Carver and Scheier (2000) suggest that the word personality conveys a sense of consistency, internal causality, and personal distinctiveness. This issue of personal distinctiveness is very important. There are certain universal characteristics of the human race and particular features of individuals. For example we all experience stress and the elevated cortisol that goes with it,

and we all suffer the immune suppressive effects there of. But each of us is unique too. However, personality consists following characteristics:

- **Stable:** It is stable and enduring. Personality once established does not under go sudden or quick change.
- **Combination of mental and social system:** A collection of psychological parts including motives, emotions, and thoughts and individual's social behaviour Personality is not only influenced by psychological construct it influenced by social environment too.
- **Uniqueness:** The need, wants attitude and habits organized within the individual in the manner that make him different from any other person.
- **Multiple expression:** Thought, feeling, relation, etc. are also the expression of personality. Some theorist believes that biological and genetic factors are responsible, other argue that life experiences are more important factor. Some theorists claim that the way we think about our selves is the key to understanding personality, whereas others stressed that they way we behave towards each other.

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5.7.1 Theories and Assessment of Personality

There are various theories of personality, the unit has discussed some of them in the following subsections.

1. Freud's psychoanalytic theory

Freud compared the human mind to an iceberg: the small part consists of the conscious—our current awareness—and the preconscious, all the information that is not currently on our mind but we could bring into consciousness if called upon. The larger part of the iceberg represents the unconscious.

The conscious mind

Freud believed that the conscious mind is all of the things of which a person is aware at any given moment. Whatever there is uppermost in one's mind is in the conscious mind. It is very similar to short term memory, or the memory system in which information is held while it is being used. Freud's terms may be different, but the concepts are basically the same as those used by cognitive psychologists to talk about memory.

The unconscious mind

Freud theorized that there is a part of the mind that remains hidden at all times, surfacing only in symbolic form in dreams and in some of the behaviour people engage in without knowing why they have done so.

The divisions of the personality

Freud believed that personality could be divided into three parts. The way these parts of the personality develop and interact with one another became the heart of his theory (1940) (refer Figure 5.2).

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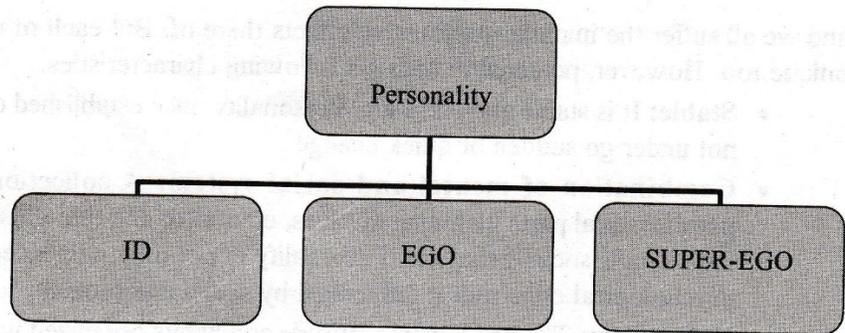


Fig. 5.2 Freud's Division of Personality

- **ID:** The first and most primitive part of the personality, present in the infant, is the id. Id is a Latin word that means 'it'. The id is a completely unconscious, and amoral part of the personality that exists at birth, containing all of the basic biological drives, e.g., hunger, thirst, self-preservation, and sex. When these drives are active, the person will feel an increase in physical tension as well as in psychological tension. Freud called this libido, the instinctual energy that may come into conflict with the demands of a society's standards for behaviour. When libidinal energy is high, it's unpleasant for the person, so the goal is to reduce the libidinal energy is high, it's unpleasant for the person, so the goal is to reduce the libido by fulfilling the drive.
- **Ego:** According to Freud, the ego, from the Latin word for 'I', to deal with reality. Ego is mostly conscious and is far more rational, logical, and than the id. The ego works on the reality principle, which is the need to satisfy the demands of the id and reduce libido only in ways that will not lead to negative consequences. This means that sometimes the ego decides to deny the id and its desires because the consequences would be painful or too unpleasant.
- **Superego:** The superego (Latin, meaning 'over the self') develops as a preschool-aged child learns the rules, customs, and expectations of society. There are actually two parts to the superego: the ego ideal and the conscience. The ego ideal is a kind of measuring device. It is the sum of all the ideal, or correct and acceptable, behaviour that the child has learned about from parents and others in the society.

Three parts of the personality work together

The id makes demands, the superego puts restrictions on how those demands can be met, and the ego has to come up with a plan that will quiet the id but satisfy the superego. Sometimes the id or the superego does not get its way, resulting in a great deal of anxiety for the ego itself. This constant state of conflict is Freud's view of how personality works; it is only when the anxiety created by this conflict gets out of hand that disordered behaviour arises.

The psychological defence mechanisms are ways of dealing with stress through unconsciously distorting one's perception of reality. These defence mechanisms were mainly outlined and studied by Freud's daughter, Anna Freud, who was a psychoanalyst (Benjafield, 1996; Anna, 1946). The defence mechanisms are as follows:

- **Repression:** Freud considered repression the most important defence mechanism. In this frightened memories and impulses are excluded from conscious awareness.
- **Reaction formation:** By giving strong expression to the opposite motive concealing a motive from ourselves.
- **Rationalization:** Assignment of socially desirable motives to what we do so that we seem to have acted rationally.
- **Displacement:** A motive that can be gratified in one form is directed into a new one. The ego replaces an unacceptable impulse with a society's acceptable one.
- **Projection:** assigning our own undesirable qualities to others in exaggerated form.
- **Denial:** refusing to acknowledge that the undesired reality exist.
- **Regression:** an attempt to gain detachment from a stressful situation by dealing with it in an abstract and intellectual term.

Figure 5.3 illustrates the stages of personality development.

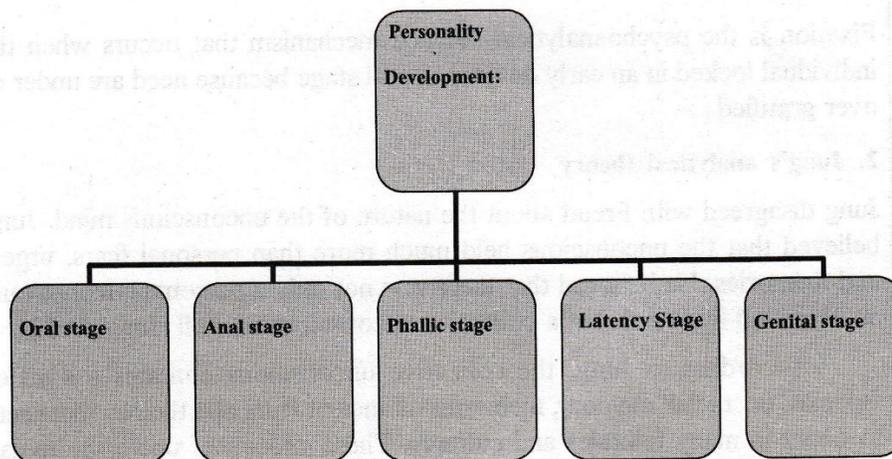


Fig. 5.3 Stages of Personality Development

The Stages of Personality development are as follows:

- **Oral stage:** This stage occurs from the birth of the infant to about 1 or 1 ½ years and is dominated by the id.
- **Anal stage:** As the child becomes a toddler (1–3 years), Freud believed that the erogenous zone moves from the mouth area to the anus. This stage is called the anal stage.

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- **Phallic stage:** As the child grows older (3–6 years), the erogenous zone finally shifts to the genitals. Children have discovered the differences between the sexes by now, and most have also engaged in perfectly normal self-stimulation of the genitals, or masturbation.

Freud essentially believed that boys develop both sexual attractions to their mother and jealousy of their fathers during this stage, a phenomenon called the Oedipus complex. (Oedipus was a king in a Greek tragedy that unknowingly killed his father and married his mother.) One of Freud's followers, Carl Jung, proposed that the term Oedipus be reserved only for males and that the complex in females is termed the Electra complex, after a female character in another Greek tragedy (Jung, 1933).

- **Latency stage:** This starts from 6 years of age to puberty. The child represses all interest in sexuality and develops social and intellectual skills. The activity Channels must of the child's energy into emotionally safe areas and aids the child in forgetting the high stressful conflict of the phallic stage.
- **Genital stage:** The genital stage represented the final process in Freud's personality theory as well as the entry into adult social and sexual behaviour. Freud believed that the individual may become fixated at any of these stages of development if the underlying conflict is not resolved.

Fixation is the psychoanalytical defence mechanism that occurs when the individual locked in an early developmental stage because need are under or over gratified.

2. Jung's analytical theory

Jung disagreed with Freud about the nature of the unconscious mind. Jung believed that the unconscious held much more than personal fears, urges, and memories. He believed that there was not only a personal unconscious, as described by Freud, but a collective unconscious as well (Jung, 1933).

According to Jung, the collective unconscious contains a kind of 'species' or 'racial' memory, memories of ancient fears and themes that seem to occur in many folktales and cultures. These collective, universal human memories were called archetypes by Jung. There are many archetypes, but two of the more well known are the animal animus (the feminine side of a man/ the masculine side of a woman) and the shadow (the dark side of personality, called the Devil in Western cultures). The side of one's personality that is shown to the world is termed the persona.

3. Adler's psychoanalytical theory

Alfred Adler was also in disagreement with Freud over the importance of sexuality in personality development. Adler (1954) developed the theory that

as young, helpless children, people all develop feelings of inferiority when comparing themselves to the more powerful, superior adults in their world. The driving force behind all human endeavours, emotions, and thoughts for Adler was not the seeking of pleasure, but the seeking of superiority. The defence mechanism of compensation, in which people try to overcome feelings of inferiority in one area of life by striving to be superior in another area, figured prominently in Adler's theory.

Adler (1954) also developed a theory that the birth order of a child affected personality. Firstborn children with younger siblings feel inferior once those younger siblings get all the attention and often overcompensate by becoming overachievers. Middle children have it slightly easier, getting to feel superior over the dethroned older child while dominating younger siblings. They tend to be very competitive. Younger children are supposedly pampered and protected, but feel inferior because they are not allowed the freedom and responsibility of the older children. Although some researchers have found evidence to support Adler's birth order theory (Stein, 2001; Sulloway, 1996) and some have even linked birth order to career choices (Leong et al., 2001; Watkins and Savickas, 1990), other researchers point to sloppy methodology and the bias of researchers toward the birth order idea (Beer and Horn, 2001; Freese et al., Ioannidis, 1998).

4. Horney's theory

Karen Horney (1967, 1973) did not study directly with Freud, but studied his work and taught psychoanalysis at the Psychoanalytic Institutes of Berlin and New York. Rather than focussing on sexuality, Horney focussed on the child's sense of basic anxiety, the anxiety created in a child born into a world that is so much bigger and more powerful than the child. People whose parents gave them love, affection, and security would overcome this anxiety, other with less secure upbringings would develop neurotic personalities and maladaptive ways of dealing with relationships. According to Horney, some children, try to deal with their anxiety by moving toward people, becoming dependent and clingy. Others move against people, becoming aggressive, demanding, and cruel. A third way of coping would be to move away from people by withdrawing from personal relationships.

5.8 PERSONALITY APPROACHES

There are different approaches to personality and they are discussed in the following subsections.

5.8.1 Skinner's Behaviourism and Bandura's Social Cognitive Theory

According to Skinner, the personality is nothing more than the individual's observed, overt behaviour, which is determined by the external environment. Personality does not include internal traits and thoughts. Skinner believed

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we do not have to understand biological or cognitive process to explain personality. They thought that we can only observe what people do. He also stressed that our behaviour always can change if we encounter new experiences and rearrange it. According to them, shy behaviour can be changed into outgoing behaviour, aggressive behaviour can be changes into docile, and lethargic behaviour can be changed into enthusiastic one.

Bandura social cognitive theory

Bandura (1989) believes that three factors influence one another in determining behaviour: the environment, the behaviour itself, and personal or cognitive factors that the person brings into the situation from earlier experiences. These three factors each affect the other two in a reciprocal, or give-and-take relationship. Bandura calls this relationship reciprocal determinism.

One of the more important person variables that Bandura talks about is self-efficacy, a person's perception of how effective behaviour will be in any particular circumstance (Bandura, 1998). Self-efficacy is not the same concept as self esteem, which are the positive values a person places on his or her sense of worth.

5.8.2 Current Thoughts on the Behavioural and Social Cognitive View

The behavioural view is criticized for ignoring the importance of cognition, biology in personality and giving too much importance to the role of environmental experiences. They are labelled as reductionistic, explaining personality in one or two factors.

Bandura's classic 'Bo-Bo doll' study, made use of experimentation (Bandura, 1965). Although some critics think that human personality and behaviour are too complex to explain as the result of cognitions and external stimuli interacting, others point out that this viewpoint has enabled the development of therapies based on learning theory that have become effective in changing undesirable behaviour.

Humanistic perspective

Humanists, such as Carl Rogers and Abraham Maslow wanted psychology to focus on the things that make people uniquely human, such as subjective emotions and the freedom to choose one's own destiny.

Carl Rogers and self-concept

Rogers (1961) believed that human beings are always striving to fulfill their innate capacities and capabilities and to become everything that genetic potential will allow them to become. This striving for fulfilment is called the self-actualizing tendency. An important tool in human self-actualization is the development of an image of oneself, or the self-concept. The self-concept is based on what people are told by others and how the sense of self is reflected in the words and actions of important people in one's life, such as parents, siblings, co-workers, friends, and teachers.

Real and ideal self

Two important components of the self-concept are the real self (one's actual perception of characteristics, traits, and abilities that from the basis of the striving for self-actualization) and the ideal self (the perception of what one should be or would like to be). The ideal self primarily comes from those important, significant others in one's life, most often the parents. Rogers believed that when the real self and the ideal self are very close or similar to each other, people feel competent and capable, but when there is a mismatch between the real and ideal selves, anxiety and neurotic behaviour can be the result.

Maslow's hierarchy of needs theory

Maslow called the humanistic approach the third force in psychology. He believed that self-actualization is the highest level human need. Most people have difficulty at reaching this level. According to the humanistic theorist Abraham Maslow (1954, 1971), our basic needs must be satisfied before our higher needs can become motivating. Maslow's need hierarchy explains that once those needs are met, safety needs becomes important. Belongingness and love are the needs for friends and companions as well as to be accepted by others, and self esteem is the need to feel good and earn the esteem of others. Although Maslow's original hierarchy include only one more level if self-actualization needs, later on he inserted to others need just below this level, (Maslow and Lowery, 1998). At the top level the cognitive and the need to know and understand the world exists. Cognitive needs are aesthetic needs, which include the need for order and beauty. Once all these needs are met it is concerned about self-actualization needs. Maslow also added a higher need called transcendence above the self-actualization needs.

Maslow cautions that most people stop maturing after they have developed a high level of esteem and thus do not become self-actualized. The idea that human motives are hierarchically arranged is an appealing one. Maslow's theory stimulates us to think about the ordering of motives in our own lives. However, the ordering is somewhat subjective. Some people might seek advancement in a career to achieve self-esteem while putting on hold their needs for love and belongingness (refer Figure 5.4).

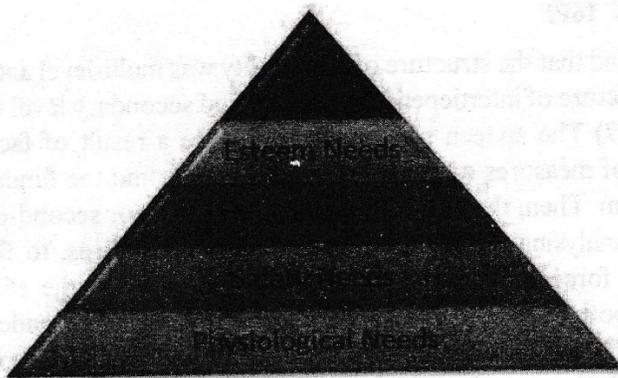


Fig. 5.4 Maslow's Hierarchy of Needs

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Conditional and unconditional positive regard

Rogers defined positive regard as warmth, affection, love, and respect that come from the significant others (parents, admired adults, friends, and teachers) in people's experience. Positive regard is vital to people's ability to cope with stress and to strive to achieve self-actualization. Rogers believed that unconditional positive regard, or love, affection, and respect with no strings attached, is necessary for people to be able to explore fully all that they can achieve and become. Unfortunately, some parents, spouses, and friends give conditional positive regard, which is love, affection, respect, and warmth that depend, or seem to depend, on doing what those people want.

Current thoughts on the humanistic view of personality

Its greatest impact has been in the development of therapies to promote self-growth and help people better understand themselves and others.

5.8.3 Trait Theories

Trait theories are less concerned with the explanation for personality development and changing personality than they are with describing personality and predicting behaviour based on that description. A trait is a consistent, enduring way of thinking, feeling, or behaving, and trait theories attempt to describe personality in terms of a person's traits.

1. Allport's personality trait theory

One of the earliest attempts to list and describe the traits that make up personality can be found in the work of Gordon Allport (Allport and Odbert, 1936). Allport and his colleague literally scanned the dictionary for words that could be traits, finding about 18,000, and then paring that down to 200 traits after eliminating synonyms. Allport believed (with no scientific evidence, however) that these traits were literally wired into the nervous system to guide one's behaviour across many different situations and that each person's 'constellation' of traits was unique.

2. Cattell's 16PF

Cattell found that the structure of personality was multi-level and hierarchical, with a structure of interdependent primary and secondary level traits (Cattell, 1946, 1957). The sixteen primary factors were a result of factor-analysing hundreds of measures of everyday behaviours to find the fundamental traits behind them. Then, they discovered the five global (or second-order) factors by factor-analysing the sixteen primary traits themselves, to find the basic, organizing forces among the sixteen basic traits. Thus, the 16PF test gives scores on both the five second-order global traits which provide an overview of personality at a broader, conceptual level, as well as on the more-numerous and precise primary traits, which give a picture of the richness and complexity

of each unique personality. Cattell also found that there was a third-order level of personality organization that contained just two over-arching, top-level factors (Cattell, 1957) but little time has been spent on defining this most abstract level of personality organization. Cattell used the new techniques of factor analysis (based on the correlation coefficient) in an attempt to try to discover and measure the fundamental traits of human personality.

Cattell described that behaviour, are easily observable and have origin in source trait and surface traits. Cattell believed that some source traits are hereditary and others are acquired through learning/experiences. One source trait can influence a number of surface traits and surface traits result from the interactions of source traits (Liebert and Spiegler, 1990). He also believed each individual has unique traits and common source traits, which have varying degrees of influence. Cattell distinguished between ability, temperamental traits and dynamic traits, the most significant aspects of personality. He defined ability traits as skills that enable individuals to function effectively, temperamental skills as relating to emotional functioning and dynamic traits as skills related to motivation (Phares, 1997). For example, someone scoring near the reserved end of the reserved/ outgoing dimension would be more introverted than someone scoring in the middle or at the opposite end.

3. The big five

Five-factor model or the big five represent the core description of human personality, i.e. the only dimension necessary to understand what makes us tick. These five trait dimensions can be remembered by using the acronym OCEAN, in which each of the letters is the first letter of one of the five dimensions of personality. They are discussed as follows:

- **Openness:** It can best be described as a person's willingness to try new things and be open to new experiences. People who try to maintain the status quo and who don't like to change things would score low on openness.
- **Conscientiousness:** It refers to a person's organization and motivation, with people who score high on this dimension. Who are careful about being places on time and careful with belongings as well. Someone scoring low on this dimension might always be late to important social events, belongings and fail to return them in poor condition.
- **Extroversion:** It is a term first used by Carl Jung (1933), who believed that all people could be divided into two personality types: extroverts and introverts. Extroverts are outgoing and sociable, whereas introverts are more solitary and dislike being the centre of attention.
- **Agreeableness:** It refers to the basic emotional style of a person, who may be easygoing, friendly, and pleasant (at the high end of the scale) or grumpy, crabby, and hard to get along with (at the low end).

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- **Neuroticism:** It refers to emotional instability or stability. People who are excessive worriers, overanxious, and moody would score high on this dimension, whereas those who are more even-tempered and calm would score low.

Costa and McCrae believed that these five traits were not interdependent. In other words, knowing someone's score on extraversion would not give any information about scores on the other four dimensions, allowing for a tremendous amount of variety in personality descriptions.

Current thoughts on the trait perspective

Some theorists have cautioned that personality traits will not always be expressed in the same way across different situations. Walter Mischel, a social cognitive theorist, has emphasized that there is a trait-situation interaction, in which the particular circumstances of any given situation are assumed to influence the way in which a trait is expressed (Mischel and Shoda, 1995). An outgoing extravert might laugh, talk to strangers, and tell jokes at a party. That same person, if at a funeral, would still talk and be open, but the jokes and laughter would be less likely to occur.

Cross-cultural studies have found evidence of these five trait dimensions in 11 different cultures, including Japan, the Philippines, Germany, China, and Peru (Digman, 1990; John et al., 1988; McCrae et al., 2000; Paunonen et al., 1996). This cultural commonality raises the question of the origins of the Big Five dimensions: Are child-rearing practices across all those cultures similar enough to result in these five aspects of personality, or could these five dimensions have a genetic component that transcends cultural differences?

CHECK YOUR PROGRESS

10. What is personality?
11. What are psychological defence mechanisms?
12. What are the two important components of self-concept?
13. Define trait.

5.9 SUMMARY

- Individual difference psychology examines how people are similar and how they differ in their thinking, feeling and behaviour. For example, people can be classified according to intelligence and personality characteristics.
- The psychology of reasoning is the study of how people think and reason. It is often broadly defined as the process of drawing conclusions to inform how people solve problems and make decisions.

- Different psychologists attempted to define intelligence in different manner.
- Some researchers have suggested that intelligence is a single, general ability; while other believe that intelligence encompasses a range of aptitudes, skills and talents.
- Intelligence has been defined as a global capacity or a composite of several intellectual skills.
- Intelligence consists of the ability to solve problems and to adapt and learned from everyday experiences.
- The Stanford Binet IQ tests and the Wechsler scales are the main intelligence assessment tools for individuals.
- Group intelligence tests like SAT are also used. Spearman proposed two factor theory of intelligence, Gardner believes in eight types of intelligence, and Sternberg's gave the triarchic theory of intelligence.
- The multiple intelligence approaches have broadened the definition of intelligence.
- Creativity is the ability to think about something in novel and unusual ways and come up with unconventional solution to problems.
- Personality involves the enduring thoughts, emotions and behaviour that characterized the way we adapt to the world.
- Freud believed that most of the mind is unconscious and his psychoanalytic theory stated that personality have three structures.
- A number of psychodynamic theorists criticized Freud and stated that Freud gave the two little credits to the ego, conscious thought and socio cultural factors.
- Horney emphasized the need for security, Jung developed the concept of collective unconscious and emphasizes archetypes, Adler's individual theory stresses that people are striving towards a positive being and that they create their own goal. Skinner's

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5.10 KEY TERMS

- **Phrenology:** Study of an individual's bumps on the skull, which supposedly reveal character traits and mental abilities
- **Individual intelligence test:** Refers to a test which can be administered to one person at a time
- **Group intelligence test:** Refers to a test which can be administered to more than one person at a time, that is, it can be administered to a group
- **Multiple aptitude test:** Barriers to test

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- **Special aptitude tests:** Tests which intend to measure only one aptitude
- **Creativity:** Ability to think about something in novel and unusual ways and to come up with unconventional solutions to problems
- **Divergent thinking:** Refers to that aspect of the mental process where the individual expands to many correct solutions of problems on the basis of a small amount of information

5.11 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Individual difference psychology examines how people are similar and how they differ in their thinking, feeling and behaviour.
2. According to Spearman (1927), intelligence is a general intellectual capacity. He postulated the existence of a general factor 'g' and a specific factor 's' underlying intelligence.
3. On the basis of extensive factor-analytic research, Thurstone and Thurstone (1943) postulated seven group factors which they designed as the primary mental abilities or PMA. These abilities are space, verbal comprehension, word fluency, number facility, induction, perceptual speed, deduction, rote memory, and arithmetic reasoning.
4. The three dimensions of SI model are contents, operations and products.
5. The disadvantages of taking a group tests are rapport formation, determining the level of anxiety, etc. Detailed information is also not possible the group.
6. Aptitude tests may conveniently be grouped into two categories—multiple aptitude tests and special aptitude tests.
7. Motor dexterity tests are tests which measure the coordination of hand, arm and/or leg movement in performing a task.
8. According to Meier, artistic aptitude consists of six interrelated traits like manual skill, aesthetic intelligence, volitional perseveration, cognitive imagination, perceptual ability and aesthetic judgment.
9. The three types of creative individuals according to Arthur Koestler are the artist, the sage and the jester.
10. Personality can be defined as the distinctive and characteristic pattern of thought, emotion and behaviour which make them to interact with the environment.
11. The psychological defence mechanisms are ways of dealing with stress through unconsciously distorting one's perception of reality.
12. Two important components of the self-concept are the real self (one's actual perception of characteristics, traits, and abilities that from the basis of the striving for self-actualization) and the ideal self (the perception of what one should be or would like to be).
13. A trait is a consistent, enduring way of thinking, feeling, or behaving, and trait theories attempt to describe personality in terms of a person's traits.

5.12 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What do you understand by individual differences?
2. Define concept formation. What are the types of concepts?
3. What is intelligence according to Binet?
4. What are the 's' and 'g' factors?
5. What is the Wechsler scale?
6. Describe briefly the Torrance test of creativity.
7. How can behavioural assessment be used in assessing personality?
9. What do you understand by the big five?

Long-Answer Questions

1. Describe the various theories of intelligence.
2. Discuss the various types of intelligence tests.
3. Elaborate upon any three types of aptitude tests.
4. Discuss the division of personality according to Freud.
5. Explain some of the theories of personality.
6. Explain the self-concept as explained by Carl Rogers.
7. What do you understand by RT? Explain.
8. Draw a comparison between group and individual tests.
9. What are the characteristics of personality?
10. What are the different approaches to personality?

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