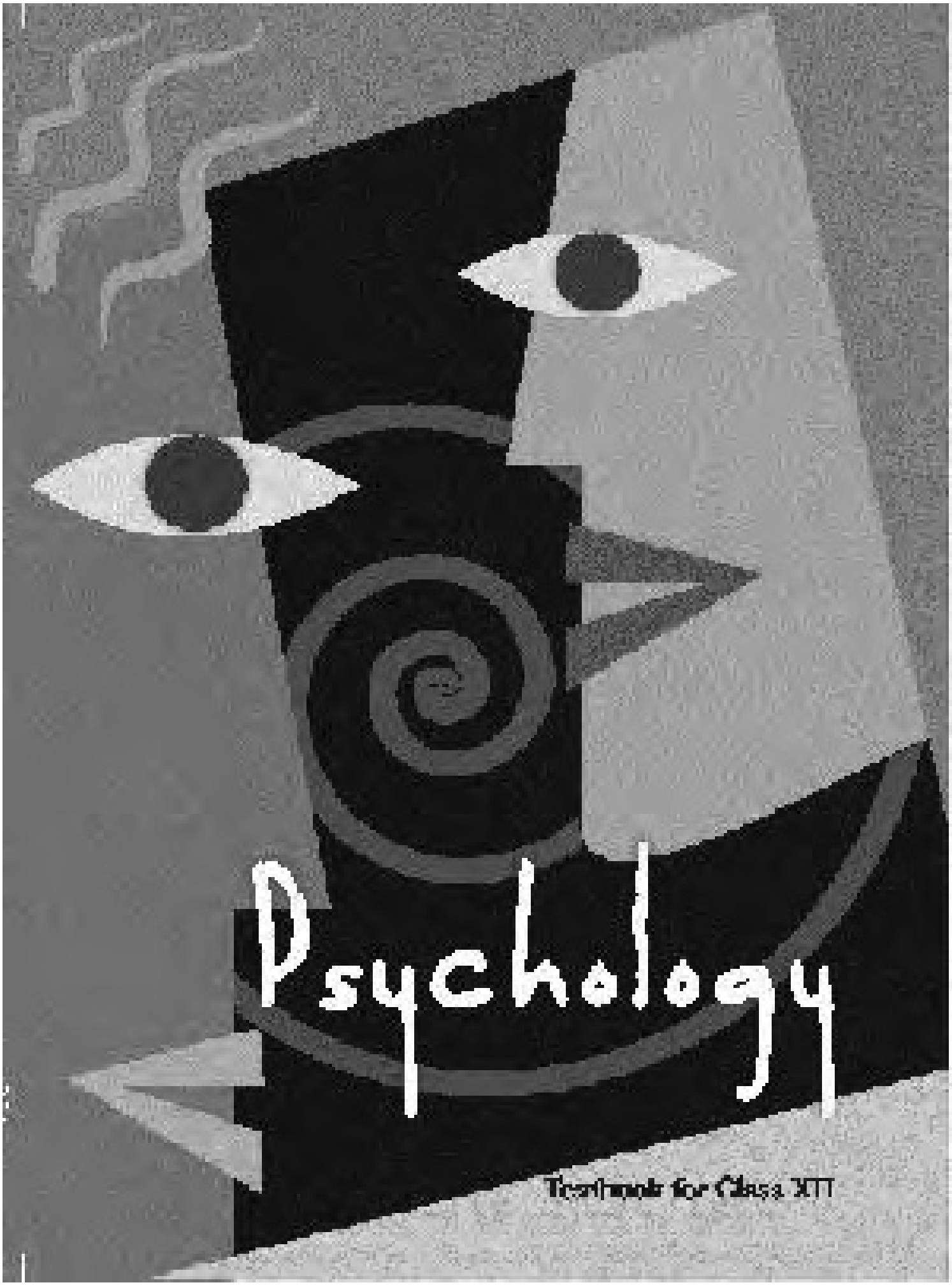


Psychology

Textbook for Class XII

CONTENTS

Foreword iii

Preface v

Chapter 1
Variations in Psychological Attributes 1

Chapter 2
Self and Personality 23

Chapter 3
Meeting Life Challenges 50

Chapter 4
Psychological Disorders 69

Chapter 5
Therapeutic Approaches 89

Chapter 6
Attitude and Social Cognition 106

Chapter 7
Social Influence and Group Processes 129

Chapter 8
Psychology and Life 152

Chapter 9
Developing Psychological Skills 177

Guidelines for Practicals in Psychology 196

Glossary 200

Suggested Readings 209

VARIATIONS IN PSYCHOLOGICAL ATTRIBUTES

1

After reading this chapter, you would be able to:

- understand psychological attributes on which people differ from each other,
- learn about different methods that are used to assess psychological attributes,
- explain what constitutes intelligent behaviour,
- learn how psychologists assess intelligence to identify mentally challenged and gifted individuals,
- understand how intelligence has different meaning in different cultures, and
- understand the difference between intelligence and aptitude.

CONTENTS

Introduction
Individual Differences in Human Functioning
Assessment of Psychological Attributes
Intelligence
Theories of Intelligence
- Theory of Multiple Intelligences
- Triarchic Theory of Intelligence
- Planning, Attention-arousal, and Simultaneous-successive Model of Intelligence

Individual Differences in Intelligence
- Variations of Intelligence
- *Some Misuses of Intelligence Tests* (Box 1.1)

Culture and Intelligence
Emotional Intelligence
- *Characteristics of Emotionally Intelligent Persons* (Box 1.2)

Special Abilities
- Aptitude : Nature and Measurement

Creativity

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

If you observe your friends, classmates or relatives, you will find how they differ from each other in the manner they perceive, learn, and think, as also in their performance on various tasks. Such individual differences can be noticed in every walk of life. That people differ from one another is obvious. In Class XI, you have learnt about psychological principles that are applied to understand human behaviour. We also need to know how people differ, what brings about these differences, and how such differences can be assessed. You will recall how one of the main concerns of modern psychology has been the study of individual differences from the time of Galton. This chapter will introduce you to some of the fundamentals of individual differences.

One of the most popular psychological attributes which has been of interest to psychologists is Intelligence. People differ from each other in their ability to understand complex ideas, adapt to environment, learn from experience, engage in various forms of reasoning, and to overcome obstacles. In this chapter, you will study the nature of intelligence, changing definitions of intelligence, cultural differences in intelligence, range and variations in the intellectual competencies of people, and the nature of special abilities or aptitudes.

Individual Differences in Human Functioning

Individual variations are common within and across all species. Variations add colour and beauty to nature. For a moment, think of a world around you where each and every object is of the same colour, say red or blue or green. How would the world appear to you? Certainly not a beautiful one! Would you prefer to live in such a world? In all likelihood, your answer will be 'no'. Like objects, people too possess different combinations of traits.

Variability is a fact of nature, and individuals are no exception to this. They vary in terms of physical characteristics, such as height, weight, strength, hair colour, and so on. They also vary along psychological dimensions. They may be intelligent or dull, dominant or submissive, creative or not so creative, outgoing or withdrawn, etc. The list of variations can be endless. Different traits can exist in varying degrees in an individual. In this sense, each one of us is unique as s/he exemplifies a typical combination of various traits. The question which you may like to pose is how and why people differ. This, in fact, is the subject matter of the study of **individual differences**. For psychologists, *individual differences refer to distinctiveness and variations among people's characteristics and behaviour patterns.*

While many psychologists believe that our behaviours are influenced by our personal traits, some others hold the view that our behaviours are influenced more by situational factors. This latter view is known as **situationism**, which states that situations and circumstances in which one is placed influence one's behaviour. A person, who is generally aggressive, may behave in a submissive manner in the presence of her/his top boss. Sometimes, the situational influences are so powerful that individuals with differing personality traits respond to them in almost the same ways. *The situationist perspective views human behaviour as resulting from interaction of external and internal factors.*

Assessment of Psychological Attributes

Psychological attributes are involved in very simple phenomena like in time taken to react to a stimulus, i.e. reaction time, and also in highly global concepts like happiness. It is difficult to count and specify the number of psychological attributes that can be assessed. **Assessment** is the first step in understanding a psychological attribute. Assessment refers to the measurement of psychological attributes of individuals and their evaluation, often using multiple methods in terms of certain standards of comparison. Any attribute will be said to exist in a person only if it can be measured by using scientific procedures. For example, when we say, "Harish is dominant", we are referring to the degree of 'dominance' in Harish. This statement is based on our own assessment of 'dominance' in him. Our assessment may be *informal* or *formal*. Formal assessment is objective, standardised, and organised. On the other hand, informal assessment varies from case to case and from one assessor to another and, therefore, is open to subjective interpretations. Psychologists are trained in making formal assessment of psychological attributes.

Once assessment is done, we can use this information to predict how Harish will probably behave in future. We may predict that Harish, if given a chance to lead a team, will most likely be an authoritarian leader. If the predicted consequence is not what we want, we may want to intervene to effect a change in Harish's behaviour. The attribute chosen for assessment depends upon our purpose. In order to help a weak student perform well in examinations, we may assess her/his intellectual strengths and weaknesses. If a person fails to adjust with members of her/his family and neighbourhood, we may consider assessing her/his personality characteristics. For a poorly motivated person, we may assess her/his interests and preferences. *Psychological assessment uses systematic testing procedures to evaluate abilities, behaviours, and personal qualities of individuals.*

Some Domains of Psychological Attributes

Psychological attributes are not linear or unidimensional. They are complex and expressed in terms of dimensions. A line is a mere aggregate of many points. A point occupies no space. But think of a box. It occupies space. It can be described only in terms of its three dimensions, i.e. length, width, and height. Similar is the case with psychological attributes. They are usually multi-dimensional. If you want to have a complete assessment of a person, you will need to assess how s/he functions in various domains or areas, such as cognitive, emotional, social, etc.

We will discuss in this chapter some important attributes that are of interest to psychologists. These attributes are categorised on the basis of varieties of tests used in psychological literature.

1. **Intelligence** is *the global capacity to understand the world, think rationally, and use available resources effectively when faced with challenges.* Intelligence tests provide a global measure of a person's general cognitive competence including the ability to profit from schooling. Generally, students having low intelligence are not likely to do so well in school-related examinations, but their success in life is not associated only with their intelligence test scores.
2. **Aptitude** refers to *an individual's underlying potential for acquiring skills.* Aptitude tests are used to predict what an individual will be able to do if given

proper environment and training. A person with high mechanical aptitude can profit from appropriate training and can do well as an engineer. Similarly, a person having high language aptitude can be trained to be a good writer.

3. **Interest** is *an individual's preference for engaging in one or more specific activities relative to others.* Assessment of interests of students may help to decide what subjects or courses they can pursue comfortably and with pleasure. Knowledge of interests helps us in making choices that promote life satisfaction and performance on jobs.
4. **Personality** refers to *relatively enduring characteristics of a person that make her or him distinct from others.* Personality tests try to assess an individual's unique characteristics, e.g. whether one is dominant or submissive, outgoing or withdrawn, moody or emotionally stable, etc. Personality assessment helps us to explain an individual's behaviour and predict how she/he will behave in future.
5. **Values** are *enduring beliefs about an ideal mode of behaviour.* A person having a value sets a standard for guiding her/his actions in life and also for judging others. In value assessment, we try to determine the dominant values of a person (e.g., political, religious, social or economic).

Assessment Methods

Several methods are used for psychological assessment. You have learnt about some of these methods in Class XI. Let us recall their key features.

- **Psychological Test** is *an objective and standardised measure of an individual's mental and/or behavioural characteristics.* Objective tests have been developed to measure all the dimensions of psychological attributes (e.g., intelligence, aptitude, etc.) described above. These tests are widely used for the purposes of clinical diagnosis, guidance, personnel selection, placement, and training. Besides objective tests, psychologists have also developed certain projective tests, especially for the assessment of personality. You will learn about them in Chapter 2.
- **Interview** involves *seeking information from a person on a one-to-one basis.* You may see it being used when a counsellor interacts with a client, a salesperson makes a door-to-door survey regarding the usefulness of a particular product, an employer selects employees for her/his organisation, or a journalist interviews important people on issues of national and international importance.
- **Case Study** is *an in-depth study of the individual in terms of her/his psychological attributes, psychological history in the context of her/his psychosocial and physical environment.* Case studies are widely used by clinical psychologists. Case analyses of the lives of great people can also be highly illuminating for those willing to learn from their life experiences. Case studies are based on data generated by different methods, e.g. interview, observation, questionnaire, psychological tests, etc.
- **Observation** involves *employing systematic, organised, and objective procedures to record behavioural phenomena occurring naturally in real time.* Certain phenomena such as mother-child interactions can be easily studied through observation. The major problems with observational methods are that the observer has little control over the situation and the reports may suffer from subjective interpretations of the observer.
- **Self-Report** is a method in which *a person provides factual information about herself/himself and/or opinions,*

beliefs, etc. that s/he holds. Such information may be obtained by using an interview schedule or a questionnaire, a psychological test, or a personal diary.

INTELLIGENCE

Intelligence is a key construct employed to know how individuals differ from one another. It also provides an understanding of how people adapt their behaviour according to the environment they live in. In this section, you will read about intelligence in its various forms.

Psychological notion of intelligence is quite different from the common sensical notion of intelligence. If you watch an intelligent person, you are likely to see in her/him attributes like mental alertness, ready wit, quickness in learning, and ability to understand relationships. The *Oxford Dictionary* explains intelligence as the power of **perceiving**, **learning**, **understanding**, and **knowing**. Early intelligence theorists also used these attributes in defining intelligence. Alfred Binet was one of the first psychologists who worked on intelligence. He defined intelligence as *the ability to judge well, understand well, and reason well.* Wechsler, whose intelligence tests are most widely used, understood intelligence in terms of its functionality, i.e. its value for adaptation to environment. He defined it as *the global and aggregate capacity of an individual to think rationally, act purposefully, and to deal effectively with her/his environment.* Other psychologists, such as Gardner and Sternberg have suggested that an intelligent individual not only adapts to the environment, but also actively modifies or shapes it. You will be able to understand the concept of intelligence and how it has evolved, when we discuss some important theories of intelligence.

Activity 1.1

Discovering the Attributes of Intelligent Persons

1. *Who is the most intelligent of your classmates? Think of her/him in your mind's eye, and write down a few words/phrases describing that person.*
2. *Think of 3 other persons in your immediate environment, whom you consider intelligent, and write down a few words/phrases describing the attributes of each.*
3. *Judge the newer additions with reference to what you wrote in item no. 1.*
4. *Make a list of all the attributes you consider as manifestations of intelligent behaviours. Using these attributes, try to frame a definition.*
5. *Discuss your report with your classmates and the teacher.*
6. *Compare it with what the researchers have to say about 'intelligence'.*

THEORIES OF INTELLIGENCE

Psychologists have proposed several theories of intelligence. Theories can be broadly classified as either representing a psychometric/structural approach or an information-processing approach.

The **psychometric approach** considers intelligence as an aggregate of abilities. It expresses the individual's performance in terms of a single index of cognitive abilities. On the other hand, the **information-processing approach** describes the processes people use in intellectual reasoning and problem solving. The major focus of this approach is on how an intelligent person acts. Rather than focusing on structure of intelligence or its underlying dimensions, information-

processing approaches emphasise studying cognitive functions underlying intelligent behaviour. We will discuss some representative theories of these approaches.

We mentioned above that Alfred Binet was the first psychologist who tried to formalise the concept of intelligence in terms of mental operations. Prior to him, we find the notion of intelligence described in general ways in various philosophical treatises available in different cultural traditions. Binet's theory of intelligence was rather simple as it arose from his interest in differentiating more intelligent from less intelligent individuals. He, therefore, conceptualised intelligence as consisting of one similar set of abilities which can be used for solving any or every problem in an individual's environment. His theory of intelligence is called **Uni** or **one factor theory** of intelligence. This theory came to be disputed when psychologists started analysing data of individuals, which was collected using Binet's test.

In 1927, Charles Spearman proposed a **two-factor theory** of intelligence employing a statistical method called factor analysis. He showed that intelligence consisted of a general factor (**g-factor**) and some specific factors (**s-factors**). The g-factor includes mental operations which are primary and common to all performances. In addition to the g-factor, he said that there are also many specific abilities. These are contained in what he called the s-factor. Excellent singers, architects, scientists, and athletes may be high on g-factor, but in addition to this, they have specific abilities which allow them to excel in their respective domains. Spearman's theory was followed by Louis Thurstone's theory. He proposed the **theory of primary mental abilities**. It states that intelligence consists of seven primary abilities, each of which is relatively independent of the others. These primary abilities are: (i) Verbal Comprehension (grasping meaning of words, concepts, and ideas), (ii) Numerical Abilities (speed and accuracy in numerical and computational skills), (iii) Spatial Relations (visualising patterns and forms), (iv) Perceptual Speed (speed in perceiving details), (v) Word Fluency (using words fluently and flexibly), (vi) Memory (accuracy in recalling information), and (vii) Inductive Reasoning (deriving general rules from presented facts).

Arthur Jensen proposed a hierarchical model of intelligence consisting of abilities operating at two levels, called **Level I** and **Level II**. *Level I is the associative learning in which output is more or less similar to the input* (e.g., rote learning and memory). *Level II, called cognitive competence, involves higher-order skills as they transform the input to produce an effective output.*

J.P. Guilford proposed the **structure-of-intellect model** which classifies intellectual traits among three dimensions: *operations*, *contents*, and *products*. Operations are what the respondent does. These include cognition, memory recording, memory retention, divergent production, convergent production, and evaluation. Contents refer to the nature of materials or information on which intellectual operations are performed. These include visual, auditory, symbolic (e.g., letters, numbers), semantic (e.g., words) and behavioural (e.g., information about people's behaviour, attitudes, needs, etc.). Products refer to the form in which information is processed by the respondent. Products are classified into units, classes, relations, systems, transformations, and implications. Since this classification (Guilford, 1988) includes 6×5×6 categories, therefore, the model has 180 cells. Each cell is expected to have at least one factor or ability; some cells may have more than

one factor. Each factor is described in terms of all three dimensions.

The above mentioned theories are representations of psychometric approach to understand intelligent behaviour.

Theory of Multiple Intelligences

Howard Gardner proposed the theory of multiple intelligences. According to him, intelligence is not a single entity; rather distinct types of intelligences exist. Each of these intelligences are independent of each other. This means that, if a person exhibits one type of intelligence, it does not necessarily indicate being high or low on other types of intelligences. Gardner also put forth that different types of intelligences interact and work together to find a solution to a problem. Gardner studied extremely talented persons, who had shown exceptional abilities in their respective areas, and described eight types of intelligence. These are as follows:

Linguistic (skills involved in the production and use of language) : It is the capacity to use language fluently and flexibly to express one's thinking and understand others. Persons high on this intelligence are 'word-smart', i.e. they are sensitive to different shades of word meanings, are articulate, and can create linguistic images in their mind. Poets and writers are very strong in this component of intelligence.

Logical-Mathematical (skills in scientific thinking and problem solving) : Persons high on this type of intelligence can think logically and critically. They engage in abstract reasoning, and can manipulate symbols to solve mathematical problems. Scientists and Nobel Prize winners are likely to be strong in this component.

Spatial (skills in forming visual images and patterns) : It refers to the abilities involved in forming, using, and transforming mental images. The person high on this intelligence can easily represent the spatial world in the mind. Pilots, sailors, sculptors, painters, architects, interior decorators, and surgeons are likely to have highly developed spatial intelligence.

Musical (sensitivity to musical rhythms and patterns) : It is the capacity to produce, create and manipulate musical patterns. Persons high on this intelligence are very sensitive to sounds and vibrations, and in creating new patterns of sounds.

Bodily-Kinaesthetic (using whole or portions of the body flexibly and creatively) : This consists of the use of the whole body or portions of it for display or construction of products and problem solving. Athletes, dancers, actors, sportspersons, gymnasts, and surgeons are likely to have such kind of intelligence.

Interpersonal (sensitivity to subtle aspects of others' behaviours) : This is the skill of understanding the motives, feelings and behaviours of other people so as to bond into a comfortable relationship with others. Psychologists, counsellors, politicians, social workers, and religious leaders are likely to possess high interpersonal intelligence.

Intrapersonal (awareness of one's own feelings, motives, and desires): This refers to the knowledge of one's internal strengths and limitations and using that knowledge to effectively relate to others. Persons high on this ability have finer sensibilities regarding their identity, human existence, and meaning of life. Philosophers and spiritual leaders present examples of this type of intelligence.

Naturalistic (sensitivity to the features of the natural world) : This involves complete awareness of our relationship with the natural world. It is useful in recognising the beauty of different species of flora and fauna, and making subtle discriminations in the natural world. Hunters, farmers, tourists, botanists,

zoologists, and bird watchers possess more of naturalistic intelligence.

Triarchic Theory of Intelligence

Robert Sternberg (1985) proposed the triarchic theory of intelligence. Sternberg views intelligence as "*the ability to adapt, to shape and select environment to accomplish one's goals and those of one's society and culture*". According to this theory, there are three basic types of intelligence: Componential, Experiential, and Contextual. The elements of the triarchic theory of intelligence are shown in Figure 1.1.

Componential Intelligence : Componential or analytical intelligence is the analysis of information to solve problems. Persons high on this ability think analytically and critically and succeed in schools. This intelligence has three components, each serving a different function. First is the knowledge acquisition component, which is responsible for learning and acquisition of the ways of doing things. The second is the meta or a higher order component, which involves planning concerning what to do and how to do. The third is the performance component, which involves actually doing things.

Experiential Intelligence: Experiential or creative intelligence is involved in using past experiences creatively to solve novel problems. It is reflected in creative performance. Persons high on this aspect integrate different experiences in an original way to make new discoveries and inventions. They quickly find out which information is crucial in a given situation.

Activity 1.2

On the 'Practical' Track

You have just been admitted into a school/college. You will take three examinations during the entire year. You sincerely want to receive high marks in the course. How likely are you to engage in each of the following actions? Rank the following courses of action. Match your answer with that of your classmates.

- *Attend classes regularly.*
- *Create study groups with your friends for weekly discussions.*
- *Take detailed notes in the class.*
- *Join a tutorial/coaching centre.*
- *Prepare written notes for each chapter.*
- *Read the textbook chapters thoroughly.*
- *Solve the questions of the last three years.*

Talk to your teacher after the class.

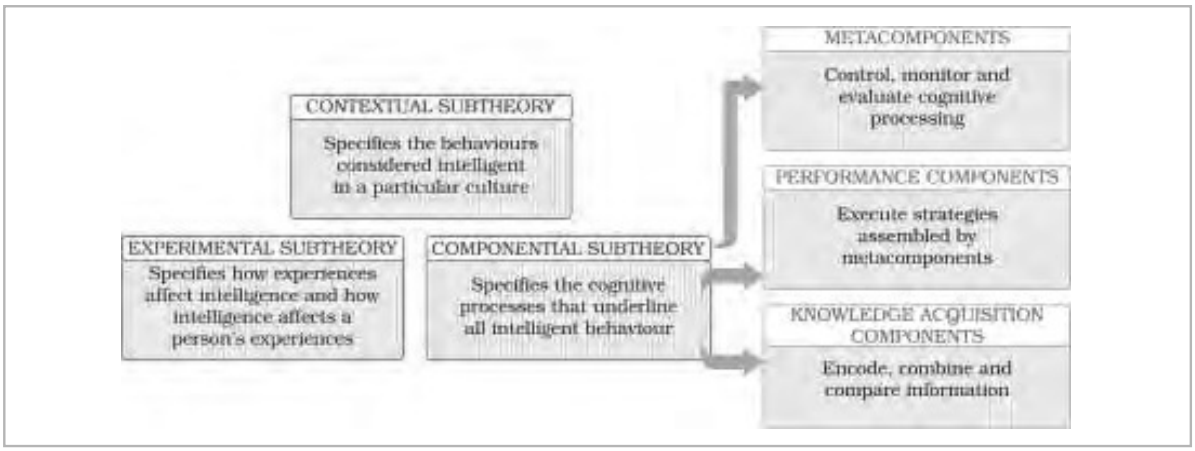


Fig.1.1 : Elements of Triarchic Theory of Intelligence

Contextual Intelligence : Contextual or practical intelligence involves the ability to deal with environmental demands encountered on a daily basis. It may be called *'street smartness'* or *'business sense'*. Persons high on this aspect easily adapt to their present environment or select a more favourable environment than the existing one, or modify the environment to fit their needs. Therefore, they turn out to be successful in life.

Sternberg's triarchic theory of intelligence represents the information-processing approach to understand intelligence.

Planning, Attention-arousal, and Simultaneous-successive (PASS) Model of Intelligence

This model has been developed by J.P. Das, Jack Naglieri, and Kirby (1994). According to this model, intellectual activity involves the interdependent functioning of three neurological systems, called the functional units of brain. These units are responsible for arousal/attention, coding or processing, and planning respectively.

Arousal/Attention : State of arousal is basic to any behaviour as it helps us in attending to stimuli. Arousal and attention enable a person to process information. An optimal level of arousal focuses our attention to the relevant aspects of a problem. Too much or too little arousal would interfere with attention. For instance, when you are told by your teacher about a test which s/he plans to hold, it would arouse you to attend to the specific chapters. Arousal forces you to focus your attention on reading, learning and revising the contents of the chapters.

Simultaneous and Successive Processing : You can integrate the information into your knowledge system either simultaneously or successively. Simultaneous processing takes place when you perceive the relations among various concepts and integrate them into a meaningful pattern for comprehension. For example, in Raven's Progressive Matrices (RPM) Test, a design is presented from which a part has been removed. You are required to choose one of the six options that best completes the design. Simultaneous processing helps you in grasping the meaning and relationship between the given abstract figures. Successive processing takes place when you remember all the information serially so that the recall of one leads to the recall of another. Learning of digits, alphabets, multiplication tables, etc. are examples of successive processing.

Planning : This is an essential feature of intelligence. After the information is attended to and processed, planning is activated. It allows us to think of the possible courses of action, implement them to reach a target, and evaluate their effectiveness. If a plan does not work, it is modified to suit the requirements of the task or situation. For example, to take the test scheduled by your teacher, you would have to set goals, plan a time schedule of study, get clarifications in case of problems and if you are not able to tackle the chapters assigned for the test, you may have to think of other ways (e.g., give more time, study with a friend, etc.) to meet your goals.

These PASS processes operate on a knowledge base developed either formally (by reading, writing, and experimenting) or informally from the environment. These processes are interactive and dynamic in nature; yet each has its own distinctive functions. Das and Naglieri have also developed a battery of tests, known as the **Cognitive Assessment System** (CAS). It consists of verbal as well as non-verbal tasks that measure basic cognitive functions presumed to be independent of schooling. The battery of tests is meant for individuals between 5 and 18 years of age.

The results of assessment can be used to remedy cognitive deficits of children with learning problems.

This model represents the information-processing approach to intelligence.

Individual Differences in Intelligence

Why are some people more intelligent than others? Is it due to their heredity, or is it due to the influence of environmental factors? You have already read about the influence of these factors in the development of an individual in Class XI.

Intelligence: Interplay of Nature and Nurture

The evidence for hereditary influences on intelligence comes mainly from studies on twins and adopted children. The intelligence of identical twins reared together correlate almost 0.90. Twins separated early in childhood also show considerable similarity in their intellectual, personality and behavioural characteristics. The intelligence of identical twins reared in different environments correlate 0.72, those of fraternal twins reared together correlate almost 0.60, and those of brothers and sisters reared together correlate about 0.50, while siblings reared apart correlate about 0.25. Another line of evidence comes from the studies of adopted children, which show that children's intelligence is more similar to their biological rather than adoptive parents.

With respect to the role of environment, studies have reported that as children grow in age, their intelligence level tends to move closer to that of their adoptive parents. Children from disadvantaged homes adopted into families with higher socio-economic status exhibit a large increase in their intelligence scores. There is evidence that environmental deprivation lowers intelligence while rich nutrition, good family background, and quality schooling increases intelligence. There is a general consensus among psychologists that intelligence is a product of complex interaction of heredity *(nature)* and environment *(nurture)*. Heredity can best be viewed as something that sets a range within which an individual's development is actually shaped by the support and opportunities of the environment.

Assessment of Intelligence

In 1905, Alfred Binet and Theodore Simon, made the first successful attempt to formally measure intelligence. In 1908, when the scale was revised, they gave the concept of **Mental Age** (MA), which is a measure of a person's intellectual development relative to people of her/his age group. A mental age of 5 means that a child's performance on an intelligence test equals the average performance level of a group of 5-year olds. **Chronological Age** (CA) is the biological age from birth. A bright child's MA is more than her/his CA; for a dull child, MA is below the CA. Retardation was defined by Binet and Simon as being two mental age years below the chronological age.

In 1912, William Stern, a German psychologist, devised the concept of **Intelligence Quotient** (IQ). IQ refers to *mental age divided by chronological age, and multiplied by 100.*

$$IQ = \frac{MA}{CA} \times 100$$

The number 100 is used as a multiplier to avoid the decimal point. When the MA equals the CA, the IQ equals 100. If MA is more than the CA, IQ is more than 100. IQ becomes less than 100 when the MA is less than the CA. For example, a 10-year-old child with a mental age of 12 would have an IQ of 120 (12/10 × 100),

Activity 1.3

'Intelligent' Numbers

(Computing IQ)

- *Find out the IQ of a 14-year-old child with a mental age of 16.*
- *Find out the mental age of a 12-year-old child with an IQ of 90.*

whereas the same child with an MA of 7 would have an IQ of 70 (7/10 × 100). The average IQ in the population is 100, irrespective of age.

IQ scores are distributed in the population in such a way that the scores of most people tend to fall in the middle range of the distribution. Only a few people have either very high or very low scores. The frequency distribution for the IQ scores tends to approximate a bell-shaped curve, called the **normal curve**. This type of distribution is symmetrical around the central value, called the mean. The distribution of IQ scores in the form of a normal distribution is shown in Figure 1.2.

The mean IQ score in a population is 100. People with IQ scores in the range of 90–110 have normal intelligence. Those with IQ below 70 are suspected to have 'mental retardation', while persons with IQ above 130 are considered to have exceptional talents. The IQ score of a person can be interpreted by referring to Table 1.1.

Table 1.1 : Classification of People on the Basis of IQ

IQ Range	*Descriptive Label*	*Per cent in the Population*
Above 130	Very superior	2.2
120 – 130	Superior	6.7
110 – 119	High average	16.1
90 – 109	Average	50.0
80 – 89	Low average	16.1
70 – 79	Borderline	6.7
Below 70	Mentally challenged/ retarded	2.2

All persons do not have the same intellectual capacity; some are exceptionally bright and some are below average. One practical use of intelligence test is to identify persons at the extremes of intellectual functioning. If you refer to Table 1.1, you will notice that about 2 per cent of the population have IQ above 130,

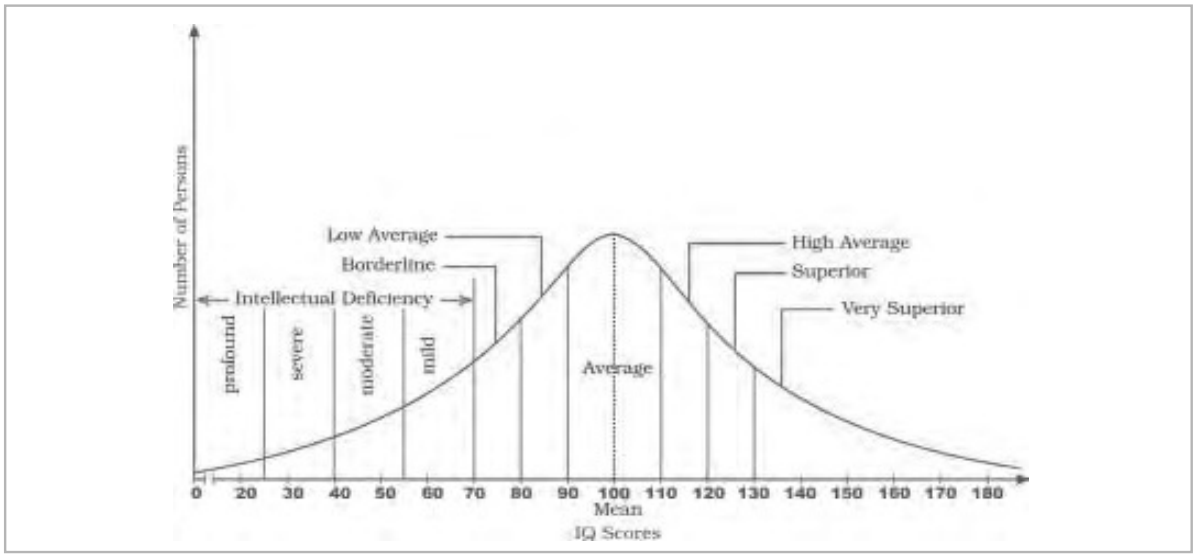


Fig.1.2 : Normal Curve Pattern Showing Distribution of IQ Scores in the Population

and a similar percentage have IQ below 70. The persons in the first group are called **intellectually gifted**; those in the second group are termed **mentally challenged** or **mentally retarded**. These two groups deviate considerably from the normal population in respect of their cognitive, emotional, and motivational characteristics.

Variations of Intelligence

Intellectual Deficiency

On the one hand are the gifted and creative persons we discussed briefly earlier. On the other hand, there are children who face enormous difficulty in learning even very simple skills. Those children who show intellectual deficiency are termed as 'mentally challenged' or 'mentally retarded'. As a group, there is wide variation among the mentally deficient or retarded. The American Association on Mental Deficiency (AAMD) views mental retardation as "*significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behaviour and manifested during the developmental period*". This definition points to three basic features. First, in order to be judged as mentally retarded, a person must show *significantly sub-average intellectual functioning*. Persons having IQs below 70 are judged to have sub-average intelligence. The second relates to *deficits in adaptive behaviour*. Adaptive behaviour refers to a person's capacity to be independent and deal effectively with one's environment. The third feature is that the deficits must be observed *during the developmental period*, that is between 0 and 18 years of age.

Individuals who are categorised as having mental retardation show significant variation in their abilities, ranging from those who can be taught to work and function with special attention, to those who cannot be trained and require institutional care throughout their lives. You have learnt earlier that the mean IQ score in the population is 100. These figures are used to understand the categories of mentally retarded. The different levels of retardation are: **mild retardation** (IQs 55–69), **moderate retardation** (IQs 40–54), **severe retardation** (IQs 25–39), and **profound retardation** (IQs below 25). Although the development of people with mild retardation is typically slower than that of their peers, they can function quite independently, hold jobs and families. As the level of retardation increases, the difficulties are strongly marked. The people with moderate retardation lag behind their peers in language and motor skills. They can be trained in self-care skills, and simple social and communication skills. They need to have moderate degree of supervision in everyday tasks. Individuals with profound and severe retardation are incapable of managing life and need constant care for their entire lives. You will read more about the characteristics of the mentally retarded/challenged in Chapter 4.

Intellectual Giftedness

Intellectually gifted individuals show higher performance because of their outstanding potentialities. The study of gifted individuals began in 1925, when Lewis Terman followed the lives of about 1500 children with IQs of 130 and above to examine how intelligence was related to occupational success and life adjustment. Although the terms '**talent**' and '**giftedness**' are often used interchangeably, they mean different things. **Giftedness** is exceptional general ability shown in superior performance in a wide variety of areas. **Talent** is a narrower term and refers to remarkable ability in a

specific field (e.g., spiritual, social, aesthetic, etc.). The highly talented are sometimes called 'prodigies'.

It has been suggested by psychologists that giftedness from the teachers' point of view depends on a combination of **high ability**, **high creativity**, and **high commitment**.

Gifted children show early signs of intellectual superiority. Even during infancy and early childhood, they show larger attention span, good recognition memory, preference for novelty, sensitivity to environmental changes, and early appearance of language skills. To equate giftedness with brilliant academic performance is not correct. Athletes who show superior psychomotor ability are also gifted. Each gifted student possesses different strengths, personalities and characteristics. Some important characteristics of gifted children are :

- Advanced logical thinking, questioning and problem solving behaviour.
- High speed in processing information.
- Superior generalisation and discrimination ability.
- Advanced level of original and creative thinking.
- High level of intrinsic motivation and self-esteem.
- Independent and non-conformist thinking.
- Preference for solitary academic activities for long periods.

Performance on intelligence tests is not the only measure for identifying the gifted. Many other sources of information, such as teachers' judgment, school achievement record, parents' interviews, peer and self-ratings, etc. can be used in combination with intellectual assessment. To reach their full potential, gifted children require special attention and different educational programmes beyond those provided to normal children in regular classrooms. These may include life enrichment programmes that can sharpen children's skills in productive thinking, planning, decision-making, and communication.

Types of Intelligence Tests

Intelligence tests are of several types. On the basis of their administration procedure, they can be categorised as individual or group tests. They can also be classified as either verbal or performance tests on the basis of the nature of items used. Depending upon the extent to which an intelligence test favours one culture over another, it can be judged as either culture-fair or culture-biased. You can choose a test depending on the purpose of your use.

Individual or Group Tests

An individual intelligence test is one which can be administered to one person at a time. A group intelligence test can be administered to several persons simultaneously. Individual tests require the test administrator to establish a rapport with the subject and be sensitive to her/his feelings, moods and expressions during the testing session. Group tests, however, do not allow an opportunity to be familiar with the subjects' feelings. Individual tests allow people to answer orally or in a written form or manipulate objects as per the tester's instructions. Group tests generally seek written answers usually in a multiple-choice format.

Verbal, Non-Verbal, or Performance Tests

An intelligence test may be fully verbal, fully non-verbal or fully performance-based, or it may consist of a mixture of items from each category. Verbal tests require subjects to give verbal responses either orally or in a written form. Therefore, verbal tests can be administered only to literate people. The non-verbal tests use

pictures or illustrations as test items. Raven's Progressive Matrices (RPM) Test is an example of a non-verbal test. In this test, the subject examines an incomplete pattern and chooses a figure from the alternatives that will complete the pattern. A specimen item from RPM is given in Figure 1.3.

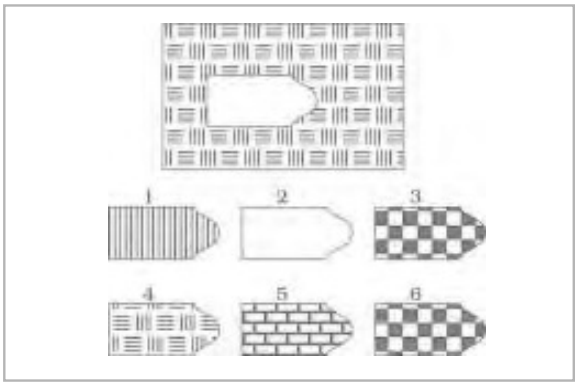


Fig.1.3 : An Item from Raven's Progressive Matrices Test

Performance tests require subjects to manipulate objects and other materials to perform a task. Written language is not necessary for answering the items. For example, Kohs' Block Design Test contains a number of wooden blocks. The subject is asked to arrange the blocks within a time period to produce a given design. A major advantage of performance tests is that they can be easily administered to persons from different cultures.

Culture-Fair or Culture-Biased Tests

Intelligence tests can be culture-fair or culture-biased. Many intelligence tests show a bias to the culture in which they are developed. Tests developed in America and Europe represent an urban and middle class cultural ethos. Hence, educated middle class white subjects generally perform well on those tests. The items do not respect the cultural perspectives of Asia and Africa. The norms for these tests are also drawn from western cultural groups. You may be already familiar with the concept of norms discussed in Class XI.

It is nearly impossible to design a test that can be applied equally meaningfully in all cultures. Psychologists have tried to develop tests that are culture-fair or culturally appropriate, i.e. one that does not discriminate against individuals belonging to different cultures. In such tests, items are constructed in a manner that they

Box 1.1

Some Misuses of Intelligence Tests

You might have learnt by now that intelligence tests serve many useful purposes such as selection, counselling, guidance, self-analysis, and diagnosis. Unless used by a trained investigator, they may be misused either intentionally or unintentionally. Some of the ill-effects of intelligence testing by naive testers are:

- Poor performance on a test may attach a stigma to children and thereby adversely affect their performance and self-respect.
- The tests may invite discriminating practices from parents, teachers and elders in the society.
- Administering a test biased in favour of the middle class and higher class populations may underestimate the IQ of children coming from disadvantaged sections of the society.
- Intelligence tests do not capture creative potentialities and practical side of intelligence, and they also do not relate much to success in life. Intelligence can be a potential factor for achievement in various spheres of life.

It is suggested that one should guard against erroneous practices associated with intelligence tests and take the help of trained psychologists to analyse an individual's strengths and weaknesses.

assess experiences common to all cultures or have questions in which language usage is not required. Non-verbal and performance tests help reduce the cultural bias usually associated with verbal tests.

Intelligence Testing in India

S.M. Mohsin made a pioneering attempt in constructing an intelligence test in Hindi in the 1930s. C.H. Rice attempted to standardise Binet's test in Urdu and Punjabi. At about the same time, Mahalanobis attempted to standardise Binet's test in Bengali. Attempts were also made by Indian researchers to develop Indian norms for some western tests including RPM, WAIS, Alexander's Passalong, Cube Construction, and Kohs' Block Design. Long and Mehta prepared a Mental Measurement Handbook listing out 103 tests of intelligence in India that were available in various languages. Since then, a number of tests have either been developed or adapted from western cultures. The National Library of Educational and Psychological Tests (NLEPT) at the National Council of Educational Research and Training (NCERT) has documented Indian tests. Critical reviews of Indian tests are published in the form of handbooks. NLEPT has brought out the handbooks in the area of intelligence, aptitude, personality, attitudes, and interests. Table 1.2 lists some tests developed in India. Among these, Bhatia's Battery of Performance Tests is quite popular.

Table 1.2 : Some Tests Developed in India

Verbal	*Performance*
• CIE Verbal Group Test of Intelligence by Uday Shankar • Group Test of General Mental Ability by S. Jalota • Group Test of Intelligence by Prayag Mehta • The Bihar Test of Intelligence by S.M. Mohsin • Group Test of Intelligence by Bureau of Psychology, Allahabad • Indian Adaptation of Stanford-Binet Test (Third Edition) by S.K. Kulshrestha • Test of General Mental Ability (Hindi) by M.C. Joshi.	• CIE Non-verbal Group Test of Intelligence • Bhatia's Battery of Performance Tests • Draw-a-Man Test by Pramila Pathak • Adaptation of Wechsler Adult Performance Intelligence Scale by R. Ramalingaswamy

CULTURE AND INTELLIGENCE

A major characteristic of intelligence is that it helps individuals to adapt to their environment. The cultural environment provides a context for intelligence to develop. Vygotsky, a Russian psychologist, has argued that culture provides a social context in which people live, grow, and understand the world around them. For example, in less technologically developed societies, social and emotional skills in relating to people are valued, while in technologically advanced societies, personal achievement founded on abilities of reasoning and judgment is considered to represent intelligence.

From your previous reading you know that *culture is a collective system*

of customs, beliefs, attitudes, and achievements in art and literature. A person's intelligence is likely to be tuned by these cultural parameters. Many theorists have regarded intelligence as attributes specific to the person without regard to their cultural background. The unique features of culture now find some representation in theories of intelligence. Sternberg's notion of contextual or practical intelligence implies that intelligence is a product of culture. Vygotsky also believed that cultures, like individuals, have a life of their own; they grow and change, and in the process specify what will be the end-product of successful intellectual development. According to him, while elementary mental functions (e.g., crying, attending to mother's voice, sensitivity to smells, walking, and running) are universal, the manner in which higher mental functions such as problem solving and thinking operate are largely culture-produced.

Technologically advanced societies adopt child rearing practices that foster skills of generalisation and abstraction, speed, minimal moves, and mental manipulation among children. These societies promote a type of behaviour, which can be called **technological intelligence**. In these societies, persons are well-versed in skills of attention, observation, analysis, performance, speed, and achievement orientation. Intelligence tests developed in western cultures look precisely for these skills in an individual.

Technological intelligence is not so valued in many Asian and African societies. The qualities and skills regarded as intelligent actions in non-western cultures are sharply different, though the boundaries are gradually vanishing under the influence of western cultures. In addition to cognitive competence that is very specific to the individual, the non-western cultures look for skills to relate to others in the society. Some non-western societies value self-reflection and collectivistic orientation as opposed to personal achievement and individualistic orientation.

Intelligence in the Indian Tradition

Contrary to technological intelligence, intelligence in the Indian tradition can be termed as **integral intelligence**, which gives emphasis on connectivity with the social and world environment. Indian thinkers view intelligence from a holistic perspective where equal attention is paid to cognitive and non-cognitive processes as well as their integration.

The Sanskrit word '*buddhi*' which is often used to represent intelligence is far more pervasive in scope than the western concept of intelligence. *Buddhi*, according to J.P. Das, includes such skills as mental effort, determined action, feelings, and opinions along with cognitive competence such as knowledge, discrimination, and understanding. Among other things, *buddhi* is the knowledge of one's own self based on conscience, will and desire. Thus, the notion of *buddhi* has affective and motivational components besides a strong cognitive component. Unlike the western views, which primarily focus on cognitive parameters, the following competencies are identified as facets of intelligence in the Indian tradition :

- **Cognitive capacity** (sensitivity to context, understanding, discrimination, problem solving, and effective communication).
- **Social competence** (respect for social order, commitment to elders, the young and the needy, concern about others, recognising others' perspectives).
- **Emotional competence** (self-regulation and self-monitoring of emotions, honesty, politeness, good conduct, and self-evaluation).

- **Entrepreneurial competence** (commitment, persistence, patience, hard work, vigilance, and goal-directed behaviours).

Emotional Intelligence

The notion of emotional intelligence broadens the concept of intelligence beyond the intellectual sphere/domain and considers that intelligence includes emotions. You may note that it builds on the concept of intelligence in the Indian tradition. **Emotional intelligence** is a set of skills that underlie accurate appraisal, expression, and regulation of emotions. It is the feeling side of intelligence. A good IQ and scholastic record is not enough to be successful in life. You may find many people who are academically talented, but are unsuccessful in their own life. They experience problems in family, workplace and interpersonal relationships. What do they lack? Some psychologists believe that the source of their difficulty may be a lack of emotional intelligence. This concept was first introduced by Salovey and Mayer who considered emotional intelligence as "*the ability to monitor one's own and other's emotions, to discriminate among them, and to use the information to guide one's thinking and actions*". **Emotional Quotient** (EQ) is used to express emotional intelligence in the same way as IQ is used to express intelligence.

In simple terms, emotional intelligence refers to the ability to process emotional information accurately and efficiently. To know the characteristics of persons who are high on emotional intelligence, read Box 1.2.

Emotional intelligence is receiving increasing attention of educators for dealing with students who are affected by stresses and challenges of the outside world. Programmes aimed at improving students' emotional intelligence have beneficial effects on their academic achievement. They encourage cooperative behaviour and reduce their antisocial activities. These programmes are very useful in preparing students to face the challenges of life outside the classroom.

Special Abilities

Aptitude : Nature and Measurement

By now you have learnt enough about intelligence. You may recall that intelligence tests assess a general mental ability. **Aptitude** refers to special abilities in a particular field of activity. *It is a combination of characteristics that indicates an individual's capacity to acquire some specific knowledge or skill after training.* We assess aptitude with the help of selected tests. The knowledge of aptitude can help us to predict an individual's future performance.

While assessing intelligence, psychologists often found that people with similar intelligence differed widely in acquiring certain knowledge or skills. You

Box 1.2

Characteristics of Emotionally Intelligent Persons

- Perceive and be sensitive to your feelings and emotions.
- Perceive and be sensitive to various types of emotions in others by noting their body language, voice and tone, and facial expressions.
- Relate your emotions to your thoughts so that you take them into account while solving problems and taking decisions.
- Understand the powerful influence of the nature and intensity of your emotions.
- Control and regulate your emotions and their expressions while dealing with self and others to achieve harmony and peace.

may observe in your class that there are certain areas in which some intelligent students do not do well. When you have a problem in mathematics, you may turn to Aman for help, and with similar difficulties in literature you may consult Avinash. You may request Shabnam to sing for your annual function, and may turn to John when facing a problem with your bike. These specific skills and abilities are called aptitudes. With proper training these abilities can be considerably enhanced.

In order to be successful in a particular field, a person must have both aptitude and interest. **Interest** is a preference for a particular activity; aptitude is the potentiality to perform that activity. A person may be interested in a particular job or activity, but may not have the aptitude for it. Similarly, a person may have the potentiality for performing a job, but may not be interested in doing that. In both cases, the outcome will not be satisfactory. A student with high mechanical aptitude and strong interest in engineering is more likely to be a successful mechanical engineer.

Aptitude tests are available in two forms: independent *(specialised)* aptitude tests and multiple *(generalised)* aptitude tests. Clerical Aptitude, Mechanical Aptitude, Numerical Aptitude, and Typing Aptitude are independent aptitude tests. Multiple Aptitude Tests exist in the form of test batteries, which measure aptitude in several separate but homogeneous areas. Differential Aptitude Tests (DAT), the General Aptitude Tests Battery (GATB), and the Armed Services Vocational Aptitude Battery (ASVAB) are well-known aptitude test batteries. Among these, DAT is most commonly used in educational settings. It consists of 8 independent subtests: (i) Verbal Reasoning, (ii) Numerical Reasoning, (iii) Abstract Reasoning, (iv) Clerical Speed and Accuracy, (v) Mechanical Reasoning, (vi) Space Relations, (vii) Spelling, and (viii) Language Usage. J.M. Ojha has developed an Indian adaptation of DAT. Several other aptitude tests have been developed in India for measuring scientific, scholastic, literary, clerical, and teaching aptitudes.

Creativity

In the foregoing sections, you have read that there are variations in psychological attributes like intelligence, aptitude, personality and so on. Here, you will learn that there are differences in the potential for creativity across individuals and the manner in which creativity is expressed. Some are highly creative and others are not so creative. Some may express creativity in writing, still others in dance, music, poetry, science and so on. Manifestations of creativity can be observed in a novel solution to a problem, an invention, composition of a poem, painting, new chemical process, an innovation in law, a breakthrough in preventing a disease and the like. Despite differences, one common element among these is the production of something new and unique.

We generally think of creativity in terms of creative persons like Tagore, Einstein, C.V. Raman, Ramanujan etc. who have made outstanding contributions in different spheres. In recent years, our understanding of creativity has broadened. Creativity is not just limited to a selected few — the artist, the scientist, the poet or the inventor. An ordinary individual who is engaged in simple occupations like pottery, carpentry, cooking, etc. can also be creative. However, it has been said that they are not working at the same level of creativity as an eminent scientist or a writer. Hence, we can say that individuals vary in terms of the level and the areas in which they exhibit creativity and that all may not be operating at the same level.

Einstein's theory of relativity is an example of the highest level of creativity which implies bringing out altogether new ideas, facts, theory, or a product. Another level of creativity is working on what has already been established earlier by way of modifications, by putting things in new perspectives or to new use.

Research literature suggests that children begin to develop their imagination during the early years of childhood but they express creativity mostly through physical activities and in non-verbal ways. When language and intellectual functions are fully developed and store of knowledge is adequately available, creativity is expressed through verbal modes too. Those who are outstanding in their creativity may give an indication about the direction in which their creativity lies through their self-chosen activities. In some cases, however, opportunities need to be provided before they can manifest their hidden potential for creativity.

How do we explain variations in the potential for creativity? As in the case of other mental and physical characteristics, such variations can be attributed to the complex interaction of heredity and environment. There is no disagreement that creativity is determined by both heredity and environment. Limits of the creative potential are set by heredity, environmental factors stimulate the development of creativity. How much of the creative potential can be realised, when and in what specific form and direction is largely determined by environmental factors such as motivation, commitment, family support, peer influences, training opportunities, etc. Although no amount of training can transform an average person to the level of Tagore, Shakespeare, etc. but it is also true that every individual can raise her/his level of creative potential beyond its present level. In this context, you have already read in Class XI about strategies to enhance creativity.

Creativity and Intelligence

One important debate in understanding the variations in creativity has been the relationship of creativity with intelligence.

Let us take an example of two students in a class. Sunita is regarded by her teachers as an excellent student. She does her work on time, scores the highest grades in her class, listens to instructions with care, grasps quickly, reproduces accurately but she rarely comes out with ideas which are her own. Rita is another student who is just average in her studies and has not achieved high grades consistently. She prefers to learn on her own. She improvises new ways of helping her mother at home and comes up with new ways of doing her work and assignments. The former is considered to be more intelligent and the latter as more creative. Thus, a person who has the ability to learn faster and reproduce accurately may be considered intelligent more than creative unless s/he devises new ways of learning and doing.

Terman, in the 1920s, found that persons with high IQ were not necessarily creative. At the same time, creative ideas could come from persons who did not have a very high IQ. Other researches have shown that not even one of those identified as gifted, followed up throughout their adult life, had become well-known for creativity in some field. Researchers have also found that both high and low level of creativity can be found in highly intelligent children and also children of average intelligence. The same person, thus, can be creative as well as intelligent but it is not necessary that intelligent ones, in the conventional sense, must be creative. Intelligence, therefore, by itself does not ensure creativity.

Researchers have found that the relationship between creativity and intelligence is positive. All creative acts require some minimum ability to acquire knowledge and capacity to comprehend, retain, and retrieve. Creative writers, for example, need facility in dealing with language. The artist must understand the effect that will be produced by a particular technique of painting, a scientist must be able to reason and so on. Hence, a certain level of intelligence is required for creativity but beyond that intelligence does not correlate well with creativity. It can be concluded that creativity can take many forms and blends. Some may have more of intellectual attributes, others may have more of attributes associated with creativity. But, what are the attributes of a creative person? You may like to discuss the attributes which are common to all kinds of creative persons.

Creativity tests came into existence to assess variations in terms of the potential for creativity in contrast to intelligence.

A general feature of most of the creativity tests is that they are open-ended. They permit the person to think of different answers to the questions or problems in terms of her/his experiences, whatever these may have been. These help the individual to go in different directions. There are no specified answers to questions or problems in creativity tests. Therefore, there is freedom to use one's imagination and express it in original ways. Creativity tests involve divergent thinking and assess such abilities as ability to produce a variety of ideas, i.e. ideas which are off-the-beaten track, ability to see new relationships between seemingly unrelated things, ability to guess causes and consequences, ability to put things in a new context, etc. This is contrary to the tests of intelligence which mostly involve convergent thinking. In tests of intelligence, the person has to think of the right solution to the problem and the focus is on assessing abilities such as memory, logical reasoning, accuracy, perceptual ability, and clear thinking. There is little scope for the expression of spontaneity, originality, and imagination.

Since expressions of creativity are varied, tests have been developed using different stimuli like words, figures, action, and sounds. These tests measure general creative thinking abilities like ability to think of a variety of ideas on a given topic/situation, alternative ways of looking at things, problems or situations, to guess causes and consequences, to think of unusual ideas to improve and to use common objects, ask unusual questions and so on. A few investigators have also developed tests of creativity in different areas such as literary creativity, scientific creativity, mathematical creativity, etc. Some of the famous psychologists who have developed creativity tests are Guilford, Torrance, Khatena, Wallach and Kogan, Paramesh, Baqer Mehdi, and Passi. Each test has a standardised procedure, a complete set of manual, and interpretation guide. These can be used only after extensive training in administration and interpretation of test scores.

Key Terms

Aptitude, Aptitude tests, Case study, Cognitive assessment system, Componential intelligence, Contextual intelligence, Creativity, Emotional intelligence, Culture-fair test, Experiential intelligence, g-factor, Individual differences, Intellectual giftedness, Intelligence, Intelligence tests, Intelligence quotient (IQ), Interest, Interview, Mental age (MA), Mental retardation, Observational method, Planning, Psychological test, Simultaneous processing, Situationism, Successive processing, Values.

Summary

- *Individuals vary in their physical and psychological characteristics. Individual differences refer to distinctiveness and variations in people's characteristics and behaviour patterns.*
- *A wide variety of personal attributes such as intelligence, aptitude, interests, personality, and values can be assessed. Psychologists assess these attributes through psychological tests, interviews, case studies, observations, and self-reports.*
- *The term 'intelligence' refers to an individual's capacity to understand the world, think rationally, and use resources effectively to meet the demands of life. Intellectual development is the product of a complex interplay of hereditary factors (nature), and environmental conditions (nurture).*
- *The psychometric approaches to intelligence lay emphasis on studying intelligence as a constellation of abilities, expressed in quantitative terms such as IQ. The more recent theories representing information-processing approaches, e.g. Sternberg's triarchic theory and Das's PASS model describe the processes underlying intelligent behaviour. Howard Gardner suggests that there are eight different kinds of intelligence.*
- *Intelligence is assessed with the help of specially designed tests. Intelligence tests may be of verbal or performance type; can be administered individually or in groups; and may be culturally-biased or culturally-fair. At the two extremes of intelligence are the intellectually deficient persons and the intellectually gifted.*
- *Culture provides a context for intellectual development. Western culture promotes 'technological intelligence' based on skills of analysis, performance, speed, and achievement orientation. In contrast, non-western cultures value self-reflection, social and emotional competence as signs of intelligent behaviour. Indian culture promotes 'integral intelligence' that emphasises connectivity with people and the larger social world.*
- *Emotional intelligence involves the ability to perceive and manage one's and other's feelings and emotions; to motivate oneself and restrain one's impulses; and to handle interpersonal relationships effectively.*
- *Aptitude refers to an individual's potential for acquiring some specific skills. Aptitude tests predict what an individual will be able to do given proper training and environment.*
- *Creativity is the ability to produce ideas, objects, or problem solutions that are novel, appropriate and useful. Certain level of intelligence is necessary to be creative, but a high level of intelligence, however, does not ensure that a person would certainly be creative.*

Review Questions

1. How do psychologists characterise and define intelligence?
2. To what extent is our intelligence the result of heredity (nature) and environment (nurture)? Discuss.
3. Explain briefly the multiple intelligences identified by Gardner.
4. How does the triarchic theory help us to understand intelligence?
5. "Any intellectual activity involves the independent functioning of three neurological systems". Explain with reference to PASS model.
6. Are there cultural differences in the conceptualisation of intelligence?
7. What is IQ? How do psychologists classify people on the basis of their IQ scores?
8. How can you differentiate between verbal and performance tests of intelligence?
9. All persons do not have the same intellectual capacity. How do individuals vary in their intellectual ability? Explain.
10. Which of the two, IQ or EQ, do you think would be more related to success in life and why?
11. How is 'aptitude' different from 'interest' and 'intelligence'? How is aptitude measured?
12. How is creativity related to intelligence?

Project Ideas

1. Observe and interview 5 persons in your neighbourhood in order to see how they differ from each other in terms of certain psychological attributes. Cover all the five domains. Prepare a psychological profile of each person and compare.
2. Select 5 vocations and gather information about the nature of work done by people in these vocations. Also analyse these vocations in terms of the types of psychological attributes required for successful performance. Write a report.

Weblinks

http://www.indiana.edu/~intell/anastasi.shtml
http://www.chiron.valdosta.edu/whuitt/col/cogsys/intell.html
http://www.humandimensions.org/emotion.htm
http://www.emotionaliq.com/Gdefault.htm
http://edweb.gsn.org/edref.mi.intro.html
http://www.talentsmart.com
http://www.kent.ac.uk/career/psychotests.com

Pedagogical Hints

1. To introduce the topic, teacher can initiate discussion on psychological constructs such as intelligence, personality, aptitude, values, etc. This would serve to point out the difficulty in arriving at one single, universal explanation of these constructs.
2. Teacher should draw from the experiences of the students to introduce the different psychological attributes discussed in the chapter.
3. Some sample items of various tests (to be collected by the teacher) can be given to students to generate their interest.
4. Encourage students to complete the activities and also to design activities on their own either individually or in groups. Initiate discussion in the class on observations made by students on completion of the activities.
5. Students should be encouraged to relate the concepts to their real-life experiences.

SELF AND PERSONALITY

2

After reading this chapter, you would be able to:

- describe the concept of self and learn some ways for self-regulation of behaviour,
- explain the concept of personality,
- differentiate between various approaches to the study of personality,
- develop insight into the development of a healthy personality, and
- describe some techniques for personality assessment.

CONTENTS

Introduction
Self and Personality
Concept of Self
Cognitive and Behavioural Aspects of Self
Self-esteem, Self-efficacy and Self-regulation
Culture and Self
Concept of Personality
Personality-related Terms (Box 2.1)
Major Approaches to the Study of Personality
Type Approaches
Trait Approaches
Five-Factor Model of Personality (Box 2.2)
Psychodynamic Approach
Behavioural Approach
Cultural Approach
Humanistic Approach
Who is a Healthy Person? (Box 2.3)
Assessment of Personality
Self-report Measures
Projective Techniques
Behavioural Analysis

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

Quite often you must have found yourself engaged in knowing and evaluating your own behaviour and that of others. You must have noticed how you react and behave in certain situations in a manner different from others? You may have also often asked questions about your relationships with others. To find an answer to some of these questions, psychologists use the notion of self. Similarly when we ask questions such as why people are different, how they make different meaning of events, and how they feel and react differently in similar situations (i.e. questions relating to variations in behaviour), the notion of personality comes into play. Both these concepts, i.e. self and personality are intimately related. Self, in fact, lies at the core of personality.

The study of self and personality helps us understand not only who we are, but also our uniqueness as well as our similarities with others. By understanding self and personality, we can understand our own as well as others' behaviour in diverse settings. Several thinkers have analysed the structure and function of self and personality. As a result, we have different theoretical perspectives on self and personality today. This chapter will introduce you to some basic aspects of self and personality. You will also learn some important theoretical approaches to self and personality, and certain methods of personality assessment.

Self and Personality

Self and personality refer to the characteristic ways in which we define our existence. They also refer to the ways in which our experiences are organised and show up in our behaviour. From common observation we know that different people hold different ideas about themselves. These ideas represent the self of a person. We also know that different people behave in different ways in a given situation, but the behaviour of a particular person from one situation to another generally remains fairly stable. Such a relatively stable pattern of behaviour represents the "personality" of that person. Thus, different persons seem to possess different personalities. These personalities are reflected in the diverse behaviour of persons.

Concept of Self

From your childhood days, you may have spent considerable time thinking about who you are, and how you are different from others. By now, you already may have developed some ideas about yourself, although you may not be aware of it. Let us try to have some preliminary notion of our self (i.e. who are we?) by completing Activity 2.1.

How easy was it for you to complete these sentences? How much time did you take? Perhaps it was not as easy as you may have thought at first. While working on it, you were describing your 'self'. You are aware of your 'self' in the same way as you are aware of various objects in your surrounding environment, such as a chair or a table in your room. A newly born child has no idea of its self. As a child grows

older, the idea of self emerges and its formation begins. Parents, friends, teachers and other significant persons play a vital role in shaping a child's ideas about self. Our interaction with other people, our experiences, and the meaning we give to them, serve as the basis of our self. The structure of self is modifiable in the light of our own experiences and the experiences we have of other people. This you will notice if you exchange the list you completed under Activity 2.1 with your other friends.

Activity 2.1

Understanding the Self

Please complete the following sentences starting with "I am".

Time Now.....

I am.....
I am.....
I am.....
I am.....
I am.....
I am.....
I am.....
I am.....
I am.....
I am.....

Time when you finished.....

Notice what they have done. You will find that they have produced a fairly long list of attributes about how they identify themselves. The attributes they have used for identification tell us about their personal as well as social or cultural identities. **Personal identity** refers to those attributes of a person that make her/him different from others. When a person describes herself/himself by telling her/his name (e.g., I am Sanjana or Karim), or her/his qualities or characteristics (e.g., I am honest or hardworking person), or her/his potentialities or capabilities (e.g., I am a singer or dancer), or her/his beliefs (e.g., I am a believer in God or destiny), s/he is disclosing her/his personal identity. **Social identity** refers to those aspects of a person that link her/him to a social or cultural group or are derived from it. When someone says that s/he is a Hindu or a Muslim, a Brahmin or an *adivasi* or a North Indian or a South Indian, or something like these, s/he is trying to indicate her/his social identity. These descriptions characterise the way people mentally represent themselves as a person. Thus, *self refers to the totality of an individual's conscious experiences, ideas, thoughts and feelings with regard to herself or himself.* These experiences and ideas define the existence of an individual both at the personal and at social levels.

Self as Subject and Self as Object

If you return to your friends' descriptions in Activity 2.1, you will find that they have described themselves either as an entity that does something (e.g., I am a dancer) or as an entity on which something is done (e.g., I am one who easily gets hurt). In the former case, the self is described as a '*subject*' (who does something); in the latter case, the self is described as an '*object*' (which gets affected).

This means that self can be understood as a subject as well as an object. When you say, "I know who I am", the self is being described as a 'knower' as well as something that can be 'known'. As a subject (actor) the self actively engages in the process of knowing itself. As an object (consequence) the self gets observed and comes to be known. This dual status of self should always be kept in mind.

Kinds of Self

There are several kinds of self. They get formed as a result of our interactions with our physical and socio-cultural environments. The first elements of self may be noticed when a newborn child cries

for milk when it is hungry. Although, this cry is based on reflex, this later on leads to development of awareness that 'I am hungry'. This biological self in the context of socio-cultural environment modifies itself. While you may feel hungry for a chocolate, an Eskimo may not.

A distinction is made between 'personal' and 'social' self. The **personal self** leads to an orientation in which one feels primarily concerned with oneself. We have talked above how our biological needs lead to the development of a 'biological self'. But, soon a child's psychological and social needs in the context of her/his environment lead other components of personal self to emerge. Emphasis comes to be laid on those aspects of life that relate only to the concerned person, such as personal freedom, personal responsibility, personal achievement, or personal comforts. The **social self** emerges in relation with others and emphasises such aspects of life as cooperation, unity, affiliation, sacrifice, support or sharing. This self values family and social relationships. Hence, it is also referred to as **familial** or **relational self**.

Cognitive and Behavioural Aspects of Self

Psychologists from all parts of the world have shown interest in the study of self. These studies have brought out many aspects of our behaviour related to self. As indicated earlier, all of us carry within us a sense of who we are and what makes us different from everyone else. We cling to our personal and social identities and feel safe in the knowledge that it remains stable in our lifetime.

The way we perceive ourselves and the ideas we hold about our competencies and attributes is also called **self-concept**. At a very general level, this view of oneself is, overall, either positive or negative. At a more specific level, a person may have a very positive view of her/his athletic bravery, but a negative view of her/his academic talents. At an even more specific level, one may have a positive self-concept about one's reading ability but a negative one about one's mathematical skills. Finding out an individual's self-concept is not easy. The most frequently used method involves asking the person about herself/himself.

Self-esteem

Self-esteem is an important aspect of our self. *As persons we always make some judgment about our own value or worth.* This value judgment of a person about herself/himself is called **self-esteem**. Some people have high self-esteem, whereas others may have low self-esteem. In order to assess self-esteem we present a variety of statements to a person, and ask her/him to indicate the extent to which those statements are true for her or him. For example, we may ask a child to indicate the extent to which statements such as "I am good at homework", or "I am the one usually chosen for the games", or "I am highly liked by my peers", are true of her/him. If a child reports these statements to be true for her/him, her/his self-esteem will be high in comparison to someone who says "no".

Studies indicate that by the age of 6 to 7 years, children seem to have formed self-esteem at least in four areas: *academic competence, social competence, physical/athletic competence,* and *physical appearance,* which become more refined with age. Our capacity to view ourselves in terms of stable dispositions permits us to combine separate self-evaluations into a general psychological image of ourselves. This is known as an overall sense of self-esteem.

Self-esteem shows a strong relationship with our everyday behaviour. For example,

children with high academic self-esteem perform better in schools than those with low academic self-esteem, and children with high social self-esteem are more liked by their peers than those with low social self-esteem. On the other hand, children with low self-esteem in all areas are often found to display anxiety, depression, and increasing antisocial behaviour. Studies have shown that warm and positive parenting helps in the development of high self-esteem among children as it allows them to know that they are accepted as competent and worthwhile. Children, whose parents help or make decisions for them even when they do not need assistance, often suffer from low self-esteem.

Self-efficacy

Self-efficacy is another important aspect of our self. People differ in the extent to which they believe they themselves control their life outcomes or the outcomes are controlled by luck or fate or other situational factors, e.g. passing an examination. A person who believes that s/he has the ability or behaviours required by a particular situation demonstrates high self-efficacy.

The notion of self-efficacy is based on Bandura's social learning theory. Bandura's initial studies showed that children and adults learned behaviour by observing and imitating others. People's expectations of mastery or achievement and their convictions about their own effectiveness also determine the types of behaviour in which they would engage, as also the amount of risk they would undertake. A strong sense of self-efficacy allows people to select, influence, and even construct the circumstances of their own life. People with a strong sense of self-efficacy also feel less fearful.

Self-efficacy can be developed. People with high self-efficacy have been found to stop smoking the moment they decide to do so. Our society, our parents and our own positive experiences can help in the development of a strong sense of self-efficacy by presenting positive models during the formative years of children.

Self-regulation

Self-regulation refers to *our ability to organise and monitor our own behaviour.* People, who are able to change their behaviour according to the demands of the external environment, are high on self-monitoring.

Many situations of life require resistance to situational pressures and control over ourselves. This becomes possible through what is commonly known as 'will power'. As human beings we can control our behaviour the way we want. We often decide to delay or defer the satisfaction of certain needs. Learning to delay or defer the gratification of needs is called **self-control**. Self-control plays a key role in the fulfilment of long-term goals. Indian cultural tradition provides us with certain effective mechanisms (e.g., fasting in *vrata* or *roza* and non-attachment with worldly things) for developing self-control.

A number of psychological *techniques of self-control* have also been suggested. **Observation of own behaviour** is one of them. This provides us with necessary information that may be used to change, modify, or strengthen certain aspects of self. **Self-instruction** is another important technique. We often instruct ourselves to do something and behave the way we want to. Such instructions are quite effective in self-regulation. **Self-reinforcement** is the third technique. This involves rewarding behaviours that have pleasant outcomes. For example, you may go to see a movie with friends, if you have done well in an examination. These techniques have been

tried out and found quite effective with respect to self-regulation and self-control.

Culture and Self

Several aspects of self seem to be linked to the characteristic features of the culture in which an individual lives. Analysis of self carried out in the Indian cultural context reveals a number of important features that are distinct from those found in the Western cultural context.

The most important distinction between the Indian and the Western views is the way the boundary is drawn between the self and the other. In the Western view, this boundary appears to be relatively fixed. The Indian view of self, on the other hand, is characterised by the shifting nature of this boundary. Thus, our self at one moment of time expands to fuse with the cosmos or include the others. But at the next moment, it seems to be completely withdrawn from it and focused fully on individual self (e.g., our personal needs or goals). The Western view seems to hold clear dichotomies between self and other, man and nature, subjective and objective. The Indian view does not make such clear dichotomies. Figure 2.1 illustrates this relationship.

In the Western culture, the self and the group exist as two different entities with clearly defined boundaries. Individual members of the group maintain their individuality. In the Indian culture, the self is generally not separated from one's own group; rather both remain in a state of harmonious co-existence. In the Western culture, on the other hand, they often remain at a distance. That is why many Western cultures are characterised as *individualistic*, whereas many Asian cultures are characterised as *collectivistic*.

Concept of Personality

The term 'personality' often appears in our day-to-day discussion. The literal meaning of personality is derived from the Latin word **persona**, the mask used by actors in the Roman theatre for changing their facial make-up. After putting on the mask, audience expected the person to perform a role in a particular manner. It did not, however, mean that the person enacting the given role necessarily possessed those qualities.

For a layperson, personality generally refers to the physical or external appearance of an individual. For example, when we find someone 'good-looking', we often assume that the person also has a charming personality. This notion of personality is based on superficial impressions, which may not be correct.

In psychological terms, **personality** *refers to our characteristic ways of*

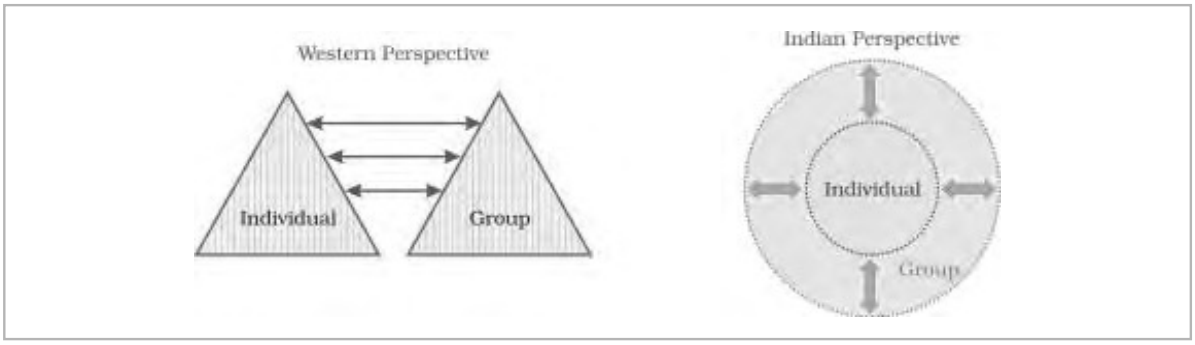


Fig.2.1 : Self and Group Boundaries in Western and Indian Cultural Perspectives

responding to individuals and situations. People can easily describe the way in which they respond to various situations. Certain catchwords (e.g., shy, sensitive, quiet, concerned, warm, etc.) are often used to describe personalities. These words refer to different components of personality. In this sense, personality refers to unique and relatively stable qualities that characterise an individual's behaviour across different situations over a period of time.

If you watch closely, you will find that people do show variations in their behaviour. One is not always cautious or impulsive, shy or friendly. Personality characterises individuals as they appear in most circumstances. Consistency in behaviour, thought and emotion of an individual across situations and across time periods characterises her/his personality. For example, an honest person is more likely to remain honest irrespective of time or situation. However, situational variations in behaviour do occur as they help individuals in adapting to their environmental circumstances.

In brief, personality is characterised by the following features:

1. It has both physical and psychological components.
2. Its expression in terms of behaviour is fairly unique in a given individual.
3. Its main features do not easily change with time.
4. It is dynamic in the sense that some of its features may change due to internal or external situational demands. Thus, personality is adaptive to situations.

Once we are able to characterise someone's personality, we can predict how that person will probably behave in a variety of circumstances. An understanding of personality allows us to deal with people in realistic and acceptable ways. For example, if you find a child who does not like orders, the most effective way to deal with that child will be not to give orders, but to present a set of acceptable alternatives from which the child may choose. Similarly, a child who has feelings of inferiority needs to be treated differently from a child who is self-confident.

Several other terms are used to refer to behavioural characteristics of individuals. Quite often they are used as synonyms of personality. Some of these terms are given in Box 2.1 along with their defining features. You may read them carefully to appreciate how they are different from the notion of personality.

Major Approaches to the Study of Personality

Psychologists interested in the study of personality, try to answer certain questions about the nature and origin of individual differences in personality. You may have observed that two children in the same family develop dramatically different personalities. Not only they look physically

Personality-related Terms

Box 2.1

Temperament: Biologically based characteristic way of reacting.

Trait: Stable, persistent and specific way of behaving.

Disposition: Tendency of a person to react to a given situation in a particular way.

Character: The overall pattern of regularly occurring behaviour.

Habit: Over learned modes of behaving.

Values: Goals and ideals that are considered important and worthwhile to achieve.

different, but they also behave differently in different situations. These observations often generate curiosity and force us to ask: "Why is it that some people react differently in a given situation than others do? Why is it that some people enjoy adventurous activities, while others like reading, watching television or playing cards? Are these differences stable all through one's life, or are they just short-lived and situation-specific?"

A number of approaches and theories have been developed to understand and explain behavioural differences among individuals, and behavioural consistencies within an individual. These theories are based on different models of human behaviour. Each throws light on some, but not all, aspects of personality.

Psychologists distinguish between type and trait approaches to personality. The **type approaches** attempts to comprehend human personality by examining certain broad patterns in the observed behavioural characteristics of individuals. Each behavioural pattern refers to one type in which individuals are placed in terms of the similarity of their behavioural characteristics with that pattern. In contrast, the **trait approach** focuses on the specific psychological attributes along which individuals tend to differ in consistent and stable ways. For example, one person may be less shy, whereas another may be more; or one person may be less friendly, whereas another may be more. Here "shyness" and "friendliness" represent traits along which individuals can be rated in terms of the degree of presence or absence of the concerned behavioural quality or a trait. The **interactional approach** holds that situational characteristics play an important role in determining our behaviour. People may behave as dependent or independent not because of their internal personality trait, but because of external rewards or threats available in a particular situation. The cross-situational consistency of traits is found to be quite low. The compelling influence of situations can be noted by observing people's behaviour in places like a market, a courtroom, or a place of worship.

Type Approaches

As we explained above, personality types are used to represent and communicate a set of expected behaviours based on similarities. Efforts to categorise people into personality types have been made since ancient times. The Greek physician Hippocrates had proposed a typology of personality based on fluid or humour. He classified people into four types (i.e., *sanguine, phlegmatic, melancholic* and *choleric*); each characterised by specific behavioural features.

In India also, *Charak Samhita,* a famous treatise on *Ayurveda,* classifies people into the categories of *vata, pitta* and *kapha* on the basis of three humoural elements called *tridosha*. Each refers to a type of temperament, called *prakriti* (basic nature) of a person. Apart from this, there is also a typology of personality based on the *trigunas*, i.e. *sattva*, *rajas*, and *tamas*. *Sattva guna* includes attributes like cleanliness, truthfulness, dutifulness, detachment, discipline, etc. *Rajas guna* includes intensive activity, desire for sense gratification, dissatisfaction, envy for others, and a materialistic mentality, etc. *Tamas guna* characterises anger, arrogance, depression, laziness, feeling of helplessness, etc. All the three *gunas* are present in each and every person in different degrees. The dominance of one or the other *guna* may lead to a particular type of behaviour.

Within psychology, the personality types given by Sheldon are fairly well-known. Using body build and temperament as the main basis, Sheldon proposed the

Endomorphic, **Mesomorphic**, and **Ectomorphic** typology. The endomorphs are fat, soft and round. By temperament they are relaxed and sociable. The mesomorphs have strong musculature, are rectangular with a strong body build. They are energetic and courageous. The ectomorphs are thin, long and fragile in body build. They are brainy, artistic and introvert.

Let us remember that these body typologies are simple, and have limited use in predicting behaviour of individuals. They are more like stereotypes which people hold.

Jung has proposed another important typology by grouping people into *introverts* and *extraverts.* This is widely recognised. According to this typology, introverts are people who prefer to be alone, tend to avoid others, withdraw themselves in the face of emotional conflicts, and are shy. Extraverts, on the other hand, are sociable, outgoing, drawn to occupations that allow dealing directly with people, and react to stress by trying to lose themselves among people and social activity.

In recent years, Friedman and Rosenman have classified individuals into Type-A and Type-B personalities. The two researchers were trying to identify psychosocial risk factors when they discovered these types. People characterised by **Type-A** *personality* seem to possess high motivation, lack patience, feel short of time, be in a great hurry, and feel like being always burdened with work. Such people find it difficult to slow down and relax. People with Type-A personality are more susceptible to problems like hypertension and coronary heart disease (CHD). The risk of developing CHD with Type-A personality is sometimes even greater than the risks caused by high blood pressure, high cholesterol levels, or smoking. Opposite to this is the **Type-B** *personality,* which can be understood as *the absence of Type-A traits.* This typology has been further extended. Morris has suggested a **Type-C** *personality*, which is prone to cancer. Individuals characterised by this personality are cooperative, unassertive and patient. They suppress their negative emotions (e.g., anger), and show compliance to authority. More recently, a **Type-D** *personality* has been suggested, which is characterised by proneness to depression.

Personality typologies are usually very appealing, but are too simplistic. Human behaviour is highly complex and variable. Assigning people to a particular personality type is difficult. People do not fit into such simple categorisation schemes so neatly.

Trait Approaches

These theories are mainly concerned with the description or characterisation of basic components of personality. They try to discover the 'building blocks' of personality. Human beings display a wide range of variations in psychological attributes, yet it is possible to club them into smaller number of personality traits. Trait approach is very similar to our common experience in everyday life. For example, when we come to know that a person is *sociable*, we assume that s/he will not only be cooperative, friendly and helping, but also engage in behaviours that involve other social components. Thus, trait approach attempts to identify primary characteristics of people. A trait is considered as a relatively enduring attribute or quality on which one individual differs from another. They include a range of possible behaviours that are activated according to the demands of the situation.

To summarise, (a) traits are relatively stable over time, (b) they are generally consistent across situations, and (c) their strengths and combinations vary across

individuals leading to individual differences in personality.

A number of psychologists have used traits to formulate their theories of personality. We will discuss some important theories.

Allport's Trait Theory

Gordon Allport is considered the pioneer of trait approach. He proposed that individuals possess a number of traits, which are dynamic in nature. They determine behaviour in such a manner that an individual approaches different situations with similar plans. The traits integrate stimuli and responses which otherwise look dissimilar. Allport argued that the words people use to describe themselves and others provide a basis for understanding human personality. He analysed the words of English language to look for traits which describe a person. Allport, based on this, categorised traits into *cardinal, central,* and *secondary*. **Cardinal traits** are highly generalised dispositions. They indicate the goal around which a person's entire life seems to revolve. Mahatma Gandhi's non-violence and Hitler's Nazism are examples of cardinal traits. Such traits often get associated with the name of the person so strongly that they derive such identities as the 'Gandhian' or 'Hitlerian' trait. Less pervasive in effect, but still quite generalised dispositions, are called **central traits**. These traits (e.g., warm, sincere, diligent, etc.) are often used in writing a testimonial or job recommendation for a person. The least generalised characteristics of a person are called **secondary traits**. Traits such as 'likes mangoes' or 'prefers ethnic clothes' are examples of secondary traits.

While Allport acknowledged the influence of situations on behaviour, he held that the way a person reacts to given situations depends on her/his traits, although people sharing the same traits might express them in different ways. Allport considered traits more like intervening variables that occur between the stimulus situation and response of the person. This meant that any variation in traits would elicit a different response to the same situation.

Cattell: Personality Factors

Raymond Cattell believed that there is a common structure on which people differ from each other. This structure could be determined empirically. He tried to identify the primary traits from a huge array of descriptive adjectives found in language. He applied a statistical technique, called **factor analysis**, to discover the common structures. He found 16 primary or source traits. The **source traits** are stable, and are considered as the building blocks of personality. Besides these, there are also a number of **surface traits** that result out of the interaction of source traits. Cattell described the source traits in terms of opposing tendencies. He developed a test, called **Sixteen Personality Factor Questionnaire (16PF)**, for the assessment of personality. This test is widely used by psychologists.

Eysenck's Theory

H.J. Eysenck proposed that personality could be reduced into two broad dimensions. These are biologically and genetically based. Each dimension subsumes a number of specific traits. These dimensions are:

(1) *Neuroticism vs. emotional stability* : It refers to the degree to which people have control over their feelings. At one extreme of the dimension, we find people who are neurotic. They are anxious, moody, touchy, restless and quickly lose control. At the other

Five-Factor Model of Personality

Box 2.2

The controversy regarding the number of basic personality traits has taken an interesting turn in recent years. Paul Costa and Robert McCrae have examined all possible personality traits. The findings indicate a set of five factors. They are often called **Big Five Factors**. These factors include:

1. *Openness to experience* : Those who score high on this factor are imaginative, curious, open to new ideas, and interested in cultural pursuits. In contrast, those who score low are rigid.
2. *Extraversion* : It characterises people who are socially active, assertive, outgoing, talkative, and fun loving. On its opposite are people who are shy.
3. *Agreeableness* : This factor characterises people who are helpful, co-operative, friendly, caring, and nurturing. On the opposite are people who are hostile and self-centered.
4. *Neuroticism* : People who score high on this factor are emotionally unstable, anxious, worried, fearful, distressed, irritable and hypertensive. On the opposite side are people who are well adjusted.
5. *Conscientiousness* : Those who score high on this factor are achievement-oriented, dependable, responsible, prudent, hardworking and self-controlled. On the opposite are people who are impulsive.

This five factor 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. Hence, it is now considered to be the most promising empirical approach to the study of personality.

extreme lie people who are calm, even-tempered, reliable and remain under control.

(2) *Extraversion vs. introversion* : It refers to the degree to which people are socially outgoing or socially withdrawn. At one extreme are those who are active, gregarious, impulsive and thrill-seeking. At the other extreme are people who are passive, quiet, cautious and reserved.

In a later work Eysenck proposed a third dimension, called *Psychoticism vs. Sociability,* which is considered to interact with the other two dimensions mentioned above. A person who scores high on psychoticism dimension tends to be hostile, egocentric, and antisocial. **Eysenck Personality Questionnaire** is the test which is used for studying these dimensions of personality.

The trait approach is very popular and many advances in this respect are taking place. These are beyond the scope of your present studies. A new formulation has also been advanced that provides a novel scheme of organising traits. This new formulation is given in Box 2.2.

Activity 2.2

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

Psychodynamic Approach

This is a highly popular approach to studying personality. This view owes largely to the contributions of Sigmund Freud. He was a physician, and developed this theory in the course of his clinical practice. Early in his career he used

hypnosis to treat people with physical and emotional problems. He noted that many of his patients needed to talk about their problems, and having talked about them, they often felt better. Freud used *free association* (a method in which a person is asked to openly share all the thoughts, feelings and ideas that come to her/his mind), *dream analysis*, and *analysis of errors* to understand the internal functioning of the mind.

Levels of Consciousness

Freud's theory considers the sources and consequences of emotional conflicts and the way people deal with these. In doing so, it visualises the human mind in terms of **three levels of consciousness**. The first level is **conscious**, which includes the thoughts, feelings and actions of which people are aware. The second level is **preconscious**, which includes mental activity of which people may become aware only if they attend to it closely. The third level is **unconscious**, which includes mental activity that people are unaware of.

According to Freud, the unconscious is a reservoir of instinctive or animal drives. It also stores all ideas and wishes that are concealed from conscious awareness, perhaps, because they lead to psychological conflicts. Most of these arise from sexual desires which cannot be expressed openly and therefore are repressed. People constantly struggle to find either some socially acceptable ways to express unconscious impulses, or to keep those impulses away from being expressed. Unsuccessful resolution of conflicts results in abnormal behaviour. Analysis of forgetting, mispronunciations, jokes and dreams provide us with a means to approach the unconscious. Freud developed a therapeutic procedure, called **psychoanalysis**. The basic goal of psychoanalytic therapy is to bring the repressed unconscious materials to consciousness, thereby helping people to live in a more self-aware and integrated manner.

Structure of Personality

According to Freud's theory, the primary structural elements of personality are three, i.e. **id**, **ego**, and **superego**. They reside in the unconscious as forces, and they can be inferred from the ways people behave (see Fig. 2.2). Let us remember that id, ego and superego are concepts, not real physical structures. We will discuss these terms in some detail.

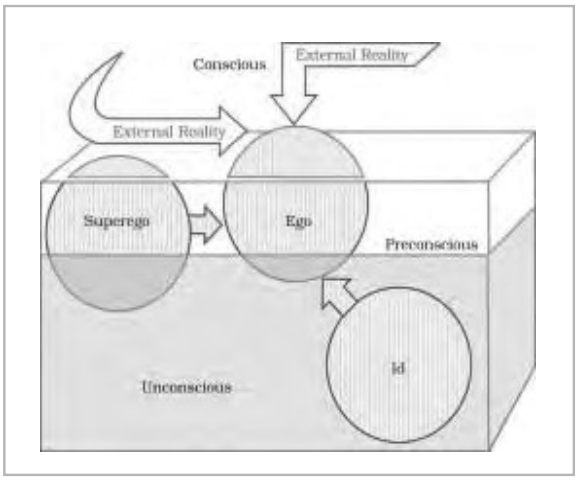


Fig.2.2 : Structure of Personality in Freudian Theory

Id : It is the source of a person's instinctual energy. It deals with immediate gratification of primitive needs, sexual desires and aggressive impulses. It works on the **pleasure principle**, which assumes that people seek pleasure and try to avoid pain. Freud considered much of a person's instinctual energy to be sexual, and the rest as aggressive. Id does not care for moral values, society, or other individuals.

Ego : It grows out of id, and seeks to satisfy an individual's instinctual needs in

accordance with reality. It works by the **reality principle**, and often directs the id towards more appropriate ways of behaving. For example, the id of a boy, who wants an ice-cream cone, tells him to grab the cone and eat it. His ego tells him that if he grabs the cone without asking, he may be punished. Working on the reality principle, the boy knows that the best way to achieve gratification is to ask for permission to eat the cone. Thus, while the id is demanding, unrealistic and works according to pleasure principle, the ego is patient, reasonable, and works by the reality principle.

Superego : The best way to characterise the superego is to think of it as the moral branch of mental functioning. The superego tells the id and the ego whether gratification in a particular instance is ethical. It helps control the id by internalising the parental authority through the process of socialisation. For example, if a boy sees and wants an ice-cream cone and asks his mother for it, his superego will indicate that his behaviour is morally correct. This approach towards obtaining the ice-cream will not create guilt, fear or anxiety in the boy.

Thus, in terms of individual functioning Freud thought of the unconscious as being composed of three competing forces. In some people, the id is stronger than the superego; in others, it is the superego. The relative strength of the id, ego and superego determines each person's stability. Freud also assumed that id is energised by two instinctual forces, called **life instinct** and **death instinct**. He paid less attention to the death instinct and focused more on the life (or sexual) instinct. The instinctual life force that energises the id is called **libido**. It works on the pleasure principle, and seeks immediate gratification.

Ego Defence Mechanisms

According to Freud, much of human behaviour reflects an attempt to deal with or escape from anxiety. Thus, how the ego deals with anxiety largely determines how people behave. Freud believed that people avoid anxiety mainly by developing defence mechanisms that try to defend the ego against the awareness of the instinctual needs. Thus, **defence mechanism** is a way of reducing anxiety by distorting reality. Although some defence against anxiety is normal and adaptive, people who use these mechanisms to such an extent that reality is truly distorted develop various forms of maladjustment.

Freud has described many different kinds of defence mechanisms. The most important is **repression**, in which anxiety-provoking behaviours or thoughts are totally dismissed by the unconscious. When people repress a feeling or desire, they become totally unaware of that wish or desire. Thus, when a person says, "I do not know why I did that", some repressed feeling or desire is expressing itself.

Other major defence mechanisms are projection, denial, reaction formation and rationalisation. In **projection**, people attribute their own traits to others. Thus, a person who has strong aggressive tendencies may see other people as acting in an excessively aggressive way towards her/him. In **denial**, a person totally refuses to accept reality. Thus, someone suffering from HIV/AIDS may altogether deny her/his illness. In **reaction formation**, a person defends against anxiety by adopting behaviours opposite to her/his true feelings. A person with strong sexual urges, who channels her/his energy into religious fervour, presents a classical example of reaction formation. In **rationalisation**, a person tries to make unreasonable feelings or behaviour seem reasonable and acceptable. For example, when a student

buys a set of new pens after doing poorly in an examination, s/he may try to rationalise her/his behaviour by asserting, "I will do much better with these pens".

People who use defence mechanisms are often unaware of doing so. Each defence mechanism is a way for the ego to deal with the uncomfortable feelings produced by anxiety. However, Freud's ideas about the role of defence mechanisms have been questioned. For example, his claim that projection reduces anxiety and stress has not found support in several studies.

Stages of Personality Development

Freud claims that the core aspects of personality are established early, remain stable throughout life, and can be changed only with great difficulty. He proposed a **five-stage theory** of personality (also called *psychosexual*) development. Problems encountered at any stage may arrest development, and have long-term effect on a person's life. A brief description of these stages is given here.

Oral Stage : A newborn's instincts are focused on the mouth. This is the infant's primary pleasure seeking centre. It is through the mouth that the baby obtains food that reduces hunger. The infant achieves oral gratification through feeding, thumb sucking, biting and babbling. It is during these early months that people's basic feelings about the world are established. Thus, for Freud, an adult who considers the world a bitter place probably had difficulty during the oral stage of development.

Anal Stage : It is found that around ages two and three the child learns to respond to some of the demands of the society. One of the principal demands made by parents is that the child learns to control the bodily functions of urination and defecation. Most children at this age experience pleasure in moving their bowels. The anal area of the body becomes the focus of certain pleasurable feelings. This stage establishes the basis for conflict between the id and the ego, and between the desire for babyish pleasure and demand for adult, controlled behaviour.

Phallic Stage : This stage focuses on the genitals. At around ages four and five children begin to realise the differences between males and females. They become aware of sexuality and the sexual relationship between their parents. During this stage, the male child experiences the **Oedipus Complex**, which involves love for the mother, hostility towards the father, and the consequent fear of punishment or castration by the father (*Oedipus was a Greek king who unknowingly killed his father and then married his mother*). A major developmental achievement of this stage is the resolution of the Oedipus complex. This takes place by accepting his father's relationship with his mother, and modelling his own behaviour after his father.

For girls, the Oedipus complex (called the **Electra Complex** *after Electra, a Greek character, who induced her brother to kill their mother*) follows a slightly different course. By attaching her love to the father a girl tries to symbolically marry him and raise a family. When she realises that this is unlikely, she begins to identify with her mother and copy her behaviour as a means of getting (or, sharing in) her father's affection. The critical component in resolving the Oedipus complex is the development of identification with the same sex parents. In other words, boys give up sexual feelings for their mothers and begin to see their fathers as role models rather than as rivals; girls give up their sexual desires for their father and identify with their mother.

Latency Stage : This stage lasts from about seven years until puberty. During this period, the child continues to grow physically, but sexual urges are relatively inactive. Much of a child's energy is channelled into social or achievement-related activities.

Genital Stage : During this stage, the person attains maturity in psychosexual development. The sexuality, fears and repressed feelings of earlier stages are once again exhibited. People learn to deal with members of the opposite sex in a socially and sexually mature way. However, if the journey towards this stage is marked by excessive stress or over-indulgence, it may cause fixation to an earlier stage of development.

Freud's theory also postulates that as children proceed from one stage to another stage of development, they seem to adjust their view of the world. Failure of a child to pass successfully through a stage leads to **fixation** to that stage. In this situation, the child's development gets arrested at an earlier stage. For example, a child who does not pass successfully through the phallic stage fails to resolve the Oedipal complex and may still feel hostile toward the parent of the same sex. This failure may have serious consequences for the child's life. Such a boy may come to consider that men are generally hostile, and may wish to relate to females in a dependable relationship. **Regression** is also a likely outcome in such situations. It takes a person back to an earlier stage. Regression occurs when a person's resolution of problems at any stage of development is less than adequate. In this situation, people display behaviours typical of a less mature stage of development.

Post-Freudian Approaches

A number of theorists further developed their ideas following Freud. Some had worked with him and then moved on to develop their own versions of the psychoanalytic theory. These theorists have been called *neo-analytic*, or *post-Freudian* in order to differentiate their work from Freud's. These theories are characterised by less prominent roles to sexual and aggressive tendencies of the id and expansion of the concept of ego. The human qualities of creativity, competence, and problem solving abilities are emphasised. Some of these theories are briefly described here.

Carl Jung : Aims and Aspirations

Jung worked with Freud in his early stages of career, but later on he broke away from Freud. Jung saw human beings guided as much by aims and aspirations as by sex and aggression. He developed his own theory of personality, called **analytical psychology**. The basic assumption of his theory is that personality consists of competing forces and structures within the individual (that must be balanced) rather than between the individual and the demands of society, or between the individual and reality.

Jung claimed that there was a **collective unconscious** consisting of **archetypes** or primordial images. These are not individually acquired, but are inherited. The God or the Mother Earth is a good example of archetypes. They are found in myths, dreams and arts of all mankind. Jung held that the self strives for unity and oneness. It is an archetype that is expressed in many ways. He devoted much of his efforts to the study of such expressions in various traditions. According to him, for achieving unity and wholeness, a person must become increasingly aware of the wisdom available in one's personal and collective unconscious, and must learn to live in harmony with it.

Karen Horney : Optimism

Horney was another disciple of Freud who developed a theory that deviated from basic Freudian principles. She adopted a more optimistic view of human life with emphasis on human growth and self-actualisation.

Horney's major contribution lies in her challenge to Freud's treatment of women as inferior. According to her, each sex has attributes to be admired by the other, and neither sex can be viewed as superior or inferior. She countered that women were more likely to be affected by social and cultural factors than by biological factors. She argued that psychological disorders were caused by **disturbed interpersonal relationship** during childhood. When parents' behaviour toward a child is indifferent, discouraging, and erratic, the child feels insecure and a feeling called **basic anxiety** results. Deep resentment toward parents or basic hostility occurs due to this anxiety. By showing excessive dominance or indifference, or by providing too much or too little approval, parents can generate among children feelings of isolation and helplessness which interfere with their healthy development.

Alfred Adler : Lifestyle and Social Interest

Adler's theory is known as **individual psychology**. His basic assumption is that human behaviour is purposeful and goal-directed. Each one of us has the capacity to choose and create. Our **personal goals** are the sources of our motivation. The goals that provide us with security and help us in overcoming the feelings of inadequacy are important in our personality development. In Adler's view, every individual suffers from the feelings of inadequacy and guilt, i.e. **inferiority complex**, which arise from childhood. Overcoming this complex is essential for optimal personality development.

Erich Fromm : The Human Concerns

In contrast to Freud's biological orientation, Fromm developed his theory from a social orientation. He viewed human beings as basically **social beings** who could be understood in terms of their relationship with others. He argued that psychological qualities such as growth and realisation of potentials resulted from a **desire for freedom**, and **striving for justice and truth**.

Fromm holds that character traits (personality) develop from our experiences with other individuals. While culture is shaped by the mode of existence of a given society, people's dominant character traits in a given society work as forces in shaping the social processes and the culture itself. His work recognises the value of positive qualities, such as tenderness and love in personality development.

Erik Erikson : Search for Identity

Erikson's theory lays stress on rational, conscious ego processes in personality development. In his theory, development is viewed as a lifelong process, and ego identity is granted a central place in this process. His concept of **identity crisis** of adolescent age has drawn considerable attention. Erikson argues that young people must generate for themselves a central perspective and a direction that can give them a meaningful sense of unity and purpose.

Psychodynamic theories face strong criticisms from many quarters. The major criticisms are as follows:

(1) The theories are largely based on case studies; they lack a rigorous scientific basis.
(2) They use small and atypical individuals as samples for advancing generalisations.
(3) The concepts are not properly defined, and it is difficult to submit them to scientific testing.

(4) Freud has used males as the prototype of all human personality development. He overlooked female experiences and perspectives.

Behavioural Approach

This approach does not give importance to the internal dynamics of behaviour. The behaviourists believe in data, which they feel are definable, observable, and measurable. Thus, they focus on learning of stimulus-response connections and their reinforcement. According to them, personality can be best understood as the response of an individual to the environment. They see the development simply as a change in response characteristics, i.e. a person learns new behaviours in response to new environments and stimuli.

For most behaviourists, the structural unit of personality is the **response**. Each response is a behaviour, which is emitted to satisfy a specific need. As you know, all of us eat because of hunger, but we are also very choosy about foods. For example, children do not like eating many of the vegetables (e.g., spinach, pumpkin, gourds, etc.), but gradually they learn to eat them. Why do they do so? According to the behavioural approach, children may initially learn to eat such vegetables in anticipation of appreciation (reinforcement) from their parents. Later on they may eventually learn to eat vegetables not only because their parents are pleased with this behaviour, but also because they acquire the taste of those vegetables, and find them good. Thus, the core tendency that organises behaviour is the reduction of biological or social needs that energise behaviour. This is accomplished through responses (behaviours) that are reinforced.

From your study in Class XI, you may recall that there are several different learning principles that involve the use of stimuli, responses, and reinforcement in different ways. The theories of *classical conditioning* (Pavlov), *instrumental conditioning* (Skinner), and *observational learning* (Bandura) are well-known to you. These theories view learning and maintenance of behaviour from different angles. The principles of these theories have been widely used in developing personality theories. For example, observational learning theory considers thought processes extremely important in learning, but these find almost no place in classical or instrumental conditioning theories. Observational learning theory also emphasises social learning (based on observation and imitation of others) and self-regulation, which again is missed out in other theories.

Activity 2.3

Observe and note your behaviour characteristics and those of your friends that have been imbibed from popular youth icons.

Cultural Approach

This approach attempts to understand personality in relation to the features of ecological and cultural environment. It proposes that a group's 'economic maintenance system' plays a vital role in the origin of cultural and behavioural variations. The climatic conditions, the nature of terrain of the habitat and the availability of food (*flora* and *fauna*) in it determine not only people's economic activities, but also their settlement patterns, social structures, division of labour, and other features such as child-rearing practices. Taken together these elements constitute a child's overall learning environment. People's skills, abilities, behavioural styles, and value priorities are viewed as strongly linked to

these features. Rituals, ceremonies, religious practices, arts, recreational activities, games and play are the means through which people's personality gets projected in a culture. People develop various personality (behavioural) qualities in an attempt to adapt to the ecological and cultural features of a group's life. Thus, the cultural approach considers personality as an adaptation of individuals or groups to the demands of their ecology and culture.

Let us try to understand these aspects with a concrete example. As you know, a good proportion of the world's population, even today, lives in forests and mountainous regions with hunting and gathering (economic activities) as their primary means of livelihood. The Birhor (a tribal group) of Jharkhand represent such a population. Most of them live a nomadic life, which requires constant movement in small bands from one forest to another in search of games and other forest products (e.g., fruits, roots, mushrooms, honey, etc.). In the Birhor society, children from an early age are allowed enormous freedom to move into forests and learn hunting and gathering skills. Their child socialisation practices are also aimed at making children independent (do many things without help from elders), autonomous (take several decisions for themselves), and achievement-oriented (accept risks and challenges such as those involved in hunting) from an early age of life.

In agricultural societies, children are socialised to be obedient to elders, nurturant to youngsters, and responsible to their duties. Since these behavioural qualities make people more functional in agricultural societies, they become dominant features of people's personality in contrast to independence, autonomy and achievement, which are more functional (and thus highly valued) in hunting-gathering societies. Because of different economic pursuits and cultural demands, children in hunting-gathering and agricultural societies develop and display different personality patterns.

Humanistic Approach

The humanistic theories are mainly developed in response to Freud's theory. Carl Rogers and Abraham Maslow have particularly contributed to the development of humanistic perspective on personality. We will briefly examine their theories.

The most important idea proposed by Rogers is that of a **fully functioning person**. He believes that fulfilment is the motivating force for personality development. People try to express their capabilities, potentials and talents to the fullest extent possible. There is an inborn tendency among persons that directs them to actualise their inherited nature.

Rogers makes two basic assumptions about human behaviour. One is that behaviour is goal-directed and worthwhile. The second is that people (who are innately good) will almost always choose adaptive, self-actualising behaviour.

Rogers' theory grew out of his experiences of listening to patients in his clinic. He noted that self was an important element in the experience of his clients. Thus, his theory is structured around the concept of self. The theory assumes that people are constantly engaged in the process of actualising their true self.

Rogers suggests that each person also has a concept of ideal self. An ideal self is the self that a person would like to be. When there is a correspondence between the real self and ideal self, a person is generally happy. Discrepancy between the real self and ideal self often results in unhappiness and dissatisfaction. Rogers' basic principle is that people have a tendency to maximise self-concept through self-actualisation. In this process, the self grows, expands and becomes more social.

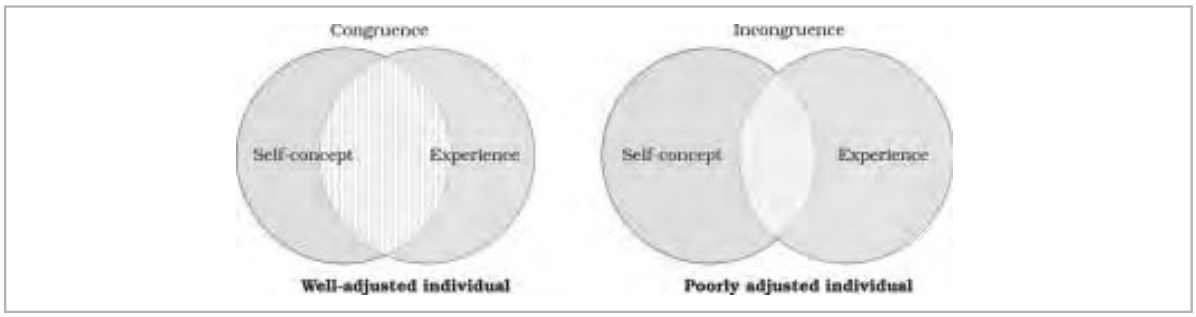


Fig.2.3 : Pattern of Adjustment and Self-concept

Rogers views personality development as a continuous process. It involves learning to evaluate oneself and mastering the process of self-actualisation. He recognises the role of social influences in the development of self-concept. When social conditions are positive, the self-concept and self-esteem are high. In contrast, when the conditions are negative, the self-concept and self-esteem are low. People with high self-concept and self-esteem are generally flexible and open to new experiences, so that they can continue to grow and self-actualise.

This situation warrants that an atmosphere of **unconditional positive regard** must be created in order to ensure enhancement of people's self-concept. The **client-centred therapy** that Rogers developed basically attempts to create this condition.

You are already familiar with the hierarchy of needs propounded by Maslow from your study of motivation in Class XI. Maslow has given a detailed account of psychologically healthy people in terms of their attainment of **self-actualisation**, a state in which people have reached their own fullest potential. Maslow had an optimistic and positive view of man who has the potentialities for love, joy and to do creative work. Human beings are considered free to shape their lives and to self-actualise. Self-actualisation becomes possible by analysing the motivations that govern our life. We know that biological, security, and belongingness needs (called *survival needs*) are commonly found among animals and human beings. Thus, an individual's sole concern with the satisfaction of these needs reduces her/him to the level of animals. The real journey of human life begins with the pursuit of self-esteem and self-actualisation needs. The humanistic approach emphasises the significance of positive aspects of life (see Box 2.3).

Box 2.3

Who is a Healthy Person?

The humanistic theorists have indicated that healthy personality lies in not mere adjustment to society. It involves a quest to know oneself deeply and to be true to one's own feelings without disguise, and to be oneself in the here-and-now. According to them, the healthy people share the following characteristics :

1. They become aware of themselves, their feelings, and their limits; accept themselves, and what they make of their lives as their own responsibility; have 'the courage to be'.
2. They experience the "here-and-now"; are not trapped.
3. They do not live in the past or dwell in the future through anxious expectations and distorted defences.

Assessment of Personality

To know, understand and describe people is a task in which everybody is involved in day-to-day life. When we meet new people, we often try to understand them and even predict what they may do before we interact with them. In our personal lives, we rely on our past experiences, observations, conversations and information obtained from other persons. This approach to understanding others may be influenced by a number of factors that may colour our judgement and reduce objectivity. Hence, we need to organise our efforts more formally to analyse personalities. A formal effort aimed at understanding personality of an individual is termed as **personality assessment**.

Assessment refers to the procedures used to evaluate or differentiate people on the basis of certain characteristics. The goal of assessment is to understand and predict behaviour with minimum error and maximum accuracy. In assessment, we try to study what a person generally does, or how s/he behaves, in a given situation. Besides promoting our understanding, assessment is also useful for diagnosis, training, placement, counselling, and other purposes.

Psychologists have tried to assess personality in various ways. The most commonly used techniques are **Psychometric Tests**, **Self-Report Measures**, **Projective Techniques**, and **Behavioural Analysis**. These techniques are rooted in different theoretical orientations; hence they throw light on different aspects of personality. You have read about psychometric tests in the previous chapter. We will discuss the other methods.

Self-report Measures

It was Allport who suggested that the best method to assess a person is by asking her/him about herself/himself. This led to the use of self-report measures. These are fairly structured measures, often based on theory, that require subjects to give verbal responses using some kind of rating scale. The method requires the subject to objectively report her/his own feelings with respect to various items. The responses are accepted at their face value. They are scored in quantitative terms and interpreted on the basis of norms developed for the test. Some of the well-known self-report measures are briefly described below.

The Minnesota Multiphasic Personality Inventory (MMPI)

This inventory is widely used as a test in personality assessment. Hathaway and McKinley developed this test as a helping tool for psychiatric diagnosis, but the test has been found very effective in identifying varieties of psychopathology. Its revised version is available as MMPI-2. It consists of 567 statements. The subject has to judge each statement as 'true' or 'false' for her/him. The test is divided into 10 subscales, which seek to diagnose hypochondriasis, depression, hysteria, psychopathic deviate, masculinity-femininity, paranoia, psychasthenia, schizophrenia, mania and social introversion. In India, Mallick and Joshi have developed the Jodhpur Multiphasic Personality Inventory (JMPI) along the lines of MMPI.

Eysenck Personality Questionnaire (EPQ)

Developed by Eysenck this test initially assessed two dimensions of personality, called **introverted-extraverted** and **emotionally stable-emotionally unstable**. These dimensions are characterised by 32 personality traits. Later on, Eysenck added a third dimension, called **psychoticism**. It is linked to psychopathology that represents a lack of feeling for others, a

tough manner of interacting with people, and a tendency to defy social conventions. A person scoring high on this dimension tends to be hostile, egocentric, and antisocial. This test is also widely used.

Sixteen Personality Factor Questionnaire (16 PF)

This test was developed by Cattell. On the basis of his studies, he identified a large set of personality descriptors, which were subjected to factor analysis to identify the basic personality structure. You will learn about this statistical technique later. The test provides with declarative statements, and the subject responds to a specific situation by choosing from a set of given alternatives. The test can be used with high school level students as well as with adults. It has been found extremely useful in career guidance, vocational exploration, and occupational testing.

Apart from the few popular tests which use self-report technique which have been described above, there are several others that try to assess specific dimensions of personality (e.g., authoritarianism, locus of control, optimism, etc.). As you proceed further with your study of psychology, you will come to know more about them.

The self-report measures suffer from a number of problems. **Social desirability** is one of them. It is a tendency on the part of the respondent to endorse items in a socially desirable manner. **Acquiescence** is another one. It is a tendency of the subject to agree with items/questions irrespective of their contents. It often appears in the form of saying 'yes' to items. These tendencies render the assessment of personality less reliable.

It is also necessary to sound a note of caution at this stage. Remember that psychological testing and understanding personality requires great skill and training. Unless you have acquired these to an optimum level under careful supervision of an expert, you should not venture into testing and interpreting the personality of your friends who do not study psychology.

Projective Techniques

The techniques of personality assessment described so far are known as direct techniques, because they tend to rely on information directly obtained from the person who clearly knows that her/his personality is being assessed. In these situations, people generally become self-conscious and hesitate to share their private feelings, thoughts, and motivations. When they do so, they often do it in a socially desirable manner.

The psychoanalytic theory tells us that a large part of human behaviour is governed by unconscious motives. Direct methods of personality assessment cannot uncover the unconscious part of our behaviour. Hence, they fail to provide us with a real picture of an individual's personality. These problems can be overcome by using indirect methods of assessment. Projective techniques fall in this category.

Projective techniques were developed to assess unconscious motives and feelings. These techniques are based on the assumption that a less structured or unstructured stimulus or situation will allow the individual to project her/his feelings, desires and needs on to that situation. These projections are interpreted by experts. A variety of projective techniques have been developed; they use various kinds of stimulus materials and situations for assessing personality. Some of them require reporting associations with stimuli (e.g., words, inkblots), some involve story writing around pictures, some require sentence completions, some require expression through drawings, and some

require choice of stimuli from a large set of stimuli.

While the nature of stimuli and responses in these techniques vary enormously, all of them do share the following features:

(1) The stimuli are relatively or fully unstructured and poorly defined.
(2) The person being assessed is usually not told about the purpose of assessment and the method of scoring and interpretation.
(3) The person is informed that there are no correct or incorrect responses.
(4) Each response is considered to reveal a significant aspect of personality.
(5) Scoring and interpretation are lengthy and sometimes subjective.

Projective techniques are different from the psychometric tests in many ways. They cannot be scored in any objective manner. They generally require qualitative analyses for which a rigorous training is needed. In the following pages, some of the well-known projective techniques are briefly discussed.

The Rorschach Inkblot Test

This test was developed by Hermann Rorschach. The test consists of 10 inkblots. Five of them are in black and white, two with some red ink, and the remaining three in some pastel colours. The blots are symmetrical in design with a specific shape or form. Each blot is printed in the centre of a white cardboard of about 7"×10" size. The blots were originally made by dropping ink on a piece of paper and then folding the paper in half (hence called *inkblot test*). The cards are administered individually in two phases. In the first phase, called **performance proper**, the subjects are shown the cards and are asked to tell what they see in each of them. In the second phase, called **inquiry**, a detailed report of the response is prepared by asking the subject to tell where, how, and on what basis was a particular response made. Fine judgment is necessary to place the subject's responses in a meaningful context. The use and interpretation of this test requires extensive training. Computer techniques too have been developed for analysis of data. An example of the Rorschach Inkblot is given in Figure 2.4.

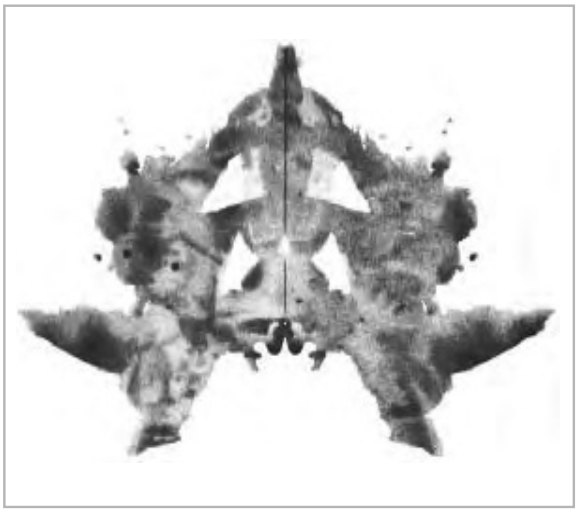


Fig.2.4 : An Example of the Rorschach Inkblot

The Thematic Apperception Test (TAT)

This test was developed by Morgan and Murray. It is a little more structured than the Inkblot test. The test consists of 30 black and white picture cards and one blank card. Each picture card depicts one or more people in a variety of situations. Each picture is printed on a card. Some cards are used with adult males or females. Others are used with boys or girls. Still others are used in some combinations. Twenty cards are appropriate for a subject, although a lesser number of cards (even five) have also been successfully used.

The cards are presented one at a time. The subject is asked to tell a story describing the situation presented in the

picture: What led up to the situation, what is happening at the moment, what will happen in the future, and what the characters are feeling and thinking? A standard procedure is available for scoring TAT responses. The test has been modified for children and for the aged. Uma Chaudhury's Indian adaptation of TAT is also available. An example of a TAT card is given in Figure 2.5.

Fig.2.5 : An Illustration Showing the Drawing of a Card of TAT

Rosenzweig's Picture-Frustration Study (P-F Study)

This test was developed by Rosenzweig to assess how people express aggression in the face of a frustrating situation. The test presents with the help of cartoon like pictures a series of situations in which one person frustrates another, or calls attention to a frustrating condition. The subject is asked to tell what the other (frustrated) person will say or do. The analysis of responses is based on the type and direction of aggression. An attempt is made to examine whether the focus is on the frustrating object, or on protection of the frustrated person, or on constructive solution of the problem. The direction of aggression may be towards the environment, towards oneself, or it may be tuned off in an attempt to gloss over or evade the situation. Pareek has adapted this test for use with the Indian population.

Sentence Completion Test

This test makes use of a number of incomplete sentences. The starting part of the sentence is first presented and the subject has to provide an ending to the sentence. It is held that the type of endings used by the subjects reflect their attitudes, motivation and conflicts. The test provides subjects with several opportunities to reveal their underlying unconscious motivations. A few sample items of a sentence completion test are given below.

1. My father——————————————————.
2. My greatest fear is ——————————.
3. The best thing about my mother is ——————————————.
4. I am proud of ——————————————————————————.

Draw-a-Person Test

It is a simple test in which the subject is asked to draw a person on a sheet of paper. A pencil and eraser is provided to facilitate drawing. After the completion of the drawing, the subject is generally asked to draw the figure of an opposite sex person. Finally, the subject is asked to make a story about the person as if s/he was a character in a novel or play. Some examples of interpretations are as follows:

(1) Omission of facial features suggests that the person tries to evade a highly conflict-ridden interpersonal relationship.

(2) Graphic emphasis on the neck suggests lack of control over impulses.
(3) Disproportionately large head suggests organic brain disease and pre-occupation with headaches.

The analysis of personality with the help of projective techniques appears fairly interesting. It helps us to understand unconscious motives, deep-rooted conflicts, and emotional complexes of an individual. However, the interpretation of the responses requires sophisticated skills and specialised training. There are problems associated with the reliability of scoring and validity of interpretations. But, the practitioners have found these techniques quite useful.

Behavioural Analysis

A person's behaviour in a variety of situations can provide us with meaningful information about her/his personality. Observation of behaviour serves as the basis of behavioural analysis. An observer's report may contain data obtained from **interview**, **observation**, **ratings**, **nomination**, and **situational tests**. We will examine these different procedures in some detail.

Interview

Interview is a commonly used method for assessing personality. This involves talking to the person being assessed and asking specific questions. Diagnostic interviewing generally involves in-depth interviewing which seeks to go beyond the replies given by the person. Interviews may be structured or unstructured depending on the purpose or goals of assessment.

In **unstructured interviews**, the interviewer seeks to develop an impression about a person by asking a number of questions. The way a person presents her/himself and answers the questions carries enough potential to reveal her/his personality. The **structured interviews** address very specific questions and follow a set procedure. This is often done to make objective comparison of persons being interviewed. Use of rating scales may further enhance the objectivity of evaluations.

Observation

Behavioural observation is another method which is very commonly used for the assessment of personality. Although all of us watch people and form impressions about their personality, use of observation for personality assessment is a sophisticated procedure that cannot be carried out by untrained people. It requires careful training of the observer, and a fairly detailed guideline about analysis of behaviours in order to assess the personality of a given person. For example, a clinical psychologist may like to observe her/his client's interaction with family members and home visitors. With carefully designed observation, the clinical psychologist may gain considerable insight into a client's personality.

In spite of their frequent and widespread use, observation and interview methods are characterised by the following limitations:

(1) Professional training required for collection of useful data through these methods is quite demanding and time-consuming.
(2) Maturity of the psychologist is a precondition for obtaining valid data through these techniques.
(3) Mere presence of the observer may contaminate the results. As a stranger, the observer may influence the behaviour of the person being observed and thus not obtain good data.

Behavioural Ratings

Behavioural ratings are frequently used for assessment of personality in educational and industrial settings. Behavioural ratings are generally taken from people who know the assessee intimately and have interacted with her/him over a period of time or have had a chance to observe her/him. They attempt to put individuals into certain categories in terms of their behavioural qualities. The categories may involve different numbers or descriptive terms. It has been found that use of numbers or general descriptive adjectives in rating scales always creates confusion for the rater. In order to use ratings effectively, the traits should be clearly defined in terms of carefully stated behavioural anchors.

The method of rating suffers from the following major limitations:

(1) Raters often display certain biases that colour their judgments of different traits. For example, most of us are greatly influenced by a single favourable or unfavourable trait. This often forms the basis of a rater's overall judgment of a person. This tendency is known as the **halo effect**.

(2) Raters have a tendency to place individuals either in the middle of the scale (called **middle category bias**) by avoiding extreme positions, or in the extreme positions (called **extreme response bias**) by avoiding middle categories on the scale.

These tendencies can be overcome by providing raters with appropriate training or by developing such scales in which the response bias is likely to be small.

Nomination

This method is often used in obtaining peer assessment. It can be used with persons who have been in long-term interaction and who know each other very well. In using nomination, each person is asked to choose one or more persons of the group with whom s/he would like to work, study, play or participate in any other activity. The person may also be asked to specify the reason for her/his choices. Nominations thus received may be analysed to understand the personality and behavioural qualities of the person. This technique has been found to be highly dependable, although it may also be affected by personal biases.

Situational Tests

A variety of situational tests have been devised for the assessment of personality. The most commonly used test of this kind is the **situational stress test**. It provides us with information about how a person behaves under stressful situations. The test requires a person to perform a given task with other persons who are instructed to be non-cooperative and interfering. The test involves a kind of role playing. The person is instructed to play a role for which s/he is observed. A verbal report is also obtained on what s/he was asked to do. The situation may be realistic one, or it may be created through a video play.

Key Terms

Anal stage, Archetypes, Cardinal traits, Central traits, Client-centred therapy, Collective unconscious, Defence mechanisms, Ego, Extraversion, Humanistic approach, Id, Ideal self, Inferiority complex, Introversion, Latency period, Libido, Metaneeds, Oedipus complex, Personal identity, Phallic stage, Projective techniques, Psychodynamic approach, Projection, Rationalisation, Reaction formation, Regression, Repression, Self-efficacy, Self-esteem, Self-regulation, Social identity, Superego, Trait approach, Type approach, Unconscious.

Summary

- *The study of the self and the personality helps us understand ourselves as well as others. An individual's self develops through social interaction with significant others.*
- *There are different kinds of self such as personal self, social self, and relational self. Self-esteem and self-efficacy are two very important aspects of behaviour, which have far-reaching consequences in our life.*
- *The psychological techniques of self-regulation include systematic observation of one's behaviour, self-reinforcement, and self-instruction.*
- *Personality refers to psychophysical characteristics of a person that are relatively stable across situations and over time and make her or him unique. Since personality helps us in adapting to a variety of situations in our life, it is likely to change as a result of external or internal forces.*
- *Personality has been studied through several approaches. The most prominent among these are typological, psychodynamic, behavioural, cultural, and humanistic approaches.*
- *The typological approach attempts to describe personality in terms of a few types, which are characterised by a cluster of traits. Allport, Cattell and Eysenck have advocated a trait approach to personality, which offers a unified view of a person.*
- *Freud developed psychodynamic approach and discussed personality in terms of a constant conflict between our internal forces, called id, ego, and superego. In Freud's view, unconscious conflicts are rooted in the process of psychosexual development, which occurs through oral, anal, phallic, latency, and genital stages.*
- *Post-Freudian theorists focus on interpersonal forces and the contemporary circumstances of life of the person. Jung, Fromm, Adler, Horney and Erikson brought out the role of ego and social forces in personality.*
- *The behavioural approach views personality as the response of an individual to the environment. They consider response as the structural unit of personality, which is emitted to satisfy a specific need.*
- *The cultural approach attempts to comprehend personality in terms of the demands of adaptation made on individuals by the economic maintenance systems and the resulting cultural features of a group of people.*
- *The Humanistic approach focuses on subjective experiences of individuals and their choices. Rogers emphasised the relationship between the 'real self' and the 'ideal self'. The congruence of these selves makes a person fully functioning. Maslow discussed personality in terms of the interplay of needs that motivated people. The needs could be arranged in a hierarchy from lower-order (survival related) needs to higher-order (development related) needs.*
- *Personality assessment refers to the procedure of analysing and evaluating people in terms of certain psychological characteristics. The goal is to predict an individual's behaviour with a high degree of accuracy.*
- *An individual's personality can be assessed by using observer reports, projective techniques, and self-report measures. Observer reports include interview, observation, ratings, nomination and situational tests. Rorschach Inkblot Test, and Thematic Apperception Test are widely used projective tests of personality. Self-report measures attempt to assess personality by using fairly structured tests.*

Review Questions

1. What is self? How does the Indian notion of self differ from the Western notion?
2. What is meant by delay of gratification? Why is it considered important for adult development?
3. How do you define personality? What are the main approaches to the study of personality?
4. What is trait approach to personality? How does it differ from type approach?
5. How does Freud explain the structure of personality?
6. How would Horney's explanation of depression be different from that of Alfred Adler?

7. What is the main proposition of humanistic approach to personality? What did Maslow mean by self-actualisation?
8. Discuss the main observational methods used in personality assessment. What problems do we face in using these methods?
9. What is meant by structured personality tests? Which are the two most widely used structured personality tests?
10. Explain how projective techniques assess personality. Which projective tests of personality are widely used by psychologists?
11. Arihant wants to become a singer even though he belongs to a family of doctors. Though his family members claim to love him but strongly disapprove his choice of career. Using Carl Rogers' terminology, describe the attitudes shown by Arihant's family.

Project Ideas

1. We all have some notions about our ideal selves, i.e. and what we would like to be? Take time to imagine that you have achieved your ideal self. With this notion of your ideal self, express your attitudes towards these categories : (a) school, (b) friends, (c) family, and (d) money. Write a paragraph on each describing your ideal attitudes. Next write all these categories on four sheets of paper and ask your two friends and two family members to write about what they perceive to be your real attitudes towards these categories. These four persons will describe your real self as they see you. Compare your ideal descriptions with others' real descriptions in detail. Are they very similar or dissimilar? Prepare a report on this.
2. Select five persons whom you most admire, either from real life or from history. Collect information about their contributions in their respective fields and identify the characteristics in their personality that have impressed you. Do you find any similarities? Prepare a comparative report.

Weblinks

www.ship.edu/~cgboeree/perscontents.html
en.wikipedia.org/wiki/projective_test

Pedagogical Hints

1. To make students understand the concept of self, certain activities could be organised, such as a student may be asked to tell about herself/himself.
2. Prepare flow charts/diagrams to explain the concepts. Help students to prepare charts/diagrams related to concepts given in the chapter.
3. Emphasise the importance of various personality assessment techniques in different spheres of life.
4. Sample items of various tests of personality could be shown to generate interest among students. They could be asked to compare the test items included in different measures of personality.

MEETING LIFE CHALLENGES

3

After reading this chapter, you would be able to:

- understand the nature, types and sources of stress as life challenges,
- examine the effects of stress on psychological functioning,
- learn ways to cope with stress,
- know about the life skills that help people to stay healthy, and
- understand the factors that promote positive health and well-being.

CONTENTS

Introduction
Nature, Types and Sources of Stress
A Measure of Stressful Life Events (Box 3.1)
Effects of Stress on Psychological Functioning and Health
Examination Anxiety (Box 3.2)
Stress and Health
General Adaptation Syndrome
Stress and Immune System
Lifestyle
Coping with Stress
Stress Management Techniques
Promoting Positive Health and Well-being
Life Skills
Resilience and Health (Box 3.3)

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

Raj has been studying for his final examination which is going to take place tomorrow morning. He studies till 1 a.m. in the night. Unable to concentrate any more, he sets the alarm for 6 a.m. and tries to go off to sleep. As he is very tense, he keeps tossing and turning in bed. Images flash through his mind of not being able to secure the marks he needs to opt for the subjects of his choice. He blames himself for fooling around with his friends and not preparing thoroughly for the examination. In the morning he wakes up with a heavy head, misses breakfast, and barely makes it in time to school for his examination. He opens the question paper, his heart pounding, hands clammy with sweat and then he feels his mind has gone completely blank.

Some of you may have lived through an experience such as Raj's. The challenge posed by examinations is common to all students. You are perhaps, already thinking about a career. What if you are denied this choice? Will you give up? Life poses challenges all the time. Think of a child who loses her/his parents at a young age with no one to take care of her/him; a young woman who loses her husband in a car accident; parents who bring up children who are physically or mentally challenged; young girls/boys who have to spend long nights in call centres and then catch up on their sleep during the day time. Look around yourself and you will find that life is a big challenge. All of us try to meet these challenges in our own way. Some of us succeed while others succumb to such life stresses. Life challenges are not necessarily stressful. Much depends on how a challenge is viewed. A number 11 batsman in a cricket team will view facing a fast bowler's delivery differently than would an opening batsman, who will look forward to such a challenge. It is said that one's best comes out when one is challenged. We will like to consider in this chapter how a life condition turns into a challenge or a cause of stress. Further, we will also see how people respond to various life challenges as well as stressful situations.

Nature, Types and Sources of Stress

While waiting to cross the road on a busy Monday morning, you may be temporarily stressed. But, because you are alert, vigilant and aware of the danger, you are able to cross the road safely. Faced with any challenge, we put in additional efforts and mobilise all our resources and the support system to meet the challenge. All the challenges, problems, and difficult circumstances put us to **stress**. Thus, if handled properly, stress increases the probability of one's survival. Stress is like electricity. It gives energy, increases human arousal and affects performance. However, if the electric current is too high, it can fuse bulbs, damage appliances, etc. High stress too can produce unpleasant effects and cause our performance to deteriorate. Conversely, too little stress may cause one to feel somewhat listless and low on motivation which may lead us to perform slowly and less efficiently. It is important to remember that not all stress is inherently bad or destructive. '**Eustress**'

is the term used to describe the level of stress that is good for you and is one of a person's best assets for achieving peak performance and managing minor crisis. Eustress, however, has the potential of turning into '**distress**'. It is this latter manifestation of stress that causes our body's wear and tear. Thus, stress can be described as **the pattern of responses an organism makes to stimulus event that disturbs the equilibrium and exceeds a person's ability to cope**.

Nature of Stress

The word stress has its origin in the Latin words 'strictus', meaning tight or narrow and 'stringere', the verb meaning to tighten. These root words reflect the internal feelings of tightness and constriction of the muscles and breathing reported by many people under stress. Stress is often explained in terms of characteristics of the environment that are disruptive to the individual. Stressors are events that cause our body to give the stress response. Such events include noise, crowding, a bad relationship, or the daily commuting to school or office. The reaction to external stressors is called '**strain**' (see Fig.3.1).

Stress has come to be associated with both the causes as well as effects. However, this view of stress can cause confusion. Hans Selye, the father of modern stress research, defined stress as "the non-specific response of the body to any demand" that is, regardless of the cause of the threat, the individual will respond with the same physiological pattern of reactions. Many researchers do not agree with this definition as they feel that the stress response is not nearly as general and non-specific as Selye suggests. Different stressors may produce somewhat different patterns of stress reaction, and different individuals may have different characteristic modes of response. You may recall the case of an opening batsman mentioned earlier. Each one of us will see the situation through our own eyes and it is our perception of the demands, and our ability to meet them, which will determine whether we are feeling 'stressed' or not.

Stress is not a factor that resides in the individual or the environment, instead it is embedded in an ongoing process that involves individuals transacting with their social and cultural environments, making appraisals of those encounters and attempting to cope with the issues that arise. Stress is a dynamic mental/cognitive state. It is a disruption in homeostasis or an imbalance that gives rise to a requirement for resolution of that imbalance or restoration of homeostasis.

The perception of stress is dependent upon the individual's cognitive appraisal of events and the resources available to deal with them. The stress process, based on the cognitive theory of stress propounded by Lazarus and his colleagues, is described in Figure 3.2. An individual's response to a stressful situation largely depends upon

Fig.3.1 : Psychological Meaning of Stress

the perceived events and how they are interpreted or appraised. Lazarus has distinguished between two types of appraisal, i.e. primary and secondary. **Primary appraisal** refers to the perception of a new or changing environment as positive, neutral or negative in its consequences. Negative events are appraised for their possible harm, threat or challenge. Harm is the assessment of the damage that has already been done by an event. Threat is the assessment of possible future damage that may be brought about by the event. Challenge appraisals are associated with more confident expectations of the ability to cope with the stressful event, the potential to overcome and even profit from the event. When we perceive an event as stressful, we are likely to make a **secondary appraisal**, which is the assessment of one's coping abilities and resources and whether they will be sufficient to meet the harm, threat or challenge of the event. These resources may be mental, physical, personal or social. If one thinks one has a positive attitude, health, skills and social support to deal with the crises s/he will feel less stressed. This two-level appraisal process determines not only our cognitive and behavioural responses but also our emotional and physiological responses to external events.

These appraisals are very subjective and will depend on many factors. One factor is the **past experience** of dealing with such a stressful condition. If one has handled similar situations very

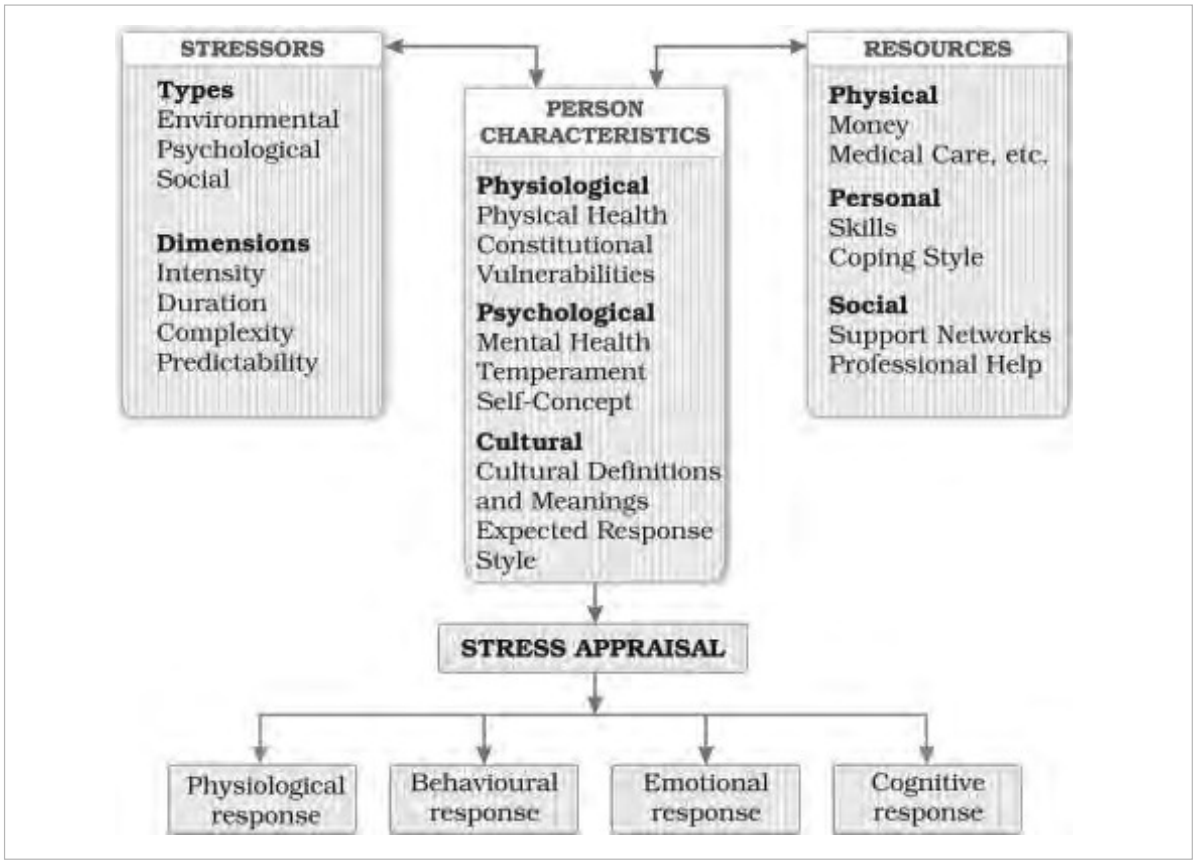


Fig.3.2 : A General Model of the Stress Process

successfully in the past, they would be less threatening for her/him. Another factor is whether the stressful event is perceived as **controllable**, i.e. whether one has mastery or control over a situation. A person who believes that s/he can control the onset of a negative situation, or its adverse consequences, will experience less amount of stress than those who have no such sense of personal control. For example, a sense of self-confidence or efficacy can determine whether the person is likely to appraise the situation as a threat or a challenge. Thus, the experience and outcome of a stressor may vary from individual to individual. Stress, includes all those environmental and personal events, which challenge or threaten the well-being of a person. These stressors can be external, such as environmental (noise, air pollution), social (break-up with a friend, loneliness) or psychological (conflict, frustration) within the individual.

Very often, these stressors result in a variety of stress reactions, which may be physiological, behavioural, emotional, and cognitive (see Fig.3.2). At the physiological level, arousal plays a key role in stress-related behaviours. The hypothalamus initiates action along two pathways. The first pathway involves the autonomic nervous system. The adrenal gland releases large amount of catecholamines (epinephrine and norepinephrine) into the blood stream. This leads to physiological changes seen in fight-or-flight response. The second pathway involves the pituitary gland, which secretes the corticosteroid (cortisol) which provides energy. The emotional reactions to experience of stress include negative emotions such as fear, anxiety, embarrassment, anger, depression or even denial. The behavioural responses are virtually limitless, depending on the nature of the stressful event. Confrontative action against the stressor (fight) or withdrawal from the threatening event (flight) are two general categories of behavioural responses. Cognitive responses include beliefs about the harm or threat an event poses and beliefs about its causes or controllability. These include responses such as inability to concentrate, and intrusive, repetitive or morbid thoughts.

As indicated in Figure 3.2, the stresses which people experience also vary in terms of **intensity** (low intensity vs. high intensity), **duration** (short-term vs. long-term), **complexity** (less complex vs. more complex) and **predictability** (unexpected vs. predictable). The outcome of stress depends on the position of a particular stressful experience along these dimensions. Usually more intense, prolonged or chronic, complex and unanticipated stresses have more negative consequences than have less intense, short-term, less complex and expected stresses. An individual's experiences of stress depend on the physiological strength of that person. Thus, individuals with poor physical health and weak constitution would be more vulnerable than would be those who enjoy good health and strong constitution.

Psychological characteristics like mental health, temperament, and self-concept are relevant to the experience of stress. The cultural context in which we live determines the meaning of any event and defines the nature of response that is expected under various conditions. Finally, the stress experience will be determined by the resources of the person, such as money, social skills, coping style, support networks, etc. All these factors determine the appraisal of a given stressful situation.

Signs and Symptoms of Stress

The way we respond to stress varies depending upon our personality, early upbringing and life experiences. Everyone has their own pattern of stress response.

So the warning signs may vary, as may their intensity. Some of us know our pattern of stress response and can gauge the depth of the problem by the nature and severity of our own symptoms or changes in behaviour. These symptoms of stress can be physical, emotional and behavioural. Any of the symptoms can indicate a degree of stress which, if left unresolved, might have serious implications.

Activity 3.1

Read the following signs of stress :

Lack of concentration, Memory loss, Poor decision-making, Inconsistency, Irregular attendance and timekeeping, Low self-esteem, Poor long-term planning, Frantic bursts of energy, Extreme mood swings, Emotional outbursts, Worry, Anxiety, Fear, Depression, Difficulties with sleep, Difficulties with eating, Misuse of drugs, Physical illness, e.g. stomach upset, headache, backache, etc.

Tick those applicable to you and then discuss in groups of two or three students in class. Can you reduce some of them? Discuss how? Consult your teacher.

Types of Stress

The three major types of stress, viz. physical and environmental, psychological, and social are listed in Figure 3.2. It is important to understand that all these types of stress are interrelated.

Physical and Environmental Stress

Physical stresses are demands that change the state of our body. We feel strained when we overexert ourselves physically, lack a nutritious diet, suffer an injury, or fail to get enough sleep. Environmental stresses are aspects of our surroundings that are often unavoidable such as air pollution, crowding, noise, heat of the summer, winter cold, etc. Another group of environmental stresses are catastrophic events or disasters such as fire, earthquake, floods, etc.

Psychological Stress

These are stresses that we generate ourselves in our minds. These are personal and unique to the person experiencing them and are internal sources of stress. We worry about problems, feel anxiety, or become depressed. These are not only symptoms of stress, but they cause further stress for us. Some of the important sources of psychological stress are frustration, conflicts, internal and social pressures, etc.

Frustration results from the blocking of needs and motives by something or someone that hinders us from achieving a desired goal. There could be a number of causes of frustration such as social discrimination, interpersonal hurt, low grades in school, etc. **Conflicts** may occur between two or more incompatible needs or motives, e.g. whether to study dance or psychology. You may want to continue studies or take up a job. There may be a conflict of values when you are pressurised to take any action that may be against the values held by you. **Internal pressures** stem from beliefs based upon expectations from inside us to ourselves such as, 'I must do everything perfectly'. Such expectations can only lead to disappointment. Many of us drive ourselves ruthlessly towards achieving unrealistically high standards in achieving our goals. **Social pressures** may be brought about from people who make excessive demands on us. This can cause even greater pressure when we have to work with them. Also, there are people with whom we face interpersonal difficulties, 'a personality clash' of sorts.

Social Stress

These are induced externally and result from our interaction with other people. Social events like death or illness in the family, strained relationships, trouble with neighbours are some examples of social stresses. These social stresses vary widely from person to person. Attending parties may be stressful for a person who likes to spend quiet evenings at home while an outgoing person may find staying at home in the evenings stressful.

Sources of Stress

A wide range of events and conditions can generate stress. Among the most important of these are major stressful life events, such as death of a loved one or personal injury, the annoying frequent hassles of everyday life and traumatic events that affect our lives.

Life Events

Changes, both big and small, sudden and gradual affect our life from the moment we are born. We learn to cope with small, everyday changes but major life events can be stressful, because they disturb our routine and cause upheaval. If several of these life events that are planned (e.g. moving into a new house) or unpredicted (e.g. break-up of a long-term relationship) occur within a short period of time, we find it difficult to cope with them and will be more prone to the symptoms of stress.

Box 3.1

A Measure of Stressful Life Events

Holmes and Rahe developed a life event measure of stress. A measure of stressful life events based on the above scale known as the Presumptive Stressful Life Events Scale has been developed for the Indian population by Singh, Kaur and Kaur. It is a self-rating questionnaire made up of fifty-one life changes, which a person may have experienced. Each of these life events is assigned a numerical value in terms of their severity. For example, the death of one's spouse is assigned 95, personal illness or injury 56, failure in examination 43, appearing for examination or interview 43, change in sleeping habits 33, as the mean stress score. Both positive and negative events are taken, believing that both kinds of changes cause stress. The respondent's stress score is the weighted sum of all the items/life change events in the past one year checked by her/him.

Some sample items of the measure are :

Life Events	Mean Stress Score
Death of a close family member	66
Unexpected accident or trauma	53
Illness of a family member	52
Break-up with friend	47
Appearing for examinations	43
Change in eating habits	27

The mean number of stressful life events experienced over a period of one year without producing overt physical or mental illness is approximately two. However, the correlations between life events and susceptibility to any particular illness is low, indicating a weak association between life events and stress. It has been argued as to whether life events have caused some stress-related illness or whether stress caused the life events and illness. The impact of most life events varies from person to person. Factors such as age at which the event was first experienced, frequency of occurrence, duration of the stressful event and social support must be studied in evaluating the relationship between stressful life events and the subsequent illness episode.

Hassles

These are the personal stresses we endure as individuals, due to the happenings in our daily life, such as noisy surroundings, commuting, quarrelsome neighbours, electricity and water shortage, traffic snarls, and so on. Attending to various emergencies are daily hassles experienced by a housewife. There are some jobs in which daily hassles are very frequent. These daily hassles may sometimes have devastating consequences for the individual who is often the one coping alone with them as others may not even be aware of them as outsiders. The more stress people report as a result of daily hassles, the poorer is their psychological well-being.

Traumatic Events

These include being involved in a variety of extreme events such as a fire, train or road accident, robbery, earthquake, tsunami, etc. The effects of these events may occur after some lapse of time and sometimes persist as symptoms of anxiety, flashbacks, dreams and intrusive thoughts, etc. Severe trauma can also strain relationships. Professional help will be needed to cope with them especially if they persist for many months after the event is over.

Activity 3.2

Identify the stressful events, which you and two of your classmates have experienced in the past one year. List the stressful events and rank them from 1 to 5 that have had negative impact in your day-to-day functioning. Then select those that are common to all three of you. Find out how much ability, skill, and family support your friends and you have in order to deal with each of these stresses.

Discuss these results with your teacher.

Effects of Stress on Psychological Functioning and Health

What are the effects of stress? Many of the effects are physiological in nature, however, other changes also occur inside stressed individuals. There are four major effects of stress associated with the stressed state, viz. **emotional**, **physiological**, **cognitive**, and **behavioural**.

Emotional Effects : Those who suffer from stress are far more likely to experience mood swings, and show erratic behaviour that may alienate them from family and friends. In some cases this can start a vicious circle of decreasing confidence, leading to more serious emotional problems. Some examples are feelings of anxiety and depression, increased physical tension, increased psychological tension and mood swings. Box 3.2 presents the phenomenon of 'Examination Anxiety'.

Physiological Effects : When the human body is placed under physical or psychological stress, it increases the production of certain hormones, such as adrenaline and cortisol. These hormones produce marked changes in heart rate, blood pressure levels, metabolism and physical activity. Although, this physical reaction will help us to function more effectively when we are under pressure for short periods of time, it can be extremely damaging to the body in the long-term effects. Examples of physiological effects are release of epinephrine and nor-epinephrine, slowing down of the digestive system, expansion of air passages in the lungs, increased heart rate, and constriction of blood vessels.

Cognitive Effects : If pressures due to stress continue, one may suffer from mental overload. This suffering from high level of stress can rapidly cause individuals to lose their ability to make sound

decisions. Faulty decisions made at home, in career, or at workplace may lead to arguments, failure, financial loss or even loss of job. Cognitive effects of stress are poor concentration, and reduced short-term memory capacity.

Behavioural Effects : Stress affects our behaviour in the form of eating less nutritional food, increasing intake of stimulants such as caffeine, excessive consumption of cigarettes, alcohol and other drugs such as tranquillisers etc. Tranquillisers can be addictive and have side effects such as loss of concentration, poor coordination, and dizziness. Some of the typical behavioural effects of stress seen are disrupted sleep patterns, increased absenteeism, and reduced work performance.

Stress and Health

You must have often observed that many of your friends (may be including yourself as well!) fall sick during the examination time. They suffer from stomach upsets, body aches, nausea, diarrhoea and fever etc. You must have also noticed that people who are unhappy in their personal lives fall sick more often than those who are happy and enjoy life. Chronic daily stress can divert an individual's attention from caring for herself or himself. When stress is prolonged, it affects physical health and impairs psychological functioning. People experience exhaustion and attitudinal problems when the stress due to demands from the environment and constraints are too high and little support is available from family and friends. The physical

Box 3.2

Examination Anxiety

Examination anxiety is a fairly common phenomenon that involves feelings of tension or uneasiness that occur before, during, or after an examination. Many people experience feelings of anxiety around examinations and find it helpful in some ways, as it can be motivating and create the pressure that is needed to stay focused on one's performance. Examination nerves, worry, or fear of failure are normal for even the most talented student. However, stress of formal examination results in such high degrees of anxiety in some students that they are unable to perform at a level which matches the potential they have shown in less stressful classroom situations. Examination stress has been characterised as "**evaluative apprehension**" or "**evaluative stress**" and produces debilitating behavioural, cognitive, and physiological effects no different from those produced by any other stressor. High stress can interfere with the student's preparation, concentration, and performance. Examination stress can cause test anxiety which adversely affects test performance. Persons who are high in test anxiety tend to perceive evaluative situations as personally threatening; in test situations, they are often tense, apprehensive, nervous, and emotionally aroused. Moreover, the negative self-centred cognitions which they experience distract their attention and interfere with concentration during examinations. High test anxious students respond to examination stress with intense emotional reactions, negative thoughts about themselves, feelings of inadequacy, helplessness, and loss of status and esteem that impair their performance. Generally, the high test anxious person instead of plunging into a task plunges inward, that is, either neglects or misinterprets informational cues that may be readily available to her/him, or experiences attentional blocks. While preparing for examinations, one must spend enough time for study, overview and weigh one's strengths and weaknesses, discuss difficulties with teachers and classmates, plan a revision timetable, condense notes, space out revision periods, and most importantly on the examination day concentrate on staying calm.

exhaustion is seen in the signs of chronic fatigue, weakness and low energy. The mental exhaustion appears in the form of irritability, anxiety, feelings of helplessness and hopelessness. This state of physical, emotional and psychological exhaustion is known as **burnout**.

There is also convincing evidence to show that stress can produce changes in the immune system and increase the chances of someone becoming ill. Stress has been implicated in the development of cardiovascular disorders, high blood pressure, as well as psychosomatic disorders including ulcers, asthma, allergies and headaches.

Researchers estimate that stress plays an important role in fifty to seventy per cent of all physical illnesses. Studies also reveal that sixty per cent of medical visits are primarily for stress-related symptoms.

General Adaptation Syndrome

What happens to the body when stress is prolonged? Selye studied this issue by subjecting animals to a variety of stressors such as high temperature, X-rays and insulin injections, in the laboratory over a long period of time. He also observed patients with various injuries and illnesses in hospitals. Selye noticed a similar pattern of bodily response in all of them. He called this pattern the *General Adaptation Syndrome* (GAS). According to him, GAS involves three stages: **alarm reaction**, **resistance**, and **exhaustion** (see Fig.3.3).

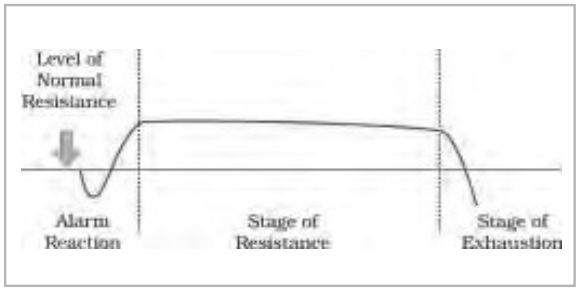


Fig.3.3 : The General Adaptation Syndrome

1. *Alarm reaction stage* : The presence of a noxious stimulus or stressor leads to activation of the adrenal-pituitary-cortex system. This triggers the release of hormones producing the stress response. Now the individual is ready for fight or flight.
2. *Resistance stage* : If stress is prolonged, the resistance stage begins. The para-sympathetic nervous system calls for more cautious use of the body's resources. The organism makes efforts to cope with the threat, as through confrontation.
3. *Exhaustion stage* : Continued exposure to the same stressor or additional stressors drains the body of its resources and leads to the third stage of exhaustion. The physiological systems involved in alarm reaction and resistance become ineffective and susceptibility to stress-related diseases such as high blood pressure becomes more likely.

Selye's model has been criticised for assigning a very limited role to psychological factors in stress. Researchers have reported that the psychological appraisal of events is important for the determination of stress. How people respond to stress is substantially influenced by their perceptions, personalities and biological constitutions.

Stress and the Immune System

Stress can cause illness by impairing the workings of the immune system. The immune system guards the body against attackers, both from within and outside. **Psychoneuroimmunology** focuses on the links between the mind, the brain and the immune system. It studies the effects of stress on the immune system. How does the immune system work? The white blood cells (**leucocytes**) within the immune system identify and destroy foreign bodies

(**antigens**) such as viruses. It also leads to the production of **antibodies**. There are several kinds of white blood cells or leucocytes within the immune system, including T cells, B cells and natural killer cells. T cells destroy invaders, and T-helper cells increase immunological activity. It is these T-helper cells that are attacked by the Human Immuno Deficiency Virus (HIV), the virus causing Acquired Immuno Deficiency Syndrome (AIDS). B cells produce antibodies. Natural killer cells are involved in the fight against both viruses and tumours.

Stress can affect natural killer cell cytotoxicity, which is of major importance in the defence against various infections and cancer. Reduced levels of natural killer cell cytotoxicity have been found in people who are highly stressed, including students facing important examinations, bereaved persons, and those who are severely depressed. Studies reveal that immune functioning is better in individuals receiving social support. Also, changes in the immune system will have more effect on health among those whose immune systems are already weakened. Figure 3.4 depicts this sequence comprising negative emotions, release of stress hormones which lead to weakening of the immune system, thereby affecting mental and physical health.

Psychological stress is accompanied by negative emotions and associated behaviours, including depression, hostility, anger and aggression. Negative emotion states are of particular concern to the study of effects of stress on health. The incidence of psychological disorders, such as panic attacks and obsessive behaviour increases with the build up of long-term stress. Worries can reach such a level that they surface as a frightening, painful physical sensation, which can be mistaken for a heart attack. People under prolonged stress are more prone to irrational fears, mood swings and phobias, and may experience fits of depression, anger and irritability. These negative emotions appear to be related to the function of the immune system. Our ability to interpret our world and to invest that interpretation with personal meaning and emotion have a powerful and direct effect on the body. Negative moods have been associated with poorer health outcomes. Feelings of hopelessness are related to worsening of disease, increased risk of injury and death due to various causes.

Lifestyle

Stress can lead to unhealthy lifestyle or health damaging behaviour. Lifestyle is the overall pattern of decisions and behaviours that determine a person's health and

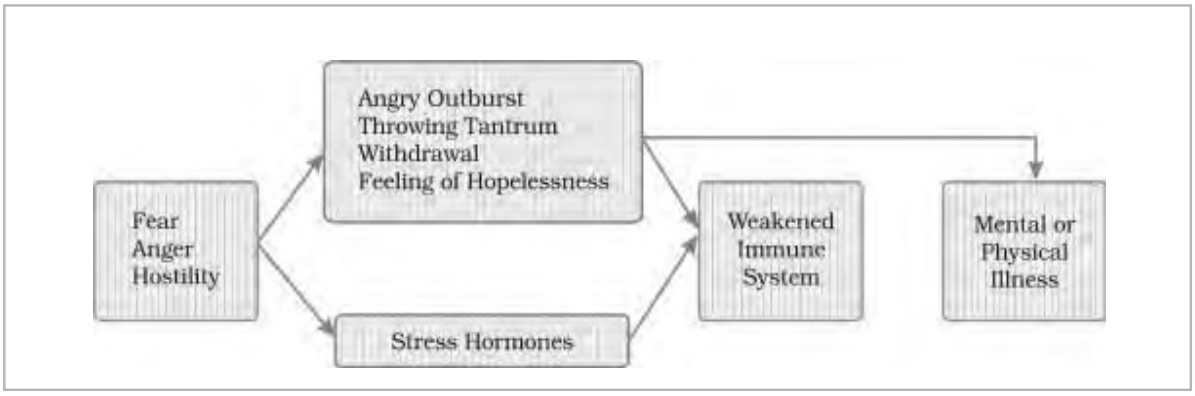


Fig.3.4 : Relation of Stress with Illness

quality of life. Stressed individuals may be more likely to expose themselves to **pathogens**, which are agents causing physical illness. People who are stressed have poor nutritional habits, sleep less and are likely to engage in other health risking behaviours like smoking and alcohol abuse. Such health impairing behaviours develop gradually and are accompanied by pleasant experiences temporarily. However, we tend to ignore their long-term damaging effects and underestimate the risk they pose to our lives.

Studies have revealed that health promoting behaviour like balanced diet, regular exercise, family support, etc. play an important role in good health. Adhering to a lifestyle that includes balanced low fat diet, regular exercise and continued activity along with positive thinking enhances health and longevity. The modern lifestyle of excesses in eating, drinking and the so called fast-paced good life has led to violation of basic principles of health in some of us, as to what we eat, think or do with our lives.

Coping with Stress

In recent years the conviction has grown that it is how we cope with stress and not the stress one experiences that influences our psychological well-being, social functioning and health. **Coping** is a dynamic situation-specific reaction to stress. It is a set of concrete responses to stressful situations or events that are intended to resolve the problem and reduce stress. The way we cope with stress often depends on rigid deep-seated beliefs, based on experience, e.g. when caught in a traffic jam we feel angry, because we believe that the traffic 'should' move faster. To manage stress we often need to reassess the way we think and learn coping strategies. People who cope poorly with stress have an impaired immune response and diminished activity of natural killer cells.

Individuals show consistent individual differences in the coping strategies they use to handle stressful situations. These can include both overt and covert activities. The three coping strategies given by Endler and Parker are:

Task-oriented Strategy : This involves obtaining information about the stressful situation and about alternative courses of action and their probable outcome; it also involves deciding priorities and acting so as to deal directly with the stressful situation. For example, schedule my time better, or think about how I have solved similar problems.

Emotion-oriented Strategy : This can involve efforts to maintain hope and to control one's emotions; it can also involve venting feelings of anger and frustration, or deciding that nothing can be done to change things. For example, tell myself that it is not really happening to me, or worry about what I am going to do.

Avoidance-oriented Strategy : This involves denying or minimising the seriousness of the situation; it also involves conscious suppression of stressful thoughts and their replacement by self-

Activity 3.3

Respond to the following items on a 5-point scale ranging from 5 = always to 1 = never.

I express emotions openly and directly.
I work towards my own personal goals.
I accept situations that cannot be altered.
I discuss my worries with friends.
I may not get everything just right.

Discuss your answers with your classmates and teacher. The higher the score, the better would be your ability to cope.

protective thoughts. Examples of this are watching TV, phone up a friend, or try to be with other people.

Lazarus and Folkman has conceptualised coping as a dynamic process rather than an individual trait. Coping refers to constantly changing cognitive and behavioural efforts to master, reduce or tolerate the internal or external demands that are created by the stressful transaction. Coping serves to allow the individual to manage or alter a problem and regulate the emotional response to that problem. According to them coping responses can be divided into two types of responses, **problem-focused** and **emotion-focused**. Problem-focused strategies attack the problem itself, with behaviours designed to gain information, to alter the event, and to alter belief and commitments. They increase the person's awareness, level of knowledge, and range of behavioural and cognitive coping options. They can act to reduce the threat value of the event. For example "I made a plan of action and followed it". Emotion-focused strategies call for psychological changes designed primarily to limit the degree of emotional disruption caused by an event, with minimal effort to alter the event itself. For example "I did some things to let it out of my system". While both problem-focused and emotion-focused coping are necessary when facing stressful situations, research suggests that people generally tend to use the former more often than the latter.

Activity 3.4

Which of the following coping behaviours are problem-focused? Why?

- *Discussing your problem with a friend.*
- *Feeling sorry for failing in an examination.*
- *Finding fault with classmates for poor marks in tests.*
- *Hiding examination results from parents.*
- *Blaming friends for bad habits.*
- *Reading essential books for the annual examination.*
- *Making efforts to improve one's performance after a setback.*
- *Missing school when assignments not completed.*

Discuss the answers with your classmates and teacher.

Stress Management Techniques

Stress is a silent killer. It is estimated to play a significant role in physical illness and disease. Hypertension, heart disease, ulcers, diabetes and even cancer are linked to stress. Due to lifestyle changes stress is on the increase. Therefore, schools, other institutions, offices and communities are concerned about knowing techniques to manage stress. Some of these techniques are:

Relaxation Techniques : It is an active skill that reduces symptoms of stress and decreases the incidence of illnesses such as high blood pressure and heart disease. Usually relaxation starts from the lower part of the body and progresses up to the facial muscles in such a way that the whole body is relaxed. Deep breathing is used along with muscle relaxation to calm the mind and relax the body.

Meditation Procedures : The yogic method of meditation consists of a sequence of learned techniques for refocusing of attention that brings about an altered state of consciousness. It involves such a thorough concentration that the meditator becomes unaware of any outside stimulation and reaches a different state of consciousness.

Biofeedback : It is a procedure to monitor and reduce the physiological aspects of stress by providing feedback about current physiological activity and is often accompanied by relaxation training.

Biofeedback training involves three stages : developing an awareness of the particular physiological response, e.g. heart rate, learning ways of controlling that physiological response in quiet conditions; and transferring that control into the conditions of everyday life.

Creative Visualisation : It is an effective technique for dealing with stress. Creative visualisation is a subjective experience that uses imagery and imagination. Before visualising one must set oneself a realistic goal, as it helps build confidence. It is easier to visualise if one's mind is quiet, body relaxed and eyes are closed. This reduces the risk of interference from unbidden thoughts and provides the creative energy needed for turning an imagined scene into reality.

Cognitive Behavioural Techniques : These techniques aim to inoculate people against stress. Stress inoculation training is one effective method developed by Meichenbaum. The essence of this approach is to replace negative and irrational thoughts with positive and rational ones. There are three main phases in this : assessment, stress reduction techniques, and application and follow-through. Assessment involves discussing the nature of the problem and seeing it from the viewpoint of the person/client. Stress reduction involves learning the techniques of reducing stress such as relaxation and self-instruction.

Exercise : Exercise can provide an active outlet for the physiological arousal experienced in response to stress. Regular exercise improves the efficiency of the heart, enhances the function of the lungs, maintains good circulation, lowers blood pressure, reduces fat in the blood and improves the body's immune system. Swimming, walking, running, cycling, skipping, etc. help to reduce stress. One must practice these exercises at least four times a week for 30 minutes at a time. Each session must have a warm-up, exercise and cool down phases.

Promoting Positive Health and Well-being

It is unlikely that we will go through life without some experience of personal crises causing acute pressure for a while. Many people sail through and rebuild their lives very positively. They are likely to have constructive attitudes and also have lots of emotional and social support of various kinds available to them. When we find ways of managing these pressures and can use the energy to create something positive out of the situation, then we will have learned to survive healthily and this will leave us more stress fit for future crises. It is like being immunised against the dangers of unhealthy stress.

Stress Resistant Personality : Recent studies by Kobasa have shown that people with high levels of stress but low levels of illness share three characteristics, which are referred to as the personality traits of **hardiness**. It consists of *'the three Cs'*, i.e. *commitment, control,* and *challenge*. Hardiness is a set of beliefs about oneself, the world, and how they interact. It takes shape as a sense of personal commitment to what you are doing, a sense of control over your life, and a feeling of challenge. Stress resistant personalities have control which is a sense of purpose and direction in life; commitment to work, family, hobbies and social life; and challenge, that is, they see changes in life as normal and positive rather than as a threat.

Everyone does not have these characteristics, many of us have to relearn specific life skills in areas such as rational thinking, and assertiveness to equip ourselves better to cope with the demands of everyday life, etc.

Life Skills

Life skills are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. Our ability to cope depends on how well we are prepared to deal with and counterbalance everyday demands, and keep equilibrium in our lives. These life skills can be learned and even improved upon. Assertiveness, time management, rational thinking, improving relationships, self-care, and overcoming unhelpful habits such as perfectionism, procrastination, etc. are some life skills that will help to meet the challenges of life.

Assertiveness : Assertiveness is a behaviour or skill that helps to communicate, clearly and confidently, our feelings, needs, wants, and thoughts. It is the ability to say no to a request, to state an opinion without being self-conscious, or to express emotions such as love, anger, etc. openly. If you are assertive, you feel confident, and have high self-esteem and a solid sense of your own identity.

Time Management : The way you spend your time determines the quality of your life. Learning how to plan time and delegate can help to relieve the pressure. The major way to reduce time stress is to change one's perception of time. The central principle of time management is to spend your time doing the things that you value, or that help you to achieve your goals. It depends on being realistic about what you know and that you must do it within a certain time period, knowing what you want to do, and organising your life to achieve a balance between the two.

Rational Thinking : Many stress-related problems occur as a result of distorted thinking. The way you think and the way you feel are closely connected. When we are stressed, we have an inbuilt selective bias to attend to negative thoughts and images from the past, which affect our perception of the present and the future. Some of the principles of rational thinking are: challenging your distorted thinking and irrational beliefs, driving out potentially intrusive negative anxiety-provoking thoughts, and making positive statements.

Improving Relationships : The key to a sound lasting relationship is communication. This consists of three essential skills: listening to what the other person is saying, expressing how you feel and what you think, and accepting the other person's opinions and feelings, even if they are different from your own. It also requires us to avoid misplaced jealousy and sulking behaviour.

Self-care : If we keep ourselves healthy, fit and relaxed, we are better prepared physically and emotionally to tackle the stresses of everyday life. Our breathing patterns reflect our state of mind and emotions. When we are stressed or anxious, we tend towards rapid and shallow breathing from high in the chest, with frequent sighs. The most relaxed breathing is slow, stomach-centred breathing from the diaphragm, i.e. a dome like muscle between the chest and the abdominal cavity. Environmental stresses like noise, pollution, space, light, colour, etc. can all exert an influence on our mood. These have a noticeable effect on our ability to cope with stress, and well-being.

Overcoming Unhelpful Habits : Unhelpful habits such as perfectionism, avoidance, procrastination, etc. are strategies that help to cope in the short-term but which make one more vulnerable to stress. Perfectionists are persons who have to get everything just right. They have difficulty in varying standards according to factors such as time available, consequences of not being able to stop work, and the effort needed. They are more likely to feel tense

and find it difficult to relax, are critical of self and others, and may become inclined to avoid challenges. Avoidance is to put the issue under the carpet and refuse to accept or face it. Procrastination means putting off what we know we need to do. We all are guilty of saying "I will do it later". People who procrastinate are deliberately avoiding confronting their fears of failure or rejection.

Various factors have been identified which facilitate the development of **positive health**. Health is a state of complete physical, mental, social and spiritual well-being, and not merely the absence of disease or infirmity. Positive health comprises the following constructs: "a healthy body; high quality of personal relationships; a sense of purpose in life; self-regard, mastery of life's tasks; and resilience to stress, trauma, and change". Box 3.3 presents the relationship between resilience and health. Specifically, factors that act as stress buffers and facilitate positive health are diet, exercise, positive attitude, positive thinking, and social support.

Diet : A balanced diet can lift one's mood, give more energy, feed muscles, improve circulation, prevent illness, strengthen the immune system and make one feel better to cope with stresses of life. The key to healthy living is to eat three main meals a day, and eat a varied well-balanced diet. How much nutrition one needs depends on one's activity level, genetic make-up, climate, and health history. What people eat, and how much do they weigh involve behavioural processes. Some people are able to maintain a healthy diet and weight while others become obese. When we are stressed, we seek 'comfort foods' which are high in fats, salt and sugar.

Exercise : A large number of studies confirm a consistently positive relationship between physical fitness and health. Also, of all the measures an individual can take to improve health, exercise is the lifestyle change with the widest popular approval. Regular exercise plays an important role in managing weight and stress, and is shown to have a positive effect on reducing

Box 3.3

Resilience and Health

In recent years, there has been a lot of research in understanding resilience in children and adolescents. Resilience is a dynamic developmental process referring to the maintenance of positive adjustment under challenging life conditions. It has been described as the capacity to 'bounce back' in the face of stress and adversity. Resilience has been conceptualised as reflecting feelings of self-worth and self-confidence, autonomy and self-reliance, finding positive role models, seeking a confidant, cognitive skills such as problem solving, creativity, resourcefulness, and flexibility and a belief that one's life has purpose and meaning. Resilient individuals are able to overcome the effects of trauma, stress and adversity and learn to live psychologically healthy and meaningful lives.

Resilience has recently been defined in terms of three resources: I HAVE (social and interpersonal strengths), i.e. 'people around me I trust and who love me no matter what', I AM (inner strengths), i.e. 'respectful of myself and others', and I CAN (interpersonal and problem solving skills), i.e. 'find ways to solve problems I face'. For a child to be resilient, s/he needs to have more than one of these strengths. For example, children may have plenty of self-esteem (I am), but may lack anyone whom they can turn to for support (I have), and do not have the capacity to solve problems (I can), will not be resilient. Outcomes of longitudinal studies of children provide evidence that in spite of extreme vulnerabilities related to poverty and other social disadvantages, many individuals develop into capable and caring adults.

tension, anxiety and depression. Physical exercises that are essential for good health are stretching exercises such as *yogic asanas* and aerobic exercises such as jogging, swimming, cycling, etc. Whereas stretching exercises have a calming effect, aerobic exercises increase the arousal level of the body. The health benefits of exercise work as a stress buffer. Studies suggest that fitness permits individuals to maintain general mental and physical well-being even in the face of negative life events.

Positive Attitude : Positive health and well-being can be realised by having a positive attitude. Some of the factors leading to a positive attitude are: having a fairly accurate perception of reality; a sense of purpose in life and responsibility; acceptance and tolerance for different viewpoints of others; and taking credit for success and accepting blame for failure. Finally, being open to new ideas and having a sense of humour with the ability to laugh at oneself help us to remain centred, and see things in a proper perspective.

Positive Thinking : The power of positive thinking has been increasingly recognised in reducing and coping with stress. Optimism, which is the inclination to expect favourable life outcomes, has been linked to psychological and physical well-being. People differ in the manner in which they cope. For example, optimists tend to assume that adversity can be handled successfully whereas pessimists anticipate disasters. Optimists use more problem-focused coping strategies, and seek advice and help from others. Pessimists ignore the problem or source of stress, and use strategies such as giving up the goal with which stress is interfering or denying that stress exists.

Social Support : Social support is defined as the existence and availability of people on whom we can rely upon, people who let us know that they care about, value, and love us. Someone who believes that s/he belongs to a social network of communication and mutual obligation experiences social support. *Perceived support*, i.e. the quality of social support is positively related to health and well-being, whereas *social network*, i.e. the quantity of social support is unrelated to well-being, because it is very time-consuming and demanding to maintain a large social network. Studies have revealed that women exposed to life event stresses, who had a close friend, were less likely to be depressed and had lesser medical complications during pregnancy. Social support can help to provide protection against stress. People with high levels of social support from family and friends may experience less stress when they confront a stressful experience, and they may cope with it more successfully.

Social support may be in the form of **tangible support** or assistance involving material aid, such as money, goods, services, etc. For example, a child gives notes to her/his friend, since s/he was absent from school due to sickness. Family and friends also provide **informational support** about stressful events. For example, a student facing a stressful event such as a difficult board examination, if provided information by a friend who has faced a similar one, would not only be able to identify the exact procedures involved, but also it would facilitate in determining what resources and coping strategies could be useful to successfully pass the examination. During times of stress, one may experience sadness, anxiety, and loss of self-esteem. Supportive friends and family provide **emotional support** by

reassuring the individual that she/he is loved, valued, and cared for. Research has demonstrated that social support effectively reduces psychological distress such as depression or anxiety, during times of stress. There is growing evidence that social support is positively related to psychological well-being. Generally, social support leads to mental health benefits for both the giver and the receiver.

Activity 3.5

Identify a child in your neighbourhood who had undergone some major stress in life such as a serious accident or been through a recent traumatic experience like a robbery, fire, etc. Talk to the child and family. Can you identify some factors that have helped her/him to cope and overcome the trauma? Do you see any similar factors in your own life? Discuss with your teacher.

Key Terms

Alarm reaction, Appraisal, Coping, Exhaustion, General adaptation syndrome, Hardiness, Homeostasis, Life skills, Optimism, Positive health, Psychoneuroimmunology, Resilience, Social support, Stress, Stressors.

Summary

- *Stress is a part of life. Stress is neither a stimulus nor a response but an ongoing transactional process between the individual and the environment.*
- *There are three major types of stresses, physical and environmental, psychological and social. Sources of stress are life events, everyday hassles, traumatic events. The response to stress is emotional, physiological, cognitive and behavioural.*
- *Coping is a dynamic situation-specific individual reaction to stress. There are three main types of coping, task-oriented, emotion-oriented, and avoidance-oriented coping. Coping responses may be problem-focused or emotion-focused. Problem-focused coping focuses to alter the environment and acts to reduce the threat value of the event. Emotion-focused coping are strategies for changing emotions and aim to limit the degree of emotional disruption caused by the event.*
- *It is essential to have a healthy lifestyle for handling stress and effective coping. Assertiveness, time management, rational thinking, improving relationships, self-care, and overcoming unhelpful habits are life skills that help us to meet life's challenges.*
- *Positive health and well-being come through balanced diet, exercise, positive attitude, positive optimistic thinking, and social support. There is also a need for overall harmonious conditions in society. We must avoid taking unhealthy escape routes of smoking, alcohol, drugs and other harmful behaviours.*

Review Questions

1. Explain the concept of stress. Give examples from daily life.
2. State the symptoms and sources of stress.
3. Describe the GAS model and illustrate the relevance of this model with the help of an example.
4. Enumerate the different ways of coping with stress.
5. Explain the effect of stress on psychological functioning.
6. Describe how life skills can help meet life's challenges.
7. Discuss the factors that lead to positive health and well-being.
8. How does stress affect the immune system?

9. Give an example of a life event which is likely to be stressful. Suggest reasons why it is likely to cause different degrees of stress to the person experiencing it.
10. Given what you know about coping strategies, what suggestions would you give to your friends to avoid stress in their everyday lives.
11. Reflect on the environmental factors that have (a) a positive impact on the being, and (b) a negative effect.
12. We know that certain lifestyle factors can cause stress and may lead to diseases like cancer and coronary heart disease, yet we are unable to change our behaviour. Explain why?

Project Ideas

1. Record the stresses in the lives of 5–10 teenagers. Are these different for girls and boys? Find out the ways by which they cope with them.
2. Discuss with your parents and grandparents the unique stressors they face in their lives and how they cope with them.

Weblinks

http://www.nlm.nih.gov/medlineplus/stress.html
http://www.teachhealth.com
http://www.lifepositive.com/stress.html

Pedagogical Hints

1. It is important to make students realise that stress is an integral part of life. They must, therefore, be encouraged to recognise the signs of stress in themselves and in others.
2. Students could brainstorm for possible ways of dealing with different types of stressors.
3. Drawing examples from students' lives, they need to be made to understand the harmful effects of stress on physical and mental health.
4. Students should be encouraged to search for literature in newspapers, magazines, Internet, etc. suggesting ways of dealing with stress. This could be followed by discussion in the classroom.

PSYCHOLOGICAL DISORDERS

4

After reading this chapter, you would be able to:

- understand the basic issues in abnormal behaviour and the criteria used to identify such behaviours,
- appreciate the factors which cause abnormal behaviour,
- explain the different models of abnormal behaviour, and
- describe the major psychological disorders.

CONTENTS

Introduction
Concepts of Abnormality and Psychological Disorders
Classification of Psychological Disorders
Factors Underlying Abnormal Behaviour
Major Psychological Disorders
- Anxiety Disorders
- Somatoform Disorders
- Dissociative Disorders
- *Salient Features of Somatoform and Dissociative Disorders* (Box 4.1)
- Mood Disorders
- Schizophrenic Disorders
- *Sub-types of Schizophrenia* (Box 4.2)
- Behavioural and Developmental Disorders
- Substance-use Disorders
- *Effects of Alcohol : Some Facts* (Box 4.3)
- *Commonly Abused Substances* (Box 4.4)

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

You must have come across people who are unhappy, troubled and dissatisfied. Their minds and hearts are filled with sorrow, unrest and tension and they feel that they are unable to move ahead in their lives; they feel life is a painful, uphill struggle, sometimes not worth living. Famous analytical psychologist Carl Jung has quite remarkably said, "How can I be substantial without casting a shadow? I must have a dark side, too, if I am to be whole and by becoming conscious of my shadow, I remember once more that I am a human being like any other". At times, some of you may have felt nervous before an important examination, tense and concerned about your future career or anxious when someone close to you was unwell. All of us face major problems at some point of our lives. However, some people have an extreme reaction to the problems and stresses of life. In this chapter, we will try to understand what goes wrong when people develop psychological problems, what are the causes and factors which lead to abnormal behaviour, and what are the various signs and symptoms associated with different types of psychological disorders?

The study of psychological disorders has intrigued and mystified all cultures for more than 2,500 years. Psychological disorders or mental disorders (as they are commonly referred to), like anything unusual may make us uncomfortable and even a little frightened. Unhappiness, discomfort, anxiety, and unrealised potential are seen all over the world. These failures in living are due mainly to failures in adaptation to life challenges. As you must have studied in the previous chapters, adaptation refers to the person's ability to modify her/his behaviour in response to changing environmental requirements. When the behaviour cannot be modified according to the needs of the situation, it is said to be maladaptive. Abnormal Psychology is the area within psychology that is focused on maladaptive behaviour – its causes, consequences, and treatment.

Concepts of Abnormality and Psychological Disorders

Although many definitions of abnormality have been used over the years, none has won universal acceptance. Still, most definitions have certain common features, often called the 'four Ds': **deviance**, **distress**, **dysfunction** and **danger**. That is, psychological disorders are **deviant** (different, extreme, unusual, even bizarre), **distressing** (unpleasant and upsetting to the person and to others), **dysfunctional** (interfering with the person's ability to carry out daily activities in a constructive way), and possibly **dangerous** (to the person or to others).

This definition is a useful starting point from which we can explore psychological abnormality. Since the word 'abnormal' literally means "away from the normal", it implies deviation from some clearly defined norms or standards. In psychology, we have no 'ideal model' or even 'normal model' of human behaviour to use as a base for comparison. Various approaches have been used in distinguishing between normal and abnormal behaviours. From these approaches, there emerge two basic and conflicting views :

The first approach views abnormal behaviour as a **deviation from social norms**. Many psychologists have stated that 'abnormal' is simply a label that is given to a behaviour which is deviant from social expectations. Abnormal behaviour, thoughts and emotions are those that differ markedly from a society's ideas of proper functioning. Each society has **norms**, which are stated or unstated rules for proper conduct. Behaviours, thoughts and emotions that break societal norms are called abnormal. A society's norms grow from its particular **culture** — its history, values, institutions, habits, skills, technology, and arts. Thus, a society whose culture values competition and assertiveness may accept aggressive behaviour, whereas one that emphasises cooperation and family values (such as in India) may consider aggressive behaviour as unacceptable or even abnormal. A society's values may change over time, causing its views of what is psychologically abnormal to change as well. Serious questions have been raised about this definition. It is based on the assumption that socially accepted behaviour is not abnormal, and that normality is nothing more than conformity to social norms.

The second approach views abnormal behaviour as **maladaptive**. Many psychologists believe that the best criterion for determining the normality of behaviour is not whether society accepts it but whether it fosters the well-being of the individual and eventually of the group to which s/he belongs. **Well-being** is not simply maintenance and survival but also includes growth and fulfilment, i.e. the actualisation of potential, which you must have studied in Maslow's need hierarchy theory. According to this criterion, conforming behaviour can be seen as abnormal if it is maladaptive, i.e. if it interferes with optimal functioning and growth. For example, a student in the class prefers to remain silent even when s/he has questions in her/his mind. Describing behaviour as maladaptive implies that a problem exists; it also suggests that vulnerability in the individual, inability to cope, or exceptional stress in the environment have led to problems in life.

If you talk to people around, you will see that they have vague ideas about psychological disorders that are characterised by superstition, ignorance and fear. Again it is commonly believed that psychological disorder is something to be ashamed of. The **stigma** attached to mental illness means that people are hesitant to consult a doctor or psychologist because they are ashamed of their problems. Actually, psychological disorder which indicates a failure in adaptation should be viewed as any other illness.

Activity 4.1

Talk to three people: one of your friends, a friend of your parents, and your neighbour.

Ask them if they have seen someone who is mentally ill or who has mental problems. Try to understand why they find this behaviour abnormal, what are the signs and symptoms shown by this person, what caused this behaviour and can this person be helped.

Share the information you elicited in class and see if there are some common features, which make us label others as 'abnormal'.

Historical Background

To understand psychological disorders, we would require a brief historical account of how these disorders have been viewed over the ages. When we study the history of abnormal psychology, we find that certain theories have occurred over and over again.

One ancient theory that is still encountered today holds that abnormal behaviour can be explained by the

operation of **supernatural** and **magical forces** such as evil spirits (*bhoot-pret*), or the devil (*shaitan*). **Exorcism**, i.e. removing the evil that resides in the individual through countermagic and prayer, is still commonly used. In many societies, the *shaman*, or medicine man (*ojha*) is a person who is believed to have contact with supernatural forces and is the medium through which spirits communicate with human beings. Through the *shaman*, an afflicted person can learn which spirits are responsible for her/his problems and what needs to be done to appease them.

A recurring theme in the history of abnormal psychology is the belief that individuals behave strangely because their bodies and their brains are not working properly. This is the **biological** or **organic approach**. In the modern era, there is evidence that body and brain processes have been linked to many types of maladaptive behaviour. For certain types of disorders, correcting these defective biological processes results in improved functioning.

Another approach is the **psychological approach**. According to this point of view, psychological problems are caused by inadequacies in the way an individual thinks, feels, or perceives the world.

All three of these perspectives — supernatural, biological or organic, and psychological — have recurred throughout the history of Western civilisation. In the ancient Western world, it was philosopher-physicians of ancient Greece such as Hippocrates, Socrates, and in particular Plato who developed the **organismic approach** and viewed disturbed behaviour as arising out of conflicts between emotion and reason. Galen elaborated on the role of the **four humours** in personal character and temperament. According to him, the material world was made up of four elements, viz. earth, air, fire, and water which combined to form four essential body fluids, viz. blood, black bile, yellow bile, and phlegm. Each of these fluids was seen to be responsible for a different temperament. Imbalances among the humours were believed to cause various disorders. This is similar to the Indian notion of the three *doshas* of *vata, pitta* and *kapha* which were mentioned in the *Atharva Veda* and *Ayurvedic* texts. You have already read about it in Chapter 2.

In the **Middle Ages**, demonology and superstition gained renewed importance in the explanation of abnormal behaviour. Demonology related to a belief that people with mental problems were evil and there are numerous instances of 'witch-hunts' during this period. During the early Middle Ages, the Christian spirit of charity prevailed and St. Augustine wrote extensively about feelings, mental anguish and conflict. This laid the groundwork for modern psychodynamic theories of abnormal behaviour.

The **Renaissance Period** was marked by increased humanism and curiosity about behaviour. Johann Weyer emphasised psychological conflict and disturbed interpersonal relationships as causes of psychological disorders. He also insisted that 'witches' were mentally disturbed and required medical, not theological, treatment.

The seventeenth and eighteenth centuries were known as the **Age of Reason and Enlightenment**, as the scientific method replaced faith and dogma as ways of understanding abnormal behaviour. The growth of a scientific attitude towards psychological disorders in the eighteenth century contributed to the **Reform Movement** and to increased compassion for people who suffered from these disorders. Reforms of asylums were initiated in both Europe and America. One aspect of the reform movement was the new inclination for **deinstitutionalisation** which placed emphasis on providing

community care for recovered mentally ill individuals.

In recent years, there has been a convergence of these approaches, which has resulted in an **interactional**, or **bio-psycho-social approach**. From this perspective, all three factors, i.e. biological, psychological and social play important roles in influencing the expression and outcome of psychological disorders.

Classification of Psychological Disorders

In order to understand psychological disorders, we need to begin by classifying them. A classification of such disorders consists of a list of categories of specific psychological disorders grouped into various classes on the basis of some shared characteristics. Classifications are useful because they enable users like psychologists, psychiatrists and social workers to communicate with each other about the disorder and help in understanding the causes of psychological disorders and the processes involved in their development and maintenance.

The American Psychiatric Association (APA) has published an official manual describing and classifying various kinds of psychological disorders. The current version of it, the **Diagnostic and Statistical Manual of Mental Disorders**, IV Edition *(DSM-IV)*, evaluates the patient on five axes or dimensions rather than just one broad aspect of 'mental disorder'. These dimensions relate to biological, psychological, social and other aspects.

The classification scheme officially used in India and elsewhere is the tenth revision of the **International Classification of Diseases** *(ICD-10)*, which is known as the **ICD-10 Classification of Behavioural and Mental Disorders**. It was prepared by the World Health Organisation (WHO). For each disorder, a description of the main clinical features or symptoms, and of other associated features including diagnostic guidelines is provided in this scheme.

Activity 4.2

Certain behaviours like eating sand would be considered abnormal. But not if it was done after being stranded on a beach in a plane crash.

Listed below are 'abnormal' behaviours followed by situations where the behaviours might be considered normal.

(i) talking to yourself - you are praying.

(ii) standing in the middle of the street waving your arms wildly - you are a traffic policeman.

Think about it and list similar examples.

Factors Underlying Abnormal Behaviour

In order to understand something as complex as abnormal behaviour, psychologists use different approaches. Each approach in use today emphasises a different aspect of human behaviour, and explains and treats abnormality in line with that aspect. These approaches also emphasise the role of different factors such as biological, psychological and interpersonal, and socio-cultural factors. We will examine some of the approaches which are currently being used to explain abnormal behaviour.

Biological factors influence all aspects of our behaviour. A wide range of biological factors such as faulty genes, endocrine imbalances, malnutrition, injuries and other conditions may interfere with normal development and functioning of the human body. These factors may be potential causes of abnormal behaviour. We have already come across the biological model. According to this model, abnormal

behaviour has a biochemical or physiological basis. Biological researchers have found that psychological disorders are often related to problems in the transmission of messages from one neuron to another. You have studied in Class XI, that a tiny space called synapse separates one neuron from the next, and the message must move across that space. When an electrical impulse reaches a neuron's ending, the nerve ending is stimulated to release a chemical, called a **neuro-transmitter**. Studies indicate that abnormal activity by certain neuro-transmitters can lead to specific psychological disorders. Anxiety disorders have been linked to low activity of the neurotransmitter *gamma aminobutyric acid* (GABA), schizophrenia to excess activity of *dopamine,* and depression to low activity of *serotonin*.

Genetic factors have been linked to mood disorders, schizophrenia, mental retardation and other psychological disorders. Researchers have not, however, been able to identify the specific genes that are the culprits. It appears that in most cases, no single gene is responsible for a particular behaviour or a psychological disorder. Infact, many genes combine to help bring about our various behaviours and emotional reactions, both functional and dysfunctional. Although there is sound evidence to believe that genetic/ biochemical factors are involved in mental disorders as diverse as schizophrenia, depression, anxiety, etc. and biology alone cannot account for most mental disorders.

There are several **psychological models** which provide a psychological explanation of mental disorders. These models maintain that psychological and interpersonal factors have a significant role to play in abnormal behaviour. These factors include maternal deprivation (separation from the mother, or lack of warmth and stimulation during early years of life), faulty parent-child relationships (rejection, overprotection, over-permissiveness, faulty discipline, etc.), maladaptive family structures (inadequate or disturbed family), and severe stress.

The psychological models include the psychodynamic, behavioural, cognitive, and humanistic-existential models. The **psychodynamic model** is the oldest and most famous of the modern psychological models. You have already read about this model in Chapter 2 on Self and Personality. Psychodynamic theorists believe that behaviour, whether normal or abnormal, is determined by psychological forces within the person of which s/he is not consciously aware. These internal forces are considered dynamic, i.e. they interact with one another and their interaction gives shape to behaviour, thoughts and emotions. Abnormal symptoms are viewed as the result of conflicts between these forces. This model was first formulated by Freud who believed that three central forces shape personality — instinctual needs, drives and impulses *(id)*, rational thinking *(ego)*, and moral standards *(superego)*. Freud stated that abnormal behaviour is a symbolic expression of unconscious mental conflicts that can be generally traced to early childhood or infancy.

Another model that emphasises the role of psychological factors is the **behavioural model**. This model states that both normal and abnormal behaviours are learned and psychological disorders are the result of learning maladaptive ways of behaving. The model concentrates on behaviours that are learned through conditioning and proposes that what has been learned can be unlearned. Learning can take place by *classical conditioning* (temporal association in which two events repeatedly occur close together in time), *operant conditioning* (behaviour is followed by a reward), and *social learning* (learning by imitating

others' behaviour). These three types of conditioning account for behaviour, whether adaptive or maladaptive.

Psychological factors are also emphasised by the **cognitive model**. This model states that abnormal functioning can result from cognitive problems. People may hold assumptions and attitudes about themselves that are irrational and inaccurate. People may also repeatedly think in illogical ways and make overgeneralisations, that is, they may draw broad, negative conclusions on the basis of a single insignificant event.

Another psychological model is the **humanistic-existential model** which focuses on broader aspects of human existence. Humanists believe that human beings are born with a natural tendency to be friendly, cooperative and constructive, and are driven to self-actualise, i.e. to fulfil this potential for goodness and growth. Existentialists believe that from birth we have total freedom to give meaning to our existence or to avoid that responsibility. Those who shirk from this responsibility would live empty, inauthentic, and dysfunctional lives.

In addition to the biological and psychosocial factors, socio-cultural factors such as war and violence, group prejudice and discrimination, economic and employment problems, and rapid social change, put stress on most of us and can also lead to psychological problems in some individuals. According to the **socio-cultural model**, abnormal behaviour is best understood in light of the social and cultural forces that influence an individual. As behaviour is shaped by societal forces, factors such as family structure and communication, social networks, societal conditions, and societal labels and roles become more important. It has been found that certain family systems are likely to produce abnormal functioning in individual members. Some families have an enmeshed structure in which the members are overinvolved in each other's activities, thoughts, and feelings. Children from this kind of family may have difficulty in becoming independent in life. The broader social networks in which people operate include their social and professional relationships. Studies have shown that people who are isolated and lack social support, i.e. strong and fulfilling interpersonal relationships in their lives are likely to become more depressed and remain depressed longer than those who have good friendships. Socio-cultural theorists also believe that abnormal functioning is influenced by the societal labels and roles assigned to troubled people. When people break the norms of their society, they are called deviant and 'mentally ill'. Such labels tend to stick so that the person may be viewed as 'crazy' and encouraged to act sick. The person gradually learns to accept and play the sick role, and functions in a disturbed manner.

In addition to these models, one of the most widely accepted explanations of abnormal behaviour has been provided by the **diathesis-stress model**. This model states that psychological disorders develop when a diathesis *(biological predisposition to the disorder)* is set off by a stressful situation. This model has three components. The first is the diathesis or the presence of some biological aberration which may be inherited. The second component is that the diathesis may carry a vulnerability to develop a psychological disorder. This means that the person is 'at risk' or 'predisposed' to develop the disorder. The third component is the presence of pathogenic stressors, i.e. factors/stressors that may lead to psychopathology. If such "at risk" persons

are exposed to these stressors, their predisposition may actually evolve into a disorder. This model has been applied to several disorders including anxiety, depression, and schizophrenia.

Major Psychological Disorders

Anxiety Disorders

One day while driving home, Deb felt his heart beating rapidly, he started sweating profusely, and even felt short of breath. He was so scared that he stopped the car and stepped out. In the next few months, these attacks increased and now he was hesitant to drive for fear of being caught in traffic during an attack. Deb started feeling that he had gone crazy and would die. Soon he remained indoors and refused to move out of the house.

We experience anxiety when we are waiting to take an examination, or to visit a dentist, or even to give a solo performance. This is normal and expected and even motivates us to do our task well. On the other hand, high levels of anxiety that are distressing and interfere with effective functioning indicate the presence of an anxiety disorder — the most common category of psychological disorders.

Everyone has worries and fears. The term **anxiety** is usually defined as a diffuse, vague, very unpleasant feeling of fear and apprehension. The anxious individual also shows combinations of the following symptoms: rapid heart rate, shortness of breath, diarrhoea, loss of appetite, fainting, dizziness, sweating, sleeplessness, frequent urination and tremors. There are many types of anxiety disorders (see Table 4.2). They include **generalised anxiety disorder**, which consists of prolonged, vague, unexplained and intense fears that are not attached to any particular object. The symptoms include worry and apprehensive feelings about the future; hypervigilance, which involves constantly scanning the environment for dangers. It is marked by motor tension, as a result of which the person is unable to relax, is restless, and visibly shaky and tense.

Another type of anxiety disorder is **panic disorder**, which consists of recurrent anxiety attacks in which the person experiences intense terror. A panic attack denotes an abrupt surge of intense anxiety rising to a peak when thoughts of a particular stimuli are present. Such thoughts occur in an unpredictable manner. The clinical features include shortness of breath, dizziness, trembling, palpitations, choking, nausea, chest pain or discomfort, fear of going crazy, losing control or dying.

You might have met or heard of someone who was afraid to travel in a lift or climb to the tenth floor of a building, or refused to enter a room if s/he saw a lizard. You may have also felt it yourself or seen a friend unable to speak a word of a well-memorised and rehearsed speech before an audience. These kinds of fears are termed as **phobias**. People who have phobias have irrational fears related to specific objects, people, or situations. Phobias often develop gradually or begin with a generalised anxiety disorder. Phobias can be grouped into three main types, i.e. *specific phobias, social phobias,* and *agoraphobia.*

Specific phobias are the most commonly occurring type of phobia. This group includes irrational fears such as intense fear of a certain type of animal, or of being in an enclosed space. Intense and incapacitating fear and embarrassment when dealing with others characterises **social phobias**. **Agoraphobia** is the term used when people develop a fear of entering unfamiliar situations. Many

agoraphobics are afraid of leaving their home. So their ability to carry out normal life activities is severely limited.

Have you ever noticed someone washing their hands everytime they touch something, or washing even things like coins, or stepping only within the patterns on the floor or road while walking? People affected by **obsessive-compulsive disorder** are unable to control their preoccupation with specific ideas or are unable to prevent themselves from repeatedly carrying out a particular act or series of acts that affect their ability to carry out normal activities. **Obsessive behaviour** is the inability to stop thinking about a particular idea or topic. The person involved, often finds these thoughts to be unpleasant and shameful. **Compulsive behaviour** is the need to perform certain behaviours over and over again. Many compulsions deal with counting, ordering, checking, touching and washing.

Activity 4.3

Recall how you felt before your Class X Board examination. How did you feel when the examinations were drawing near (one month before the examinations; one week before the examinations; on the day of the examination, and when you were entering the examination hall)? Also try to recollect what you felt when you were awaiting your results. Write down your experiences in terms of bodily symptoms (e.g. 'butterflies in the stomach', clammy hands, excessive perspiration, etc.) as well as mental experiences (e.g. tension, worry, pressure, etc.). Compare your symptoms with those of your classmates and classify them as Mild, Moderate, or Severe.

Very often people who have been caught in a natural disaster (such as tsunami) or have been victims of bomb blasts by terrorists, or been in a serious accident or in a war-related situation, experience **post-traumatic stress disorder** (PTSD). PTSD symptoms vary widely but may include recurrent dreams, flashbacks, impaired concentration, and emotional numbing.

Somatoform Disorders

These are conditions in which there are physical symptoms in the absence of a physical disease. In somatoform disorders, the individual has psychological difficulties and complains of physical symptoms, for which there is no biological cause. Somatoform disorders include *pain disorders, somatisation disorders, conversion disorders,* and *hypochondriasis.*

Table 4.1 : Major Anxiety Disorders and their Symptoms

1. *Generalised Anxiety Disorder* : prolonged, vague, unexplained and intense fears that have no object, accompanied by hypervigilance and motor tension.
2. *Panic Disorder* : frequent anxiety attacks characterised by feelings of intense terror and dread; unpredictable 'panic attacks' along with physiological symptoms like breathlessness, palpitations, trembling, dizziness, and a sense of loosing control or even dying.
3. *Phobias* : irrational fears related to specific objects, interactions with others, and unfamiliar situations.
4. *Obsessive-compulsive Disorder* : being preoccupied with certain thoughts that are viewed by the person to be embarrassing or shameful, and being unable to check the impulse to repeatedly carry out certain acts like checking, washing, counting, etc.
5. *Post-traumatic Stress Disorder (PTSD)* : recurrent dreams, flashbacks, impaired concentration, and emotional numbing followed by a traumatic or stressful event like a natural disaster, serious accident, etc.

Pain disorders involve reports of extreme and incapacitating pain, either without any identifiable biological symptoms or greatly in excess of what might be expected to accompany biological symptoms. How people interpret pain influences their overall adjustment. Some pain sufferers can learn to use active coping, i.e. remaining active and ignoring the pain. Others engage in passive coping, which leads to reduced activity and social withdrawal.

Patients with **somatisation disorders** have multiple and recurrent or chronic bodily complaints. These complaints are likely to be presented in a dramatic and exaggerated way. Common complaints are headaches, fatigue, heart palpitations, fainting spells, vomiting, and allergies. Patients with this disorder believe that they are sick, provide long and detailed histories of their illness, and take large quantities of medicine.

The symptoms of **conversion disorders** are the reported loss of part or all of some basic body functions. Paralysis, blindness, deafness and difficulty in walking are generally among the symptoms reported. These symptoms often occur after a stressful experience and may be quite sudden.

Hypochondriasis is diagnosed if a person has a persistent belief that s/he has a serious illness, despite medical reassurance, lack of physical findings, and failure to develop the disease. Hypochondriacs have an obsessive preoccupation and concern with the condition of their bodily organs, and they continually worry about their health.

Dissociative Disorders

Dissociation can be viewed as severance of the connections between ideas and emotions. Dissociation involves feelings of unreality, estrangement, depersonalisation, and sometimes a loss or shift of identity. Sudden temporary alterations of consciousness that blot out painful experiences are a defining characteristic of **dissociative disorders**. Four conditions are included in this group: *dissociative amnesia, dissociative fugue, dissociative identity disorder*, and *depersonalisation*. Salient features of somatoform and dissociative disorders are given in Box 4.1.

Box 4.1

Salient Features of Somatoform and Dissociative Disorders

Somatoform Disorders	*Dissociative Disorders*
Hypochondriasis : A person interprets insignificant symptoms as signs of a serious illness despite repeated medical evaluation that point to no pathology/disease.	*Dissociative amnesia* : The person is unable to recall important, personal information often related to a stressful and traumatic report. The extent of forgetting is beyond normal.
Somatisation : A person exhibits vague and recurring physical/bodily symptoms such as pain, acidity, etc., without any organic cause.	*Dissociative fugue* : The person suffers from a rare disorder that combines amnesia with travelling away from a stressful environment.
Conversion : The person suffers from a loss or impairment of motor or sensory function (e.g., paralysis, blindness, etc.) that has no physical cause but may be a response to stress and psychological problems.	*Dissociative identity (multiple personality)* : The person exhibits two or more separate and contrasting personalities associated with a history of physical abuse.

Dissociative amnesia is characterised by extensive but selective memory loss that has no known organic cause (e.g., head injury). Some people cannot remember anything about their past. Others can no longer recall specific events, people, places, or objects, while their memory for other events remains intact. This disorder is often associated with an overwhelming stress.

Dissociative fugue has, as its essential feature, an unexpected travel away from home and workplace, the assumption of a new identity, and the inability to recall the previous identity. The fugue usually ends when the person suddenly 'wakes up' with no memory of the events that occurred during the fugue.

Dissociative identity disorder, often referred to as *multiple personality*, is the most dramatic of the dissociative disorders. It is often associated with traumatic experiences in childhood. In this disorder, the person assumes alternate personalities that may or may not be aware of each other.

Depersonalisation involves a dreamlike state in which the person has a sense of being separated both from self and from reality. In depersonalisation, there is a change of self-perception, and the person's sense of reality is temporarily lost or changed.

Mood Disorders

Mood disorders are characterised by disturbances in mood or prolonged emotional state. The most common mood disorder is **depression**, which covers a variety of negative moods and behavioural changes. Depression can refer to a *symptom* or a *disorder*. In day-to-day life, we often use the term depression to refer to normal feelings after a significant loss, such as the break-up of a relationship, or the failure to attain a significant goal. The main types of mood disorders include *depressive, manic* and *bipolar disorders*. **Major depressive disorder** is defined as a period of depressed mood and/or loss of interest or pleasure in most activities, together with other symptoms which may include change in body weight, constant sleep problems, tiredness, inability to think clearly, agitation, greatly slowed behaviour, and thoughts of death and suicide. Other symptoms include excessive guilt or feelings of worthlessness.

Factors Predisposing towards Depression : Genetic make-up, or heredity is an important risk factor for major depression and bipolar disorders. Age is also a risk factor. For instance, women are particularly at risk during young adulthood, while for men the risk is highest in early middle age. Similarly gender also plays a great role in this differential risk addition. For example, women in comparison to men are more likely to report a depressive disorder. Other risk factors are experiencing negative life events and lack of social support.

Another less common mood disorder is **mania**. People suffering from mania become euphoric ('high'), extremely active, excessively talkative, and easily distractible. Manic episodes rarely appear by themselves; they usually alternate with depression. Such a mood disorder, in which both mania and depression are alternately present, is sometimes interrupted by periods of normal mood. This is known as **bipolar mood disorder**. Bipolar mood disorders were earlier referred to as manic-depressive disorders.

Among the mood disorders, the lifetime risk of a suicide attempt is highest in case of bipolar mood disorders. Several risk factors in addition to mental health status of a person predict the likelihood of suicide. These include age, gender, ethnicity, or race and recent occurrence of

serious life events. Teenagers and young adults are as much at high risk for suicide, as those who are over 70 years. Gender is also an influencing factor, i.e. men have a higher rate of contemplated suicide than women. Other factors that affect suicide rates are cultural attitudes toward suicide. In Japan, for instance, suicide is the culturally appropriate way to deal with feeling of shame and disgrace. Negative expectations, hopelessness, setting unrealistically high standards, and being over-critical in self-evaluation are important themes for those who have suicidal preoccupations.

Suicide can be prevented by being alert to some of the symptoms which include :

- changes in eating and sleeping habits
- withdrawal from friends, family and regular activities
- violent actions, rebellious behaviour, running away
- drug and alcohol abuse
- marked personality change
- persistent boredom
- difficulty in concentration
- complaints about physical symptoms, and
- loss of interest in pleasurable activities.

However, seeking timely help from a professional counsellor/psychologist can help to prevent the likelihood of suicide.

Activity 4.4

You may have got some bad news in the family (for example, death of a close relative) or watched your favourite character dying in a film or got less marks than you hoped for or lost your pet. This may have made you sad and depressed and hopeless about the future. Try and recall such incidents in your life. List the situations that led to this reaction. Compare your list and reactions with those of others in class.

Schizophrenic Disorders

Schizophrenia is the descriptive term for a group of psychotic disorders in which personal, social and occupational functioning deteriorate as a result of disturbed thought processes, strange perceptions, unusual emotional states, and motor abnormalities. It is a debilitating disorder. The social and psychological costs of schizophrenia are tremendous, both to patients as well as to their families and society.

Symptoms of Schizophrenia

The symptoms of schizophrenia can be grouped into three categories, viz. **positive symptoms** (i.e. excesses of thought, emotion, and behaviour), **negative symptoms** (i.e. deficits of thought, emotion, and behaviour), and **psychomotor symptoms**.

Positive symptoms are 'pathological excesses' or 'bizarre additions' to a person's behaviour. Delusions, disorganised thinking and speech, heightened perception and hallucinations, and inappropriate affect are the ones most often found in schizophrenia.

Many people with schizophrenia develop **delusions**. A delusion is a false belief that is firmly held on inadequate grounds. It is not affected by rational argument, and has no basis in reality. **Delusions of persecution** are the most common in schizophrenia. People with this delusion believe that they are being plotted against, spied on, slandered, threatened, attacked or deliberately victimised. People with schizophrenia may also experience **delusions of reference** in which they attach special and personal meaning to the actions of others or to objects and events. In **delusions of grandeur**, people believe themselves to be specially empowered persons and in **delusions of control**, they

believe that their feelings, thoughts and actions are controlled by others.

People with schizophrenia may not be able to think logically and may speak in peculiar ways. These **formal thought disorders** can make communication extremely difficult. These include rapidly shifting from one topic to another so that the normal structure of thinking is muddled and becomes illogical (*loosening of associations, derailment*), inventing new words or phrases (*neologisms*), and persistent and inappropriate repetition of the same thoughts (*perseveration*).

Schizophrenics may have **hallucinations**, i.e. perceptions that occur in the absence of external stimuli. **Auditory hallucinations** are most common in schizophrenia. Patients hear sounds or voices that speak words, phrases and sentences directly to the patient (*second-person hallucination*) or talk to one another referring to the patient as s/he (*third-person hallucination*). Hallucinations can also involve the other senses. These include **tactile hallucinations** (i.e. forms of tingling, burning), **somatic hallucinations** (i.e. something happening inside the body such as a snake crawling inside one's stomach), **visual hallucinations** (i.e. vague perceptions of colour or distinct visions of people or objects), **gustatory hallucinations** (i.e. food or drink taste strange), and **olfactory hallucinations** (i.e. smell of poison or smoke).

People with schizophrenia also show **inappropriate affect**, i.e. emotions that are unsuited to the situation.

Negative symptoms are 'pathological deficits' and include poverty of speech, blunted and flat affect, loss of volition, and social withdrawal. People with schizophrenia show **alogia** or poverty of speech, i.e. a reduction in speech and speech content. Many people with schizophrenia show less anger, sadness, joy, and other feelings than most people do. Thus they have **blunted affect**. Some show no emotions at all, a condition known as **flat affect**. Also patients with schizophrenia experience **avolition**, or apathy and an inability to start or complete a course of action. People with this disorder may withdraw socially and become totally focused on their own ideas and fantasies.

People with schizophrenia also show **psychomotor symptoms**. They move less spontaneously or make odd grimaces and gestures. These symptoms may take extreme forms known as **catatonia**. People in a **catatonic stupor** remain motionless and silent for long stretches of time. Some show **catatonic rigidity**, i.e. maintaining a rigid, upright posture for hours. Others exhibit **catatonic posturing**, i.e. assuming awkward, bizarre positions for long periods

Activity 4.5

Can you list some characters in films you have seen or books you have read who suffered from any of the disorders we have studied here like depression or schizophrenia showing some of these delusions?

Can you identify which kind of delusion each of these is?

1. *A person who believes that s/he is going to be the next President of India.*
2. *One who believes that the intelligence agencies/police are conspiring to trap her/him in a spy scandal.*
3. *One who believes that s/he is the incarnation of God and can make things happen.*
4. *One who believes that the tsunami occurred to prevent her/him from enjoying her/his holidays.*
5. *One who believes that her/his actions are controlled by the satellite through a chip implanted in her/his brain by some extraterrestrial beings.*

Box 4.2

Sub-types of Schizophrenia

According to *DSM-IV-TR*, the sub-types of schizophrenia and their characteristics are :

- **Paranoid type** : Preoccupation with delusions or auditory hallucinations; no disorganised speech or behaviour or inappropriate affect.
- **Disorganised type** : Disorganised speech and behaviour; inappropriate or flat affect; no catatonic symptoms.
- **Catatonic type** : Extreme motor immobility; excessive motor inactivity; extreme negativism (i.e. resistance to instructions) or mutism (i.e. refusing to speak).
- **Undifferentiated type** : Does not fit any of the sub-types but meets symptom criteria.
- **Residual type** : Has experienced at least one episode of schizophrenia; no positive symptoms but shows negative symptoms.

of time. Sub-types of schizophrenia and their characteristics are described briefly in Box 4.2.

Behavioural and Developmental Disorders

Apart from those mentioned above, there are certain disorders that are specific to children and if neglected can lead to serious consequences later in life. Children have less self-understanding and they have not yet developed a stable sense of identity nor do they have an adequate frame of reference regarding reality, possibility, and value. As a result, they are unable to cope with stressful events which might be reflected in behavioural and emotional problems. On the other hand, although their inexperience and lack of self-sufficiency make them easily upset by problems that seem minor to an adult, children typically bounce back more quickly.

We will now discuss several disorders of childhood like **Attention-deficit Hyperactivity Disorder (ADHD)**, **Conduct Disorder**, and **Separation Anxiety Disorder**. These disorders, if not attended, can lead to more serious and chronic disorders as the child moves into adulthood.

Classification of children's disorders has followed a different path than that of adult disorders. Achenbach has identified two factors, i.e. *externalisation* and *internalisation*, which include the majority of childhood behaviour problems. The **externalising disorders**, or undercontrolled problems, include behaviours that are disruptive and often aggressive and aversive to others in the child's environment. The **internalising disorders**, or overcontrolled problems, are those conditions where the child experiences depression, anxiety, and discomfort that may not be evident to others.

There are several disorders in which children display disruptive or externalising behaviours. We will now focus on three prominent disorders, viz. *Attention-deficit Hyperactivity Disorder* (ADHD), *Oppositional Defiant Disorder* (ODD), and *Conduct Disorder*.

The two main features of ADHD are **inattention** and **hyperactivity-impulsivity**. Children who are **inattentive** find it difficult to sustain mental effort during work or play. They have a hard time keeping their minds on any one thing or in following instructions. Common complaints are that the child does not listen, cannot concentrate, does not follow instructions, is disorganised, easily distracted, forgetful, does not finish assignments, and is quick to lose interest in boring activities. Children who are **impulsive** seem unable to control their

immediate reactions or to think before they act. They find it difficult to wait or take turns, have difficulty resisting immediate temptations or delaying gratification. Minor mishaps such as knocking things over are common whereas more serious accidents and injuries can also occur. **Hyperactivity** also takes many forms. Children with ADHD are in constant motion. Sitting still through a lesson is impossible for them. The child may fidget, squirm, climb and run around the room aimlessly. Parents and teachers describe them as 'driven by a motor', always on the go, and talk incessantly. Boys are four times more likely to be given this diagnosis than girls.

Children with **Oppositional Defiant Disorder** (ODD) display age-inappropriate amounts of stubbornness, are irritable, defiant, disobedient, and behave in a hostile manner. Unlike ADHD, the rates of ODD in boys and girls are not very different. The terms **Conduct Disorder** and **Antisocial Behaviour** refer to age-inappropriate actions and attitudes that violate family expectations, societal norms, and the personal or property rights of others. The behaviours typical of conduct disorder include aggressive actions that cause or threaten harm to people or animals, non-aggressive conduct that causes property damage, major deceitfulness or theft, and serious rule violations. Children show many different types of aggressive behaviour, such as **verbal aggression** (i.e. name-calling, swearing), **physical aggression** (i.e. hitting, fighting), **hostile aggression** (i.e. directed at inflicting injury to others), and **proactive aggression** (i.e. dominating and bullying others without provocation).

Internalising disorders include **Separation Anxiety Disorder** (SAD) and **Depression**. Separation anxiety disorder is an internalising disorder unique to children. Its most prominent symptom is excessive anxiety or even panic experienced by children at being separated from their parents. Children with SAD may have difficulty being in a room by themselves, going to school alone, are fearful of entering new situations, and cling to and shadow their parents' every move. To avoid separation, children with SAD may fuss, scream, throw severe tantrums, or make suicidal gestures.

The ways in which children express and experience depression are related to their level of physical, emotional, and cognitive development. An infant may show sadness by being passive and unresponsive; a pre-schooler may appear withdrawn and inhibited; a school-age child may be argumentative and combative; and a teenager may express feelings of guilt and hopelessness.

Children may also have more serious disorders called **Pervasive Developmental Disorders**. These disorders are characterised by severe and widespread impairments in social interaction and communication skills, and stereotyped patterns of behaviours, interests and activities. **Autistic disorder** or **autism** is one of the most common of these disorders. Children with autistic disorder have marked difficulties in social interaction and communication, a restricted range of interests, and strong desire for routine. About 70 per cent of children with autism are also mentally retarded.

Children with autism experience profound difficulties in relating to other people. They are unable to initiate social behaviour and seem unresponsive to other people's feelings. They are unable to share experiences or emotions with others. They also show serious abnormalities in communication and language that persist over time. Many autistic children never develop speech and those who do, have repetitive and deviant speech patterns. Children with autism often show narrow

patterns of interests and repetitive behaviours such as lining up objects or stereotyped body movements such as rocking. These motor movements may be self-stimulatory such as hand flapping or self-injurious such as banging their head against the wall.

Another group of disorders which are of special interest to young people are **eating disorders**. These include *anorexia nervosa*, *bulimia nervosa*, and *binge eating*. In **anorexia nervosa**, the individual has a distorted body image that leads her/him to see herself/himself as overweight. Often refusing to eat, exercising compulsively and developing unusual habits such as refusing to eat in front of others, the anorexic may lose large amounts of weight and even starve herself/himself to death. In **bulimia nervosa**, the individual may eat excessive amounts of food, then purge her/his body of food by using medicines such as laxatives or diuretics or by vomiting. The person often feels disgusted and ashamed when s/he binges and is relieved of tension and negative emotions after purging. In **binge eating**, there are frequent episodes of out-of-control eating.

Mental Retardation

You have already read about variations in intelligence in Chapter 1. Mental retardation refers to below average intellectual functioning (with an IQ of approximately 70 or below), and deficits or impairments in adaptive behaviour (i.e. in the areas of communication, self-care, home living, social/interpersonal skills, functional academic skills, work, etc.) which are manifested before the age of 18 years. Table 4.2 describes characteristics of the mentally challenged persons.

Substance-use Disorders

Addictive behaviour, whether it involves excessive intake of high calorie food resulting in extreme obesity or involving the abuse of substances such as alcohol or cocaine, is one of the most severe problems being faced by society today.

Disorders relating to maladaptive behaviours resulting from regular and consistent use of the substance involved are called *substance abuse disorders*. These disorders include problems associated with using and abusing such drugs as alcohol, cocaine and heroin, which alter the way people think, feel and behave. There are two sub-groups of substance-use disorders, i.e. those related to *substance dependence* and those related to *substance abuse*.

In **substance dependence**, there is intense craving for the substance to which the person is addicted, and the person shows tolerance, withdrawal symptoms and compulsive drug-taking. Tolerance means that the person has to use more and more of a substance to get the same effect. Withdrawal refers to physical symptoms that occur when a person stops or cuts down on the use of a psychoactive substance, i.e. a substance that has the ability to change an individual's consciousness, mood and thinking processes.

In **substance abuse**, there are recurrent and significant adverse consequences related to the use of substances. People who regularly ingest drugs damage their family and social relationships, perform poorly at work, and create physical hazards.

We will now focus on the three most common forms of substance abuse, viz. **alcohol abuse and dependence, heroin abuse and dependence**, and **cocaine abuse and dependence**.

Alcohol Abuse and Dependence

People who abuse alcohol drink large amounts regularly and rely on it to help

Table 4.2 : Characteristics of Individuals with Different Levels of Mental Retardation

Area of Functioning	Mild (IQ range = 50–70)	Moderate (IQ range = 35–49)	Severe (IQ range = 20–34) and Profound (IQ = below 20)
Self-help Skills	Feeds and dresses self and cares for own toilet needs	Has difficulties and requires training but can learn adequate self-help skills	No skills to partial skills, but some can care for personal needs on limited basis
Speech and Communication	Receptive and expressive language is adequate; understands communication	Receptive and expressive language is adequate; has speech problems	Receptive language is limited; expressive language is poor
Academics	Optimal learning environment; third to sixth grade	Very few academic skills; first or second grade is maximal	No academic skills
Social Skills	Has friends; can learn to adjust quickly	Capable of making friends but has difficulty in many social situations	Not capable of having real friends; no social interactions
Vocational Adjustment	Can hold a job; competitive to semi-competitive; primarily unskilled work	Sheltered work environment; usually needs consistent supervision	Generally no employment; usually needs constant care
Adult Living	Usually marries, has children; needs help during stress	Usually does not marry or have children; dependent	No marriage or children; always dependent on others

them face difficult situations. Eventually the drinking interferes with their social behaviour and ability to think and work. For many people the pattern of alcohol abuse extends to dependence. That is, their bodies build up a tolerance for alcohol and

Box 4.3

Effects of Alcohol : Some Facts

- All alcohol beverages contain ethyl alcohol.
- This chemical is absorbed into the blood and carried into the central nervous system (brain and spinal cord) where it depresses or slows down functioning.
- Ethyl alcohol depresses those areas in the brain that control judgment and inhibition; people become more talkative and friendly, and they feel more confident and happy.
- As alcohol is absorbed, it affects other areas of the brain. For example, drinkers are unable to make sound judgments, speech becomes less careful and less clear, and memory falters; many people become emotional, loud and aggressive.
- Motor difficulties increase. For example, people become unsteady when they walk and clumsy in performing simple activities; vision becomes blurred and they have trouble in hearing; they have difficulty in driving or in solving simple problems.

they need to drink even greater amounts to feel its effects. They also experience withdrawal responses when they stop drinking. Alcoholism destroys millions of families, social relationships and careers. Intoxicated drivers are responsible for many road accidents. It also has serious effects on the children of persons with this disorder. These children have higher rates of psychological problems, particularly anxiety, depression, phobias and substance-related disorders. Excessive drinking can seriously damage physical health. Some of the ill-effects of alcohol on health and psychological functioning are presented in Box 4.3.

Heroin Abuse and Dependence

Heroin intake significantly interferes with social and occupational functioning. Most abusers further develop a dependence on heroin, revolving their lives around the substance, building up a tolerance for it, and experiencing a withdrawal reaction when they stop taking it. The most direct danger of heroin abuse is an overdose, which slows down the respiratory centres in the brain, almost paralysing breathing, and in many cases causing death.

Cocaine Abuse and Dependence

Regular use of cocaine may lead to a pattern of abuse in which the person may be intoxicated throughout the day and function poorly in social relationships and at work. It may also cause problems in short-term memory and attention. Dependence may develop, so that cocaine dominates the person's life, more of the drug is needed to get the desired effects, and stopping it results in feelings of depression, fatigue, sleep problems, irritability and anxiety. Cocaine poses serious dangers. It has dangerous effects on psychological functioning and physical well-being.

Some of the commonly abused substances are given in Box 4.4.

Box 4.4

Commonly Abused Substances (Following the *DSM-IV-TR* Classification)

- **Alcohol**
- **Amphetamines**: dextroamphetamines, metaamphetamines, diet pills
- **Caffeine**: coffee, tea, caffeinated soda, analgesics, chocolate, cocoa
- **Cannabis**: marijuana or '*bhang*', hashish, sensimilla
- **Cocaine**
- **Hallucinogens**: LSD, mescaline
- **Inhalants**: gasoline, glue, paint thinners, spray paints, typewriter correction fluid, sprays
- **Nicotine**: cigarettes, tobacco
- **Opioid**: morphine, heroin, cough syrup, painkillers (analgesics, anaesthetics)
- **Phencyclidine**
- **Sedatives**

Key Terms

Abnormal psychology, Antisocial behaviour, Anxiety, Autism, Deinstitutionalisation, Delusions, Diathesis-stress model, Eating disorders, Genetics, Hallucinations, Hyperactivity, Hypochondriasis, Mental retardation, Mood disorders, Neurotransmitters, Norms, Obsessive-compulsive disorders, Phobias, Schizophrenia, Somatoform disorders, Substance abuses.

Summary

- *Abnormal behaviour is behaviour that is deviant, distressing, dysfunctional, and dangerous. Those behaviours are seen as abnormal which represent a deviation from social norms and which interfere with optimal functioning and growth.*
- *In the history of abnormal behaviour, the three perspectives are, i.e. the supernatural, the biological or organic, and the psychological. In interactional or bio-psycho-social approach, all three factors, viz. biological, psychological and social play important roles in psychological disorders.*
- *Classification of psychological disorders has been done by the WHO (ICD-10) and the American Psychiatric Association (DSM-IV-TR).*
- *A variety of models have been used to explain abnormal behaviour. These are the biological, psychodynamic, behavioural, cognitive, humanistic-existential, diathesis-stress systems, and socio-cultural approaches.*
- *The major psychological disorders include anxiety, somatoform, dissociative, mood, schizophrenic, developmental and behavioural, and substance-use disorders.*

Review Questions

1. Identify the symptoms associated with depression and mania.
2. Describe the characteristics of hyperactive children.
3. What do you understand by substance abuse and dependence?
4. Can a distorted body image lead to eating disorders? Classify the various forms of it.
5. "Physicians make diagnosis looking at a person's physical symptoms". How are psychological disorders diagnosed?
6. Distinguish between obsessions and compulsions.
7. Can a long-standing pattern of deviant behaviour be considered abnormal? Elaborate.
8. While speaking in public the patient changes topics frequently, is this a positive or a negative symptom of schizophrenia? Describe the other symptoms and sub-types of schizophrenia.
9. What do you understand by the term 'dissociation'? Discuss its various forms.
10. What are phobias? If someone had an intense fear of snakes, could this simple phobia be a result of faulty learning? Analyse how this phobia could have developed.
11. Anxiety has been called the "butterflies in the stomach feeling". At what stage does anxiety become a disorder? Discuss its types.

Project Ideas

1. All of us have changes in mood or mood swings all day. Keep a small diary or notebook with you and jot down your emotional experiences over 3–4 days. As you go through the day (for instance, when you wake up, go to school/college, meet your friends, return home), you will observe that there are many highs and lows, ups and downs in your moods. Note down when you felt happy or unhappy, felt joy or sadness, felt anger, irritation and other commonly experienced emotions. Also note down the situations which elicited these various emotions. After collecting this information, you will have a better understanding of your own moods and how they fluctuate through the day.
2. Studies have shown that current standards of physical attractiveness have contributed to eating disorders. Thinness is valued in fashion models, actors, and dancers. To study this, observe the people around you. Select at least 10 people (they may include your family, friends and other acquaintances), and rate them in terms of Large, Average and Thin. Then pick up any fashion or film magazine. Look at the pictures of models, winners of beauty competitions, and film stars. Write a paragraph or two describing the magazine's message to its readers about the normal or acceptable male or female body. Does this view match what you see as normal body types in the general population?
3. Make a list of movies, TV shows, or plays you have seen where a particular psychological disorder has been highlighted. Match the symptoms shown to the ones you have read. Prepare a report.

Weblinks

http://www.mental-health-matters.com/disorders
http://allpsych.com
http://mentalhealth.com

Pedagogical Hints

1. The contents on psychological disorders have to be handled sensitively. After becoming familiar with various kinds of disorders and their symptoms, students may begin to feel and may express that they are suffering from one or more of the given disorders. It is important to explain to the students, not to draw any definite conclusions on the basis of some signs/symptoms experienced.
2. Students need to be made aware that mere knowledge and information about psychological disorders do not provide the necessary skills for either diagnosing or treating psychological disorders.
3. Students should be discouraged from attempting to treat each other, as they are not qualified to do so. Specialised training in clinical psychology/counselling is required to undertake psycho-diagnostic testing.

THERAPEUTIC APPROACHES

5

After reading this chapter, you would be able to:

- familiarise yourself with the basic nature and process of psychotherapy,
- appreciate that there are different types of therapies for helping people,
- understand the use of psychological forms of intervention, and
- know how people with mental disorders can be rehabilitated.

CONTENTS

Nature and Process of Psychotherapy
- Therapeutic Relationship

Type of Therapies
- *Steps in the Formulation of a Client's Problem* (Box 5.1)
- Psychodynamic Therapy
- Behaviour Therapy
- *Relaxation Procedures* (Box 5.2)
- Cognitive Therapy
- Humanistic-existential Therapy
- Biomedical Therapy
- Alternative Therapies

Rehabilitation of the Mentally Ill

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

In the preceding chapter, you have studied about major psychological disorders and the distress caused by them to the patient and others. In this chapter, you will learn about the various therapeutic methods that are used by psychotherapists to help their patients. There are various types of psychotherapy. Some of them focus on acquiring self-understanding; other therapies are more action-oriented. All approaches hinge on the basic issue of helping the patient overcome her/his debilitating condition. The effectiveness of a therapeutic approach for a patient depends on a number of factors such as severity of the disorder, degree of distress faced by others, and the availability of time, effort and money, among others.

All therapeutic approaches are corrective and helping in nature. All of them involve an interpersonal relationship between the therapist and the client or patient. Some of them are directive in nature, such as psychodynamic, while some are non-directive such as person-centred. In this chapter, we will briefly discuss some of the major forms of psychotherapy.

Nature and Process of Psychotherapy

Psychotherapy is a voluntary relationship between the one seeking treatment or the client and the one who treats or the therapist. The purpose of the relationship is to help the client to solve the psychological problems being faced by her or him. The relationship is conducive for building the trust of the client so that problems may be freely discussed. Psychotherapies aim at changing the maladaptive behaviours, decreasing the sense of personal distress, and helping the client to adapt better to her/his environment. Inadequate marital, occupational and social adjustment also requires that major changes be made in an individual's personal environment.

All psychotherapeutic approaches have the following characteristics : (i) there is systematic application of principles underlying the different theories of therapy, (ii) persons who have received practical training under expert supervision can practice psychotherapy, and not everybody. An untrained person may unintentionally cause more harm than any good, (iii) the therapeutic situation involves a therapist and a client who seeks and receives help for her/his emotional problems (this person is the focus of attention in the therapeutic process), and (iv) the interaction of these two persons — the therapist and the client — results in the consolidation/formation of the therapeutic relationship. This is a confidential, interpersonal, and dynamic relationship. This human relationship is central to any sort of psychological therapy and is the vehicle for change.

All psychotherapies aim at a few or all of the following goals :

(i) Reinforcing client's resolve for betterment.
(ii) Lessening emotional pressure.
(iii) Unfolding the potential for positive growth.
(iv) Modifying habits.
(v) Changing thinking patterns.
(vi) Increasing self-awareness.
(vii) Improving interpersonal relations and communication.

(viii) Facilitating decision-making.
(ix) Becoming aware of one's choices in life.
(x) Relating to one's social environment in a more creative and self-aware manner.

Therapeutic Relationship

The special relationship between the client and the therapist is known as the *therapeutic relationship* or *alliance*. It is neither a passing acquaintance, nor a permanent and lasting relationship. There are two major components of a therapeutic alliance. The first component is the contractual nature of the relationship in which two willing individuals, the client and the therapist, enter into a partnership which aims at helping the client overcome her/his problems. The second component of therapeutic alliance is the limited duration of the therapy. This alliance lasts until the client becomes able to deal with her/his problems and take control of her/his life. This relationship has several unique properties. It is a trusting and confiding relationship. The high level of trust enables the client to unburden herself/himself to the therapist and confide her/his psychological and personal problems to the latter. The therapist encourages this by being accepting, empathic, genuine and warm to the client. The therapist conveys by her/his words and behaviours that s/he is not judging the client and will continue to show the same positive feelings towards the client even if the client is rude or confides all the 'wrong' things that s/he may have done or thought about. This is the **unconditional positive regard** which the therapist has for the client. The therapist has empathy for the client. **Empathy** is different from sympathy and intellectual understanding of another person's situation. In sympathy, one has compassion and pity towards the suffering of another but is not able to feel like the other person. Intellectual understanding is cold in the sense that the person is unable to feel like the other person and does not feel sympathy either. On the other hand, empathy is present when one is able to understand the plight of another person, and feel like the other person. It means understanding things from the other person's perspective, i.e. putting oneself in the other person's shoes. Empathy enriches the therapeutic relationship and transforms it into a healing relationship.

The therapeutic alliance also requires that the therapist must keep strict confidentiality of the experiences, events, feelings or thoughts disclosed by the client. The therapist must not exploit the trust and the confidence of the client in anyway. Finally, it is a professional relationship, and must remain so.

Activity 5.1

A classmate or friend of yours or your favourite character in a TV serial may have recently experienced a negative or a traumatic life event (e.g., death of a loved one, break-up of an important friendship or relationship) of which you are aware. Try to put yourself in the other person's shoes, try to experience how that person is feeling, what s/he is thinking and try to take her/his perspective of the entire situation. This will help you to understand better how that person is feeling.

(Note : This exercise may be done in class, so that teachers can help students in overcoming any distress experienced).

Type of Therapies

Though all psychotherapies aim at removing human distress and fostering effective behaviour, they differ greatly in

concepts, methods, and techniques. Psychotherapies may be classified into three broad groups, viz. the *psychodynamic*, *behaviour*, and *existential* psychotherapies. In terms of the chronological order, psychodynamic therapy emerged first followed by behaviour therapy while the existential therapies which are also called the third force, emerged last. The classification of psychotherapies is based on the following *parameters*:

1. *What is the cause, which has led to the problem?*
   Psychodynamic therapy is of the view that intrapsychic conflicts, i.e. the conflicts that are present within the psyche of the person, are the source of psychological problems. According to behaviour therapies, psychological problems arise due to faulty learning of behaviours and cognitions. The existential therapies postulate that the questions about the meaning of one's life and existence are the cause of psychological problems.

2. *How did the cause come into existence?*
   In the psychodynamic therapy, unfulfilled desires of childhood and unresolved childhood fears lead to intrapsychic conflicts. The behaviour therapy postulates that faulty conditioning patterns, faulty learning, and faulty thinking and beliefs lead to maladaptive behaviours that, in turn, lead to psychological problems. The existential therapy places importance on the present. It is the current feelings of loneliness, alienation, sense of futility of one's existence, etc., which cause psychological problems.

3. *What is the chief method of treatment?*
   Psychodynamic therapy uses the methods of free association and reporting of dreams to elicit the thoughts and feelings of the client. This material is interpreted to the client to help her/him to confront and resolve the conflicts and thus overcome problems. Behaviour therapy identifies the faulty conditioning patterns and sets up alternate behavioural contingencies to improve behaviour. The cognitive methods employed in this type of therapy challenge the faulty thinking patterns of the client to help her/him overcome psychological distress. The existential therapy provides a therapeutic environment which is positive, accepting, and non-judgmental. The client is able to talk about the problems and the therapist acts as a facilitator. The client arrives at the solutions through a process of personal growth.

4. *What is the nature of the therapeutic relationship between the client and the therapist?*
   Psychodynamic therapy assumes that the therapist understands the client's intrapsychic conflicts better than the client and hence it is the therapist who interprets the thoughts and feelings of the client to her/him so that s/he gains an understanding of the same. The behaviour therapy assumes that the therapist is able to discern the faulty behaviour and thought patterns of the client. It further assumes that the therapist is capable of finding out the correct behaviour and thought patterns, which would be adaptive for the client. Both the psychodynamic and the behaviour therapies assume that the therapist is capable of arriving at solutions to the client's problems. In contrast to these therapies, the existential therapies emphasise that the therapist merely provides a warm, empathic relationship in which the client feels secure to explore the nature

and causes of her/his problems by herself/himself.

5. *What is the chief benefit to the client?* Psychodynamic therapy values emotional insight as the important benefit that the client derives from the treatment. Emotional insight is present when the client understands her/his conflicts intellectually; is able to accept the same emotionally; and is able to change her/his emotions towards the conflicts. The client's symptoms and distresses reduce as a consequence of this emotional insight. The behaviour therapy considers changing faulty behaviour and thought patterns to adaptive ones as the chief benefit of the treatment. Instituting adaptive or healthy behaviour and thought patterns ensures reduction of distress and removal of symptoms. The humanistic therapy values personal growth as the chief benefit. Personal growth is the process of gaining increasing understanding of oneself, and one's aspirations, emotions and motives.

6. *What is the duration of treatment?* The duration of classical psychoanalysis may continue for several years. However, several recent versions of psychodynamic therapies are completed in 10–15 sessions. Behaviour and cognitive behaviour therapies as well as existential therapies are shorter and are completed in a few months.

Thus, different types of psychotherapies differ on multiple parameters. However, they all share the common method of providing treatment for psychological distress through psychological means. The therapist, the therapeutic relationship, and the process of therapy become the agents of change in the client leading to the alleviation of psychological distress. The process of psychotherapy begins by formulating the client's problem. Steps involved in the formulation of a client's problem are given in Box 5.1.

Box 5.1

Steps in the Formulation of a Client's Problem

Clinical formulation refers to formulating the problem of the client in the therapeutic model being used for the treatment. The clinical formulation has the following advantages:

1. *Understanding of the problem* : The therapist is able to understand the full implications of the distress being experienced by the client.
2. *Identification of the areas to be targetted for treatment in psychotherapy* : The theoretical formulation clearly identifies the problem areas to be targetted for therapy. Thus, if a client seeks help for inability to hold a job and reports inability to face superiors, the clinical formulation in behaviour therapy would state it as lack of assertiveness skills and anxiety. The target areas have thus been identified as inability to assert oneself and heightened anxiety.
3. *Choice of techniques for treatment* : The choice of techniques for treatment depends on the therapeutic system in which the therapist has been trained. However, even within this broad domain, the choice of techniques, timing of the techniques, and expectations of outcome of the therapy depend upon the clinical formulation.

The clinical formulation is an ongoing process. Formulations may require reformulations as clinical insights are gained in the process of therapy. Usually the first one or two sessions yield enough clinical material for the initial clinical formulation. It is not advisable to start psychotherapy without a clinical formulation.

Activity 5.2

Gather information about some institutions you know which offer psychiatric/psychotherapeutic help.

The following sections explain representative therapies from each of the three major systems of psychotherapy mentioned earlier.

Psychodynamic Therapy

As you have already read, the psychodynamic therapy pioneered by Sigmund Freud is the oldest form of psychotherapy. His close collaborator Carl Jung modified it to what came to be known as the analytical psychotherapy. Subsequently, Freud's successors, known as Neo-Freudians, established their own versions of classical psychodynamic therapy. Broadly, the psychodynamic therapy has conceptualised the structure of the psyche, dynamics between different components of the psyche, and the source of psychological distress. You have already studied these concepts in the chapters on Self and Personality, and Psychological Disorders. The method of treatment, steps in the treatment, nature of the therapeutic relationship, and the expected outcome from the psychodynamic therapy are explained below.

Methods of Eliciting the Nature of Intrapsychic Conflict

Since the psychoanalytic approach views intrapsychic conflicts to be the cause of psychological disorder, the first step in the treatment is to elicit this intrapsychic conflict. Psychoanalysis has invented **free association** and **dream interpretation** as two important methods for eliciting the intrapsychic conflicts. The free association method is the main method for understanding the client's problems. Once a therapeutic relationship is established, and the client feels comfortable, the therapist makes her/him lie down on the couch, close her/his eyes and asks her/him to speak whatever comes to mind without censoring it in anyway. The client is encouraged to freely associate one thought with another, and this method is called the method of free association. The censoring superego and the watchful ego are kept in abeyance as the client speaks whatever comes to mind in an atmosphere that is relaxed and trusting. As the therapist does not interrupt, the free flow of ideas, desires and conflicts of the unconscious, which had been suppressed by the ego, emerge into the conscious mind. This free uncensored verbal narrative of the client is a window into the client's unconscious to which the therapist gains access. Along with this technique, the client is asked to write down her/his dreams upon waking up. Psychoanalysts look upon dreams as symbols of the unfulfilled desires present in the unconscious. The images of the dreams are symbols which signify intrapsychic forces. Dreams use symbols because they are indirect expressions and hence would not alert the ego. If the unfulfilled desires are expressed directly, the ever-vigilant ego would suppress them and that would lead to anxiety. These symbols are interpreted according to an accepted convention of translation as the indicators of unfulfilled desires and conflicts.

Modality of Treatment

Transference and **Interpretation** are the means of treating the patient. As the unconscious forces are brought into the conscious realm through free association and dream interpretation described above, the client starts identifying the therapist with the authority figures of the past, usually childhood. The therapist may be

seen as the punitive father, or as the negligent mother. The therapist maintains a non-judgmental yet permissive attitude and allows the client to continue with this process of emotional identification. This is the process of *transference*. The therapist encourages this process because it helps her/him in understanding the unconscious conflicts of the client. The client acts out her/his frustrations, anger, fear, and depression that s/he harboured towards that person in the past, but could not express at that time. The therapist becomes a substitute for that person in the present. This stage is called **transference neurosis**. A full-blown transference neurosis is helpful in making the therapist aware of the nature of intrapsychic conflicts suffered by the client. There is the **positive transference** in which the client idolises, or falls in love with the therapist, and seeks the therapist's approval. **Negative transference** is present when the client has feelings of hostility, anger, and resentment towards the therapist.

The process of transference is met with **resistance**. Since the process of transference exposes the unconscious wishes and conflicts, thereby increasing the distress levels, the client resists transference. Due to resistance, the client opposes the progress of therapy in order to protect herself/himself from the recall of painful unconscious memories. Resistance can be *conscious* or *unconscious*. Conscious resistance is present when the client deliberately hides some information. Unconscious resistance is assumed to be present when the client becomes silent during the therapy session, recalls trivial details without recalling the emotional ones, misses appointments, and comes late for therapy sessions. The therapist overcomes the resistance by repeatedly confronting the patient about it and by uncovering emotions such as anxiety, fear, or shame, which are causing the resistance.

Interpretation is the fundamental mechanism by which change is effected. **Confrontation** and **clarification** are the two analytical techniques of interpretation. In confrontation, the therapist points out to the client an aspect of her/his psyche that must be faced by the client. Clarification is the process by which the therapist brings a vague or confusing event into sharp focus. This is done by separating and highlighting important details about the event from unimportant ones. Interpretation is a more subtle process. It is considered to be the pinnacle of psychoanalysis. The therapist uses the unconscious material that has been uncovered in the process of free association, dream interpretation, transference and resistance to make the client aware of the psychic contents and conflicts which have led to the occurrence of certain events, symptoms and conflicts. Interpretation can focus on intrapsychic conflicts or on deprivations suffered in childhood. The repeated process of using confrontation, clarification, and interpretation is known as **working through**. Working through helps the patient to understand herself/himself and the source of the problem and to integrate the uncovered material into her/his ego.

The outcome of working through is **insight**. Insight is not a sudden event but a gradual process wherein the unconscious memories are repeatedly integrated into conscious awareness; these unconscious events and memories are re-experienced in transference and are worked through. As this process continues, the client starts to understand herself/himself better at an intellectual and emotional level, and gains insight into her/his conflicts and problems. The intellectual understanding is the intellectual insight. The emotional understanding, acceptance of one's

irrational reaction to the unpleasant events of the past, and the willingness to change emotionally as well as making the change is emotional insight. Insight is the end point of therapy as the client has gained a new understanding of herself/himself. In turn, the conflicts of the past, defence mechanisms and physical symptoms are no longer present and the client becomes a psychologically healthy person. Psychoanalysis is terminated at this stage.

Duration of Treatment

Psychoanalysis lasts for several years, with one hour session for 4–5 days per week. It is an intense treatment. There are **three stages** in the treatment. Stage one is the initial phase. The client becomes familiar with the routines, establishes a therapeutic relationship with the analyst, and gets some relief with the process of recollecting the superficial materials from the consciousness about the past and present troublesome events. Stage two is the middle phase, which is a long process. It is characterised by transference, resistance on the part of the client, and confrontation and clarification, i.e. working through on the therapist's part. All these processes finally lead to insight. The third phase is the termination phase wherein the relationship with the analyst is dissolved and the client prepares to leave the therapy.

Behaviour Therapy

Behaviour therapies postulate that psychological distress arises because of faulty behaviour patterns or thought patterns. It is, therefore, focused on the behaviour and thoughts of the client in the present. The past is relevant only to the extent of understanding the origins of the faulty behaviour and thought patterns. The past is not activated or relived. Only the faulty patterns are corrected in the present.

The clinical application of learning theory principles constitute behaviour therapy. Behaviour therapy consists of a large set of specific techniques and interventions. It is not a unified theory, which is applied irrespective of the clinical diagnosis or the symptoms present. The symptoms of the client and the clinical diagnosis are the guiding factors in the selection of the specific techniques or interventions to be applied. Treatment of phobias or excessive and crippling fears would require the use of one set of techniques while that of anger outbursts would require another. A depressed client would be treated differently from a client who is anxious. The foundation of behaviour therapy is on formulating dysfunctional or faulty behaviours, the factors which reinforce and maintain these behaviours, and devising methods by which they can be changed.

Method of Treatment

The client with psychological distress or with physical symptoms, which cannot be attributed to physical disease, is interviewed with a view to analyse her/his behaviour patterns. Behavioural analysis is conducted to find malfunctioning behaviours, the antecedents of faulty learning, and the factors that maintain or continue faulty learning. *Malfunctioning behaviours* are those behaviours which cause distress to the client. *Antecedent factors* are those causes which predispose the person to indulge in that behaviour. *Maintaining factors* are those factors which lead to the persistence of the faulty behaviour. An example would be a young person who has acquired the malfunctioning behaviour of smoking and seeks help to get rid of smoking. Behavioural analysis conducted by

interviewing the client and the family members reveals that the person started smoking when he was preparing for the annual examination. He had reported relief from anxiety upon smoking. Thus, anxiety-provoking situation becomes the causative or antecedent factor. The feeling of relief becomes the maintaining factor for him to continue smoking. The client has acquired the operant response of smoking, which is maintained by the reinforcing value of relief from anxiety.

Once the faulty behaviours which cause distress, have been identified, a treatment package is chosen. The aim of the treatment is to extinguish or eliminate the faulty behaviours and substitute them with adaptive behaviour patterns. The therapist does this through establishing **antecedent operations** and **consequent operations**. Antecedent operations control behaviour by changing something that precedes such a behaviour. The change can be done by increasing or decreasing the reinforcing value of a particular consequence. This is called *establishing operation*. For example, if a child gives trouble in eating dinner, an establishing operation would be to decrease the quantity of food served at tea time. This would increase the hunger at dinner and thereby increase the reinforcing value of food at dinner. Praising the child when s/he eats properly tends to encourage this behaviour. The antecedent operation is the reduction of food at tea time and the consequent operation is praising the child for eating dinner. It establishes the response of eating dinner.

Behavioural Techniques

A range of techniques is available for changing behaviour. The principles of these techniques are to reduce the arousal level of the client, alter behaviour through classical conditioning or operant conditioning with different contingencies of reinforcements, as well as to use vicarious learning procedures, if necessary.

Negative reinforcement and aversive conditioning are the two major techniques of behaviour modification. As you have already studied in Class XI, **Negative reinforcement** refers to following an undesired response with an outcome that is painful or not liked. For example, the teacher reprimands a child who shouts in class. This is negative reinforcement. **Aversive conditioning** refers to repeated association of undesired response with an aversive consequence. For example, an

Box 5.2

Relaxation Procedures

Anxiety is a manifestation of the psychological distress for which the client seeks treatment. The behavioural therapist views anxiety as increasing the arousal level of the client, thereby acting as an antecedent factor in causing the faulty behaviour. The client may smoke to decrease anxiety, may indulge in other activities such as eating, or be unable to concentrate for long hours on her/his study because of the anxiety. Therefore, reduction of anxiety would decrease the unwanted behaviours of excessive eating or smoking. Relaxation procedures are used to decrease the anxiety levels. For instance, *progressive muscular relaxation* and *meditation* induce a state of relaxation. In progressive muscular relaxation, the client is taught to contract individual muscle groups in order to give the awareness of tenseness or muscular tension. After the client has learnt to tense the muscle group such as the forearm, the client is asked to let go the tension. The client is told that the tension is what the client has at present and that s/he has to get into the opposite state. With repeated practice the client learns to relax all the muscles of the body. You will learn about meditation at a later point in this chapter.

alcoholic is given a mild electric shock and asked to smell the alcohol. With repeated pairings the smell of alcohol is aversive as the pain of the shock is associated with it and the person will give up alcohol. If an adaptive behaviour occurs rarely, **positive reinforcement** is given to increase the deficit. For example, if a child does not do homework regularly, positive reinforcement may be used by the child's mother by preparing the child's favourite dish whenever s/he does homework at the appointed time. The positive reinforcement of food will increase the behaviour of doing homework at the appointed time. Persons with behavioural problems can be given a token as a reward every time a wanted behaviour occurs. The tokens are collected and exchanged for a reward such as an outing for the patient or a treat for the child. This is known as **token economy**.

Unwanted behaviour can be reduced and wanted behaviour can be increased simultaneously through *differential reinforcement*. Positive reinforcement for the wanted behaviour and negative reinforcement for the unwanted behaviour attempted together may be one such method. The other method is to positively reinforce the wanted behaviour and ignore the unwanted behaviour. The latter method is less painful and equally effective. For example, let us consider the case of a girl who sulks and cries when she is not taken to the cinema when she asks. The parent is instructed to take her to the cinema if she does not cry and sulk but not to take her if she does. Further, the parent is instructed to ignore the girl when she cries and sulks. The wanted behaviour of politely asking to be taken to the cinema increases and the unwanted behaviour of crying and sulking decreases.

You read about phobias or irrational fears in the previous chapter. **Systematic desensitisation** is a technique introduced by Wolpe for treating phobias or irrational fears. The client is interviewed to elicit fear-provoking situations and together with the client, the therapist prepares a hierarchy of anxiety-provoking stimuli with the least anxiety-provoking stimuli at the bottom of the hierarchy. The therapist relaxes the client and asks the client to think about the least anxiety-provoking situation. Box 5.2 gives details of relaxation procedures. The client is asked to stop thinking of the fearful situation if the slightest tension is felt. Over sessions, the client is able to imagine more severe fear-provoking situations while maintaining the relaxation. The client gets systematically desensitised to the fear.

The **principle of reciprocal inhibition** operates here. This principle states that the presence of two mutually opposing forces at the same time, inhibits the weaker force. Thus, the relaxation response is first built up and mildly anxiety-provoking scene is imagined, and the anxiety is overcome by the relaxation. The client is able to tolerate progressively greater levels of anxiety because of her/his relaxed state. **Modelling** is the procedure wherein the client learns to behave in a certain way by observing the behaviour of a role model or the therapist who initially acts as the role model. *Vicarious learning*, i.e. learning by observing others, is used and through a

Activity 5.3

Your friend is feeling very nervous and panicky before the examinations. S/he is pacing up and down, is unable to study and feels s/he has forgotten all that s/he has learnt. Try to help her/him to relax by inhaling (taking in a deep breath), holding it for sometime (5–10 seconds), then exhaling (releasing the breath). Ask her/him to repeat this 5–10 times. Also ask her/him to remain focused on her/his breathing. You can do the same exercise when you feel nervous.

process of rewarding small changes in the behaviour, the client gradually learns to acquire the behaviour of the model.

There is a great variety of techniques in behaviour therapy. The skill of the therapist lies in conducting an accurate behavioural analysis and building a treatment package with the appropriate techniques.

Cognitive Therapy

Cognitive therapies locate the cause of psychological distress in irrational thoughts and beliefs. Albert Ellis formulated the **Rational Emotive Therapy** (RET). The central thesis of this therapy is that irrational beliefs mediate between the antecedent events and their consequences. The first step in RET is the *antecedent-belief-consequence (ABC) analysis*. Antecedent events, which caused the psychological distress, are noted. The client is also interviewed to find the irrational beliefs, which are distorting the present reality. Irrational beliefs may not be supported by empirical evidence in the environment. These beliefs are characterised by thoughts with 'musts' and 'shoulds', i.e. things 'must' and 'should' be in a particular manner. Examples of irrational beliefs are, "One should be loved by everybody all the time", "Human misery is caused by external events over which one does not have any control", etc. This distorted perception of the antecedent event due to the irrational belief leads to the consequence, i.e. negative emotions and behaviours. Irrational beliefs are assessed through questionnaires and interviews. In the process of RET, the irrational beliefs are refuted by the therapist through a process of *non-directive questioning*. The nature of questioning is gentle, without probing or being directive. The questions make the client to think deeper into her/his assumptions about life and problems. Gradually the client is able to change the irrational beliefs by making a change in her/his philosophy about life. The rational belief system replaces the irrational belief system and there is a reduction in psychological distress.

Another cognitive therapy is that of Aaron Beck. His theory of psychological distress characterised by anxiety or depression, states that childhood experiences provided by the family and society develop **core schemas** or systems, which include beliefs and action patterns in the individual. Thus, a client, who was neglected by the parents as a child, develops the core schema of "I am not wanted". During the course of life, a critical incident occurs in her/his life. S/he is publicly ridiculed by the teacher in school. This critical incident triggers the core schema of "I am not wanted" leading to the development of negative automatic thoughts. Negative thoughts are persistent irrational thoughts such as "nobody loves me", "I am ugly", "I am stupid", "I will not succeed", etc. Such negative automatic thoughts are characterised by cognitive distortions. Cognitive distortions are ways of thinking which are general in nature but which distort the reality in a negative manner. These patterns of thought are called **dysfunctional cognitive structures**. They lead to errors of cognition about the social reality.

Repeated occurrence of these thoughts leads to the development of feelings of anxiety and depression. The therapist uses questioning, which is gentle, non-threatening disputation of the client's beliefs and thoughts. Examples of such question would be, "Why should everyone love you?", "What does it mean to you to succeed?", etc. The questions make the client think in a direction opposite to that of the negative automatic thoughts whereby s/he gains insight into the nature

of her/his dysfunctional schemas, and is able to alter her/his cognitive structures. The aim of the therapy is to achieve this cognitive restructuring which, in turn, reduces anxiety and depression.

Similar to behaviour therapy, cognitive therapy focuses on solving a specific problem of the client. Unlike psychodynamic therapy, behaviour therapy is open, i.e. the therapist shares her/his method with the client. It is short, lasting between 10–20 sessions.

Cognitive Behaviour Therapy

The most popular therapy presently is the **Cognitive Behaviour Therapy** (CBT). Research into the outcome and effectiveness of psychotherapy has conclusively established CBT to be a short and efficacious treatment for a wide range of psychological disorders such as anxiety, depression, panic attacks, and borderline personality, etc. CBT adopts a bio-psychosocial approach to the delineation of psychopathology. It combines cognitive therapy with behavioural techniques.

The rationale is that the client's distress has its origins in the biological, psychological, and social realms. Hence, addressing the biological aspects through relaxation procedures, the psychological ones through behaviour therapy and cognitive therapy techniques and the social ones with environmental manipulations makes CBT a comprehensive technique which is easy to use, applicable to a variety of disorders, and has proven efficacy.

Humanistic-existential Therapy

The humanistic-existential therapies postulate that psychological distress arises from feelings of loneliness, alienation, and an inability to find meaning and genuine fulfilment in life. Human beings are motivated by the desire for personal growth and **self-actualisation**, and an innate need to grow emotionally. When these needs are curbed by society and family, human beings experience psychological distress. Self-actualisation is defined as an innate or inborn force that moves the person to become more complex, balanced, and integrated, i.e. achieving the complexity and balance without being fragmented. Integrated means a sense of whole, being a complete person, being in essence the same person in spite of the variety of experiences that one is subjected to. Just as lack of food or water causes distress, frustration of self-actualisation also causes distress.

Healing occurs when the client is able to perceive the obstacles to self-actualisation in her/his life and is able to remove them. Self-actualisation requires free emotional expression. The family and society curb emotional expression, as it is feared that a free expression of emotions can harm society by unleashing destructive forces. This curb leads to destructive behaviour and negative emotions by thwarting the process of emotional integration. Therefore, the therapy creates a permissive, non-judgmental and accepting atmosphere in which the client's emotions can be freely expressed and the complexity, balance and integration could be achieved. The fundamental assumption is that the client has the freedom and responsibility to control her/his own behaviour. The therapist is merely a facilitator and guide. It is the client who is responsible for the success of therapy. The chief aim of the therapy is to expand the client's awareness. Healing takes place by a process of understanding the unique personal experience of the client by herself/himself. The client initiates the process of self-growth through which healing takes place.

Existential Therapy

Victor Frankl, a psychiatrist and neurologist propounded the **Logotherapy**. Logos is the Greek word for soul and Logotherapy means treatment for the soul. Frankl calls this process of finding meaning even in life-threatening circumstances as the process of *meaning making*. The basis of meaning making is a person's quest for finding the spiritual truth of one's existence. Just as there is an unconscious, which is the repository of instincts (see Chapter 2), there is a spiritual unconscious, which is the storehouse of love, aesthetic awareness, and values of life. Neurotic anxieties arise when the problems of life are attached to the physical, psychological or spiritual aspects of one's existence. Frankl emphasised the role of spiritual anxieties in leading to meaninglessness and hence it may be called an **existential anxiety**, i.e. neurotic anxiety of spiritual origin. The goal of logotherapy is to help the patients to find meaning and responsibility in their life irrespective of their life circumstances. The therapist emphasises the unique nature of the patient's life and encourages them to find meaning in their life.

In Logotherapy, the therapist is open and shares her/his feelings, values and his/her own existence with the client. The emphasis is on here and now. Transference is actively discouraged. The therapist reminds the client about the immediacy of the present. The goal is to facilitate the client to find the meaning of her/his being.

Client-centred Therapy

Client-centred therapy was given by Carl Rogers. Rogers combined scientific rigour with the individualised practice of client-centred psychotherapy. Rogers brought into psychotherapy the concept of self, with freedom and choice as the core of one's being. The therapy provides a warm relationship in which the client can reconnect with her/his disintegrated feelings. The therapist shows *empathy*, i.e. understanding the client's experience as if it were her/his own, is *warm* and has *unconditional positive regard*, i.e. total acceptance of the client as s/he is. Empathy sets up an emotional resonance between the therapist and the client. Unconditional positive regard indicates that the positive warmth of the therapist is not dependent on what the client reveals or does in the therapy sessions. This unique unconditional warmth ensures that the client feels secure and can trust the therapist. The client feels secure enough to explore her/his feelings. The therapist reflects the feelings of the client in a non-judgmental manner. The reflection is achieved by rephrasing the statements of the client, i.e. seeking simple clarifications to enhance the meaning of the client's statements. This process of reflection helps the client to become integrated. Personal relationships improve with an increase in adjustment. In essence, this therapy helps a client to become her/his real self with the therapist working as a facilitator.

Gestalt Therapy

The German word gestalt means 'whole'. This therapy was given by Freiderick (Fritz) Perls together with his wife Laura Perls. The goal of gestalt therapy is to increase an individual's self-awareness and self-acceptance. The client is taught to recognise the bodily processes and the emotions that are being blocked out from awareness. The therapist does this by encouraging the client to act out fantasies about feelings and conflicts. This therapy can also be used in group settings.

Biomedical Therapy

Medicines may be prescribed to treat psychological disorders. Prescription of medicines for treatment of mental

disorders is done by qualified medical professionals known as psychiatrists. They are medical doctors who have specialised in the understanding, diagnosis and treatment of mental disorders. The nature of medicines used depends on the nature of the disorders. Severe mental disorders such as schizophrenia or bipolar disorder require anti-psychotic drugs. Common mental disorders such as generalised anxiety or reactive depression may also require milder drugs. The medicines prescribed to treat mental disorders can cause side-effects which need to be understood and monitored. Hence, it is essential that medication is given under proper medical supervision. Even the drugs which normal individuals use to stay awake to study for examinations or to get a 'high' at a party have dangerous side-effects. These drugs can cause addiction, and harm the brain and the body. Therefore, it is dangerous to self-medicate with drugs which affect the mind.

You must have seen people with mental problems being given electric shocks in films. **Electro-convulsive Therapy** (ECT) is another form of biomedical therapy. Mild electric shock is given via electrodes to the brain of the patient to induce convulsions. The shock is given by the psychiatrist only when it is necessary for the improvement of the patient. ECT is not a routine treatment and is given only when drugs are not effective in controlling the symptoms of the patient.

Factors Contributing to Healing in Psychotherapy

As we have read, psychotherapy is a treatment of psychological distress. There are several factors which contribute to the healing process. Some of these factors are as follows :

1. A major factor in the healing is the techniques adopted by the therapist and the implementation of the same with the patient/client. If the behavioural system and the CBT school are adopted to heal an anxious client, the relaxation procedures and the cognitive restructuring largely contribute to the healing.
2. The therapeutic alliance, which is formed between the therapist and the patient/client, has healing properties, because of the regular availability of the therapist, and the warmth and empathy provided by the therapist.
3. At the outset of therapy while the patient/client is being interviewed in the initial sessions to understand the nature of the problem, s/he unburdens the emotional problems being faced. This process of emotional unburdening is known as catharsis, and it has healing properties.
4. There are several non-specific factors associated with psychotherapy. Some of these factors are attributed to the patient/client and some to the therapist. These factors are called non-specific because they occur across different systems of psychotherapy and across different clients/patients and different therapists. Non-specific factors attributable to the client/patient are motivation for change, expectation of improvement due to the treatment, etc. These are called *patient variables*. Non-specific factors attributable to the therapist are positive nature, absence of unresolved emotional conflicts, presence of good mental health, etc. These are called *therapist variables*.

Ethics in Psychotherapy

Some of the ethical standards that need to be practiced by professional psycho-therapists are :

1. Informed consent needs to be taken.

2. Confidentiality of the client should be maintained.
3. Alleviating personal distress and suffering should be the goal of all attempts of the therapist.
4. Integrity of the practitioner-client relationship is important.
5. Respect for human rights and dignity.
6. Professional competence and skills are essential.

Alternative Therapies

Alternative therapies are so called, because they are alternative treatment possibilities to the conventional drug treatment or psychotherapy. There are many alternative therapies such as yoga, meditation, acupuncture, herbal remedies and so on. In the past 25 years, yoga and meditation have gained popularity as treatment programmes for psychological distress.

Yoga is an ancient Indian technique detailed in the *Ashtanga Yoga* of Patanjali's *Yoga Sutras*. Yoga as it is commonly called today either refers to only the *asanas* or body posture component or to breathing practices or *pranayama*, or to a combination of the two. Meditation refers to the practice of focusing attention on breath or on an object or thought or a *mantra*. Here attention is focused. In *Vipasana meditation*, also known as mindfulness-based meditation, there is no fixed object or thought to hold the attention. The person passively observes the various bodily sensations and thoughts that are passing through in her or his awareness.

The rapid breathing techniques to induce hyperventilation as in *Sudarshana Kriya Yoga* (SKY) is found to be a beneficial, low-risk, low-cost adjunct to the treatment of stress, anxiety, post-traumatic stress disorder (PTSD), depression, stress-related medical illnesses, substance abuse, and rehabilitation of criminal offenders. SKY has been used as a public health intervention technique to alleviate PTSD in survivors of mass disasters. Yoga techniques enhance well-being, mood, attention, mental focus, and stress tolerance. Proper training by a skilled teacher and a 30-minute practice every day will maximise the benefits. Research conducted at the National Institute of Mental Health and Neurosciences (NIMHANS), India, has shown that SKY reduces depression. Further, alcoholic patients who practice SKY have reduced depression and stress levels. Insomnia is treated with yoga. Yoga reduces the time to go to sleep and improves the quality of sleep.

Kundalini Yoga taught in the USA has been found to be effective in treatment of mental disorders. The Institute for Non-linear Science, University of California, San Diego, USA has found that *Kundalini Yoga* is effective in the treatment of obsessive-compulsive disorder. *Kundalini Yoga* combines *pranayama* or breathing techniques with chanting of *mantras*. Prevention of repeated episodes of depression may be helped by mindfulness-based meditation or *Vipasana*. This meditation would help the patients to process emotional stimuli better and hence prevent biases in the processing of these stimuli.

Rehabilitation of the Mentally Ill

The treatment of psychological disorders has two components, i.e. reduction of symptoms, and improving the level of functioning or quality of life. In the case of milder disorders such as generalised anxiety, reactive depression or phobia, reduction of symptoms is associated with an improvement in the quality of life. However, in the case of severe mental disorders such as schizophrenia, reduction of symptoms may not be associated with

an improvement in the quality of life. Many patients suffer from negative symptoms such as disinterest and lack of motivation to do work or to interact with people. Rehabilitation is required to help such patients become self-sufficient. The aim of rehabilitation is to empower the patient to become a productive member of society to the extent possible. In rehabilitation, the patients are given *occupational therapy*, *social skills training*, and *vocational therapy*. In occupational therapy, the patients are taught skills such as candle making, paper bag making and weaving to help them to form a work discipline. Social skills training helps the patients to develop interpersonal skills through role play, imitation and instruction. The objective is to teach the patient to function in a social group. Cognitive retraining is given to improve the basic cognitive functions of attention, memory and executive functions. After the patient improves sufficiently, vocational training is given wherein the patient is helped to gain skills necessary to undertake productive employment.

Key Terms

Alternative therapy, Behaviour therapy, Biomedical therapy, Client-centred therapy, Cognitive behaviour therapy, Empathy, Gestalt therapy, Humanistic therapy, Psycho dynamic therapy, Psychotherapy, Rehabilitation, Resistance, Self-actualisation, Therapeutic alliance, Transference, Unconditional positive regard.

Summary

- *Psychotherapy is a treatment for the healing of psychological distress. It is not a homogenous treatment method. There are about 400 different types of psychotherapy.*
- *Psychoanalysis, behavioural, cognitive and humanistic-existential are the important systems of psychotherapy. There are many schools within each of the above systems.*
- *The important components of psychotherapy are the clinical formulation, i.e. statement of the client's problem and treatment in the framework of a particular therapy.*
- *Therapeutic alliance is the relation between the therapist and the client in which the client has trust in the therapist and the therapist has empathy for the client.*
- *The predominant mode of psychotherapy for adults with psychological distress is individual psychotherapy. The therapist requires to be professionally trained before embarking on the journey of psychotherapy.*
- *Alternative therapies such as some yogic and meditative practices have been found to be effective in treating certain psychological disorders.*
- *Rehabilitation of the mentally ill is necessary to improve their quality of life once their active symptoms are reduced.*

Review Questions

1. Describe the nature and scope of psychotherapy. Highlight the importance of therapeutic relationship in psychotherapy.
2. What are the different types of psychotherapy? On what basis are they classified?
3. A therapist asks the client to reveal all her/his thoughts including early childhood experiences. Describe the technique and type of therapy being used.
4. Discuss the various techniques used in behaviour therapy.
5. Explain with the help of an example how cognitive distortions take place.
6. Which therapy encourages the client to seek personal growth and actualise their potential? Write about the therapies which are based on this principle.

7. What are the factors that contribute to healing in psychotherapy? Enumerate some of the alternative therapies.
8. What are the techniques used in the rehabilitation of the mentally ill?
9. How would a social learning theorist account for a phobic fear of lizards/cockroaches? How would a psychoanalyst account for the same phobia?
10. Should Electro-convulsive Therapy (ECT) be used in the treatment of mental disorders?
11. What kind of problems is cognitive behaviour therapy best suited for?

Project Ideas

- In school at times you get good points (or gold points or stars) when you do well and bad or black points when you do something wrong. This is an example of a token system. With the help of your classmates make a list of all those school and classroom activities for which you are rewarded or receive praise from your teacher or appreciation from your friends. Also make a list of all those activities for which your teacher scolds you or your classmates get angry with you.
- Describe a person in your past or present who has consistently demonstrated unconditional positive regard towards you. What effect, if any, did (or does) this have on you? Explain. Gather the same information from more friends and prepare a report.

Weblinks

http://www.sciencedirect.com
http://allpsych.com
http://mentalhealth.com

Pedagogical Hints

1. Students could be asked to connect the different therapeutic approaches to some of the theories of personality they have studied in Chapter 2 on Self and Personality.
2. Role-play and dramatisation of certain student-related behavioural issues, such as break-up of relationship with a friend would evoke interest among the students and also emphasise the application of psychology.
3. As therapy is a highly skilled process requiring professional training, students should be refrained from treating it in a frivolous manner.
4. Any activity/discussion, which may have a serious impact on the psyche of the students, should be properly transacted in the presence of the teacher.

ATTITUDE AND SOCIAL COGNITION

6

After reading this chapter, you would be able to:

- understand what are attitudes, how they are formed and changed,
- analyse how people interpret and explain the behaviour of others,
- comprehend how the presence of others influences our behaviour,
- explain why people help or do not help others in distress, and
- understand the concept of pro-social behaviour and factors affecting it.

CONTENTS

Introduction
Explaining Social Behaviour
Nature and Components of Attitudes
A 'Green Environment' : The A-B-C Components of an Attitude (Box 6.1)
Attitude Formation and Change
Attitude Formation
Attitude Change
Telling a Lie for Twenty Dollars (Box 6.2)
Attitude-Behaviour Relationship
Prejudice and Discrimination
Strategies for Handling Prejudice
Social Cognition
Schemas and Stereotypes
Impression Formation and Explaining Behaviour of Others through Attributions
Impression Formation
Attribution of Causality
Behaviour in the Presence of Others
Pro-social Behaviour
Factors Affecting Pro-social Behaviour

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

Social psychology is that branch of psychology which investigates how the behaviour of individuals is affected by others and the social environment. All of us form attitudes, or ways of thinking about specific topics and people. We also form impressions about persons we meet, and assign causes to their behaviour. Besides, our own behaviour gets influenced by other individuals and groups. In some situations, people show pro-social behaviour, that is, helping the needy and the distressed, without expecting anything in return. Many of these social behaviours seem to be simple. Yet, explaining the processes that lie behind these behaviours is a complex matter. This chapter will describe the basic ideas related to attitudes, social cognition and pro-social behaviour as explained by social psychologists.

Explaining Social Behaviour

Social behaviour is a necessary part of human life, and being social means much more than merely being in the company of others. You may recall from what you studied in Class XI that social psychology deals with all behaviour that takes place in the actual, imagined, or implied presence of others. Take this simple example: if you have to memorise a poem and recite it, you may have no problem in doing this when you are by yourself. But if you have to recite this poem to an audience, your performance might get influenced, because you are now in a social situation. Even imagining that people are listening to your recitation (although they may not be physically present) may change your performance. This is just one example that demonstrates how our social environment influences our thoughts, emotions and behaviour in complex ways. Social psychologists examine various forms of social behaviour, and try to explain their basis. Because of social influences, people form views, or **attitudes** about people, and about different issues in life, that exist in the form of behavioural tendencies. When we meet people, we make inferences about their personal qualities. This is called **impression formation**. We are also interested in why people behave in the ways they do — that is, we assign causes to the behaviour shown in specific social situations. This process is called **attribution**. Very often, impression formation and attributions are influenced by attitudes. These three processes are examples of mental activities related to the gathering and interpretation of information about the social world, collectively called **social cognition**. Moreover, social cognition is activated by cognitive units called **schemas**. Cognitive processes cannot be directly seen; they have to be inferred on the basis of externally shown behaviour. There are other examples of social influence that are in the form of observable behaviour. Two such examples are **social facilitation/ inhibition**, i.e. the improvement/decline in performance in the presence of others, and helping, or **pro-social behaviour**, i.e. responding to others who are in need or distress. In order to understand completely how the social context influences the individual, it is necessary to study both social-cognitive processes and social behaviour. Social psychologists have shown that one must go beyond common sense and folk wisdom in order to explain how people observe and make sense of their own and others' diverse behaviours. Through systematic and objective observations, and by adopting scientific methods, it is possible

to establish logical cause-and-effect relationships that explain social behaviour.

This chapter will give an account of the fundamental aspects of the topics mentioned above. We will begin with a description of attitudes.

Nature and Components of Attitudes

For a few minutes quietly do the following mental exercise. Today, how many times did you tell yourself : "In my opinion..." or "Others may say so and so, but I feel..."?

What you fill in the blanks are called *opinions*. Now continue the exercise : how important are these opinions to you? The topics of some of these opinions may be only moderately important to you; they are simply ways of thinking, and it does not matter much to you that others agree or disagree with your views. On the other hand, you may find that some other topics are extremely important to you. If someone opposes or challenges your views about these topics, you get emotional. You may have made some of these views part of your behaviour. In other words, if your views are not merely thoughts, but also have emotional and action components, then these views are more than 'opinions'; they are examples of **attitudes**.

All definitions of attitudes agree that an attitude is a state of the mind, a set of views, or thoughts, regarding some topic (called the 'attitude object'), which have an evaluative feature (positive, negative or neutral quality). It is accompanied by an emotional component, and a tendency to act in a particular way with regard to the attitude object. The thought component is referred to as the **cognitive** aspect, the emotional component is known as the **affective** aspect, and the tendency to act is called the **behavioural** (or conative) aspect. Taken together, these three aspects have been referred to as the **A-B-C components** (Affective-Behavioural-Cognitive components) of attitude. Note that attitudes are themselves not behaviour, but they represent a tendency to behave or act in certain ways. They are part of cognition, along with an emotional component, and cannot be observed from outside. Box 6.1 presents an example of an attitude towards the environment, showing the relationship between the three components.

Attitudes have to be distinguished from two other closely related concepts, namely,

Box 6.1

A 'Green Environment' : The A-B-C Components of an Attitude

Suppose a group of people in your neighbourhood start a tree plantation campaign as part of a 'green environment' movement. Based on sufficient information about the environment, your view towards a 'green environment' is positive (cognitive or 'C' component, along with the evaluative aspect). You feel very happy when you see greenery. You feel sad and angry when you see trees being cut down. These aspects reflect the affective (emotional), or 'A' component of the same attitude. Now suppose you also actively participate in the tree plantation campaign. This shows the behavioural or 'B' component of your attitudes towards a 'green environment'. In general, we expect all three components to be consistent with each other, that is, in the same direction. However, such consistency may not necessarily be found in all situations. For example, it is quite possible that the cognitive aspect of your 'green environment' attitude is very strong, but the affective and behavioural components may be relatively weaker. Or, the cognitive and affective components may be strong and positive, but the behavioural component may be neutral. Therefore, predicting one component on the basis of the other two may not always give us the correct picture about an attitude.

beliefs and **values**. **Beliefs** refer to the cognitive component of attitudes, and form the ground on which attitudes stand, such as belief in God, or belief in democracy as a political ideology. **Values** are attitudes or beliefs that contain a 'should' or 'ought' aspect, such as moral or ethical values. One example of a value is the idea that one should work hard, or that one should always be honest, because honesty is the best policy. Values are formed when a particular belief or attitude becomes an inseparable part of the person's outlook on life. Consequently, values are difficult to change.

What is the purpose served by an attitude? We find that attitudes provide a background that makes it easier for a person to decide how to act in new situations. For example, our attitude towards foreigners may indirectly provide a mental 'layout' or 'blueprint' for the way in which we should behave whenever we meet one.

In addition to the affective, cognitive and behavioural components, attitudes also have other properties. Four significant features of attitudes are : **Valence** (positivity or negativity), **Extremeness**, **Simplicity** or **Complexity** (multiplexity), and **Centrality**.

Valence (positivity or negativity) : The valence of an attitude tells us whether an attitude is positive or negative towards the attitude object. Suppose an attitude (say, towards nuclear research) has to be expressed on a 5-point scale, ranging from 1 (Very bad), 2 (Bad), 3 (Neutral — neither good nor bad), and 4 (Good), to 5 (Very good). If an individual rates her/his view towards nuclear research as 4 or 5, this is clearly a positive attitude. This means that the person likes the idea of nuclear research and thinks it is something good. On the other hand, if the rating is 1 or 2, the attitude is negative. This means that the person dislikes the idea of nuclear research, and thinks it is something bad. We also allow for neutral attitudes. In this example, a neutral attitude towards nuclear research would be shown by a rating of 3 on the same scale. A neutral attitude would have neither positive nor negative valence.

Extremeness : The extremeness of an attitude indicates how positive or negative an attitude is. Taking the nuclear research example given above, a rating of 1 is as extreme as a rating of 5 : they are only in the opposite directions (valence). Ratings of 2 and 4 are less extreme. A neutral attitude, of course, is lowest on extremeness.

Simplicity or **Complexity** (multiplexity) : This feature refers to how many attitudes there are within a broader attitude. Think of an attitude as a family containing several 'member' attitudes. In case of various topics, such as health and world peace, people hold many attitudes instead of single attitude. An attitude *system* is said to be 'simple' if it contains only one or a few attitudes, and 'complex' if it is made up of many attitudes. Consider the example of attitude towards health and well-being. This attitude system is likely to consist of several 'member' attitudes, such as one's concept of physical and mental health, views about happiness and well-being, and beliefs about how one should achieve health and happiness. By contrast, the attitude towards a particular person is likely to consist of mainly one attitude. The multiple member-attitudes within an attitude system should not be confused with the three components described earlier. Each member attitude that belongs to an attitude system also has A-B-C components.

Centrality : This refers to the role of a particular attitude in the attitude system. An attitude with greater centrality would influence the other attitudes in the system much more than non-central (or peripheral) attitudes would. For example, in the attitude towards world peace, a negative

attitude towards high military expenditure may be present as a core or central attitude that influences all other attitudes in the multiple attitude system.

Attitude Formation and Change

Attitude Formation

One important question that psychologists are interested in answering is : how are attitudes formed? Like many other thoughts and concepts that develop and become part of our cognitive system, attitudes towards different topics, things and people also are formed as we interact with others. However, there are specific conditions that lead to the formation of specific attitudes.

In general, attitudes are *learned* through one's own experiences, and through interaction with others. There are a few research studies that show some sort of inborn aspect of attitudes, but such genetic factors influence attitudes only indirectly, along with learning. Therefore, most social psychologists have focused on the conditions which lead to the learning of attitudes.

Process of Attitude Formation

The processes and conditions of learning may be different, resulting in varying attitudes among people.

- *Learning attitudes by association :* You might have seen that students often develop a liking for a particular subject because of the teacher. This is because they see many positive qualities in that teacher; these positive qualities get linked to the subject that s/he teaches, and ultimately get expressed in the form of liking for the subject. In other words, a positive attitude towards the subject is learned through the positive association between a teacher and a student.
- *Learning attitudes by being rewarded or punished :* If an individual is praised for showing a particular attitude, chances are high that s/he will develop that attitude further. For example, if a teenager does *yogasanas* regularly, and gets the honour of being 'Miss Good Health' in her school, she may develop a positive attitude towards *yoga* and health in general. Similarly, if a child constantly falls ill because s/he eats junk food instead of proper meals, then the child is likely to develop a negative attitude towards junk food, and also a positive attitude towards eating healthy food.
- *Learning attitudes through modelling (observing others) :* Often it is not through association, or through reward and punishment, that we learn attitudes. Instead, we learn them by observing others being rewarded or punished for expressing thoughts, or showing behaviour of a particular kind towards the attitude object. For example, children may form a respectful attitude towards elders, by observing that their parents show respect for elders, and are appreciated for it.
- *Learning attitudes through group or cultural norms :* Very often, we learn attitudes through the *norms* of our group or culture. Norms are unwritten rules about behaviour that everyone is supposed to show under specific circumstances. Over time, these norms may become part of our social cognition, in the form of attitudes. Learning attitudes through group or cultural norms may actually be an example of all three forms of learning described above — learning through association, reward or punishment, and modelling. For example, offering money, sweets, fruit and flowers in a place of worship is a normative behaviour in some religions.

When individuals see that such behaviour is shown by others, is expected and socially approved, they may ultimately develop a positive attitude towards such behaviour and the associated feelings of devotion.

- *Learning through exposure to information :* Many attitudes are learned in a social context, but not necessarily in the physical presence of others. Today, with the huge amount of information that is being provided through various media, both positive and negative attitudes are being formed. By reading the biographies of self-actualised persons, an individual may develop a positive attitude towards hard work and other aspects as the means of achieving success in life.

Factors that Influence Attitude Formation

The following factors provide the context for the learning of attitudes through the processes described above.

1. *Family and School Environment :* Particularly in the early years of life, parents and other family members play a significant role in shaping attitude formation. Later, the school environment becomes an important background for attitude formation. Learning of attitudes within the family and school usually takes place by association, through rewards and punishments, and through modelling.

2. *Reference Groups :* Reference groups indicate to an individual the norms regarding acceptable behaviour and ways of thinking. Thus, they reflect learning of attitudes through group or cultural norms. Attitudes towards various topics, such as political, religious and social groups, occupations, national and other issues are often developed through reference groups. Their influence is noticeable especially during the beginning of adolescence, at which time it is important for the individual to feel that s/he belongs to a group. Therefore, the role of reference groups in attitude formation may also be a case of learning through reward and punishment.

3. *Personal Experiences :* Many attitudes are formed, not in the family environment or through reference groups, but through direct personal experiences which bring about a drastic change in our attitude towards people and our own life. Here is a real-life example. A driver in the army went through a personal experience that transformed his life. On one mission, he narrowly escaped death although all his companions got killed. Wondering about the purpose of his own life, he gave up his job in the army, returned to his native village in Maharashtra, and worked actively as a community leader. Through a purely personal experience this individual evolved a strong positive attitude towards community upliftment. His efforts completely changed the face of his village.

4. *Media-related Influences :* Technological advances in recent times have made audio-visual media and the Internet very powerful sources of information that lead to attitude formation and change. In addition, school level textbooks also influence attitude formation. These sources first strengthen the cognitive and affective components of attitudes, and subsequently may also affect the behavioural component. The media can exert both good and bad influences on attitudes. On one hand, the media and Internet make people better informed than other modes of communication. On the other hand, there may be no check on the nature of information being

gathered, and therefore no control over the attitudes that are being formed, or the direction of change in the existing attitudes. The media can be used to create consumerist attitudes where none existed, and can also be harnessed to create positive attitudes to facilitate social harmony.

Attitude Change

During the process of attitude formation, and also after this process, attitudes may be changed and modified through various influences. Some attitudes change more than others do. Attitudes that are still in the formative stage, and are more like opinions, are much more likely to change compared to attitudes that have become firmly established, and have become a part of the individual's values. From a practical point of view, bringing about a change in people's attitudes is of interest to community leaders, politicians, producers of consumer goods, advertisers, and others. Unless we find out how attitudes change, and what conditions account for such change, it would not be possible to take steps to bring about attitude change.

Process of Attitude Change

Three major concepts that draw attention to some important processes in attitude change are described below :

(a) The concept of **balance**, proposed by Fritz Heider is sometimes described in the form of the '**P-O-X**' triangle, which represents the relationships between three aspects or components of the attitude. **P** is the person whose attitude is being studied, **O** is another person, and **X** is the topic towards which the attitude is being studied (attitude object). It is also possible that all three are persons.

The basic idea is that an attitude changes if there is a state of imbalance between the **P-O** attitude, **O-X** attitude, and **P-X** attitude. This is because imbalance is logically uncomfortable. Therefore, the attitude changes in the direction of balance.

Imbalance is found when (i) all three sides of the **P-O-X** triangle are negative, or (ii) two sides are positive, and one side is negative. Balance is found when (i) all three sides are positive, or (ii) two sides are negative, and one side is positive.

Consider the example of dowry as an attitude topic (**X**). Suppose a person (**P**) has a positive attitude towards dowry (**P-X** positive). **P** is planning to get his son married to the daughter of some person (**O**) who has a negative attitude towards dowry (**O-X** negative). What would be the nature of the **P-O** attitude, and how would it determine balance or imbalance in the situation? If **O** initially has a positive attitude towards **P**, the situation would be unbalanced. **P-X** is positive, **O-P** is positive, but **O-X** is negative. That is, there are two positives and one negative in the triangle. This is a situation of imbalance. One of the three attitudes will therefore have to change. This change could take place in the **P-X** relationship (**P** starts disliking dowry as a custom), or in the **O-X** relationship (**O** starts liking dowry as a custom), or in the **O-P** relationship (**O** starts disliking **P**). In short, an attitude change will have to take place so that there will be three positive relationships, or two negative and one positive relationship, in the triangle.

(b) The concept of **cognitive dissonance** was proposed by Leon Festinger. It emphasises the cognitive component. Here the basic idea is that the cognitive components of an attitude must be 'consonant' (opposite of 'dissonant'), i.e., they should be logically in line with each other. If an individual finds that two cognitions in an attitude are dissonant, then one of them will be changed in the direction of consonance. For example,

think about the following ideas ('cognitions') :

Cognition I : *Pan masala causes mouth cancer which is fatal.*

Cognition II : *I eat pan masala.*

Holding these two ideas or cognitions will make any individual feel that something is 'out of tune', or dissonant, in the attitude towards *pan masala*. Therefore, one of these ideas will have to be changed, so that consonance can be attained. In the example given above, in order to remove or reduce the dissonance, I will stop eating *pan masala* (change Cognition II). This would be the healthy, logical and sensible way of reducing dissonance.

Festinger and Carlsmith, two social psychologists, conducted an experiment that showed how cognitive dissonance works (see Box 6.2).

Both balance and cognitive dissonance are examples of **cognitive consistency.** Cognitive consistency means that two components, aspects or elements of the attitude, or attitude system, must be in the same direction. Each element should logically fall in line with other elements. If this does not happen, then the person experiences a kind of mental discomfort, i.e. the sense that 'something is not quite right' in the attitude system. In such a state, some aspect in the attitude system changes in the direction of consistency, because our cognitive system requires logical consistency.

(c) The **two-step concept** was proposed by S.M. Mohsin, an Indian psychologist. According to him, attitude change takes place in the form of two steps. In the first step, the target of change identifies with the source. The 'target' is the person whose attitude is to be changed. The 'source' is the person through whose influence the change is to take place. **Identification** means that the target has liking and regard for the source. S/he puts herself/himself in the place of the target, and tries to feel like her/him. The source must also have a

Box 6.2

Telling a Lie for Twenty Dollars

After participating in a very boring experiment, a group of students were asked to tell another group of students waiting outside that the experiment was very interesting. For telling this lie to the waiting students, half of the first group of students was paid $ 1, and the other half were paid $ 20. After some weeks, the participants of the boring experiment were asked to recall the experiment, and to say how interesting they had found that experiment to be. The responses showed that the $ 1 group described the experiment as more interesting than the $ 20 group. The explanation was : the $ 1 students changed their attitude towards the experiment because they experienced cognitive dissonance.

In the $ 1 group,

The initial cognitions would be : (Dissonant cognitions)	The changed cognitions would be: (Dissonance reduced)
"The experiment was very boring" ;	*"The experiment was actually interesting" ;*
"I told the waiting students that it was interesting";	*"I told the waiting students that it was interesting" ;*
"I told a lie for only $ 1."	*"I would not have told a lie for only $ 1."*

The $ 20 group did not experience cognitive dissonance. So, they did not change their attitude towards the experiment, and rated it as very boring.

The cognitions in the $ 20 (No dissonance) group would be :

"The experiment was very boring";
"I told the waiting students that it was interesting";
"I told a lie because I was paid $ 20."

positive attitude towards the target, and the regard and attraction becomes mutual. In the second step, the source herself/himself shows an attitude change, by actually changing her/him behaviour towards the attitude object. Observing the source's changed attitude and behaviour, the target also shows an attitude change through behaviour. This is a kind of imitation or observational learning.

Consider the following example of two-step attitude change. Preeti reads in the newspapers that a particular soft drink that she enjoys is extremely harmful. But Preeti sees that her favourite sportsperson has been advertising the same soft drink. She has identified herself with the sportsperson, and would like to imitate her/him. Now, suppose the sportsperson wishes to change people's attitude towards this soft drink from positive to negative. The sportsperson must first show positive feelings for her/his fans, and then actually change her/his own habit of consuming that soft drink (Step I) — perhaps by substituting it with a health drink. If the sportsperson actually changes her/his behaviour, it is very likely that now Preeti will also change her attitude and behaviour, and stop consuming the harmful soft drink (Step II).

Factors that Influence Attitude Change

Whether attitudes will change, and if so, to what extent, is a question that puzzles many psychologists. However, most of them agree upon the following major factors that influence attitude change :

- *Characteristics of the existing attitude* : All four properties of attitudes mentioned earlier, namely, **valence** (positivity or negativity), **extremeness, simplicity** or **complexity** (multiplexity), and **centrality** or significance of the attitude, determine attitude change. In general, positive attitudes are easier to change than negative attitudes are. Extreme attitudes, and central attitudes are more difficult to change than the less extreme, and peripheral (less significant) attitudes are. Simple attitudes are easier to change than multiple attitudes are.

In addition, one must also consider the *direction* and *extent* of attitude change. An attitude change may be **congruent** — it may change in the same direction as the existing attitude (for example, a positive attitude may become more positive, or a negative attitude may become more negative). For instance, suppose a person has a somewhat positive attitude towards empowerment of women. Reading about a successful woman may make this attitude more positive. This would be a congruent change. On the other hand, an attitude change may be **incongruent** — it may change in a direction opposite to the existing attitude (for example, a positive attitude becomes less positive, or negative, or a negative attitude becomes less negative, or positive). In the example just given, after reading about successful women, a person may think that women might soon become too powerful, and neglect their family responsibilities. This may make the person's existing positive attitude towards empowerment of women, less positive, or even negative. If this happens, then it would be a case of incongruent change. It has been found that, in general, congruent changes are easier to bring about than are the incongruent changes in attitudes.

Moreover, an attitude may change in the direction of the information that is presented, or in a direction opposite to that of the information presented. Posters describing the importance of brushing one's teeth would strengthen a positive attitude towards dental care. But if people are shown frightening pictures of dental cavities, they may not believe the pictures, and may become less positive about dental care. Research has found that fear sometimes works well in convincing people but if a message generates too much fear, it turns

off the receiver and has little persuasive effect.

• *Source characteristics :* Source **credibility** and **attractiveness** are two features that affect attitude change. Attitudes are more likely to change when the message comes from a highly credible source rather than from a low-credible source. For example, adults who are planning to buy a laptop are more convinced by a computer engineer who points out the special features of a particular brand of laptop, than they would be by a schoolchild who might give the same information. But, if the buyers are themselves schoolchildren, they may be convinced more by another schoolchild advertising a laptop than they would be by a professional giving the same information (see Figure 6.1). In the case of some products such as cars, sales may increase if they are publicised, not necessarily by experts, but by popular public figures.

• *Message characteristics :* The message is the information that is presented in order to bring about an attitude change. Attitudes will change when the amount of information that is given about the topic is just enough, neither too much nor too little. Whether the message contains a **rational** or an **emotional appeal**, also makes a difference. For example, an advertisement for cooking food in a pressure cooker may point out that this saves fuel such as cooking gas (LPG) and is economical (rational appeal). Alternatively, the advertisement may say that pressure-cooking preserves nutrition, and that if one cares for the family, nutrition would be a major concern (emotional appeal) (see Figure 6.2).

The **motives** activated by the message also determine attitude change. For example, drinking milk may be said to make a person healthy and good-looking, or more energetic and more successful at one's job.

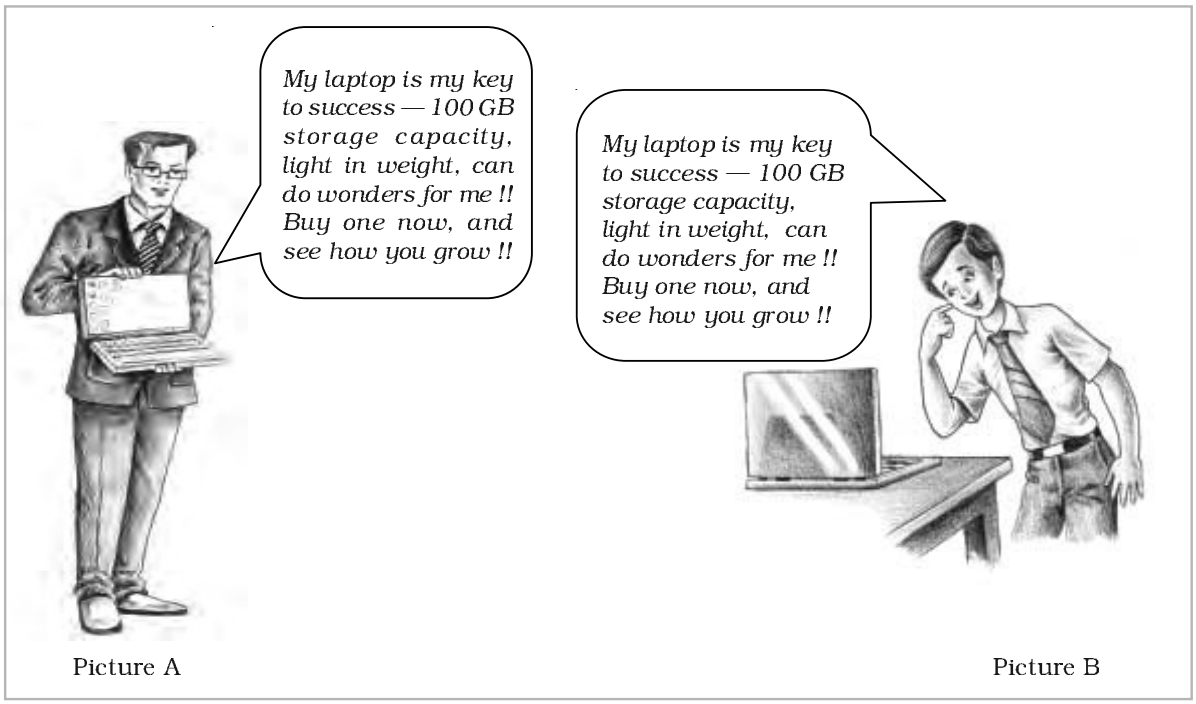


Fig.6.1 : Which Picture will Make You More Eager to Buy a Laptop – Picture A, or Picture B ? Why?

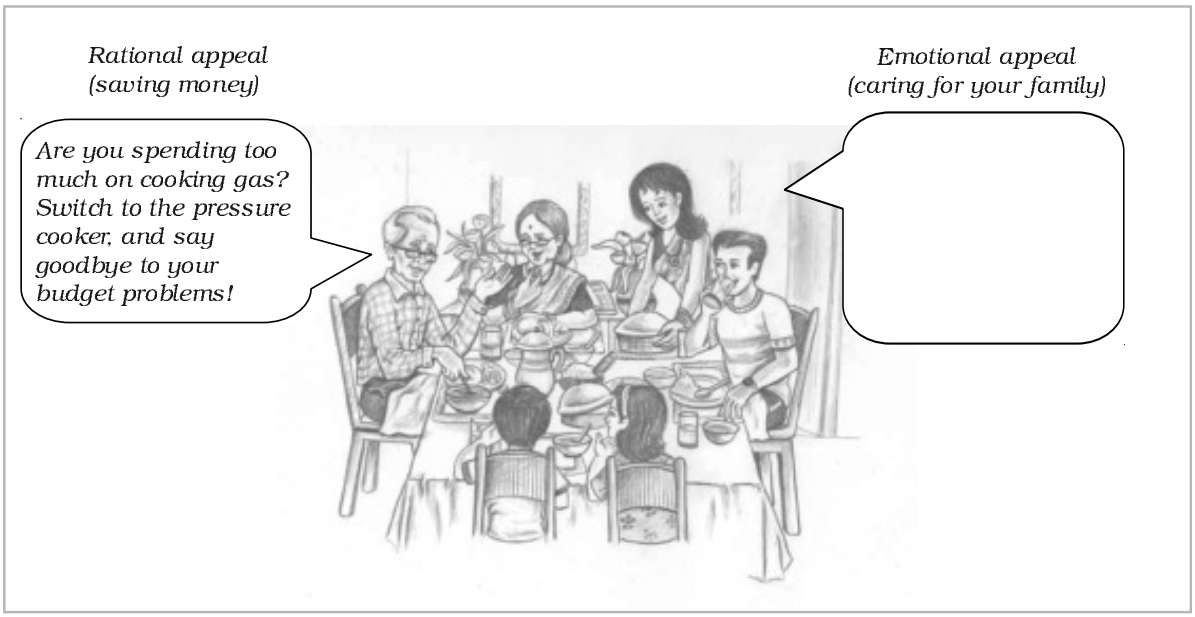


Fig.6.2 : Rational and Emotional Appeals

Finally, the **mode** of spreading the message plays a significant role. Face-to-face transmission of the message is usually more effective than indirect transmission, as for instance, through letters and pamphlets, or even through mass media. For example, a positive attitude towards Oral Rehydration Salts (ORS) for young children is more effectively created if community social workers and

Fig.6.3 : Face-to-face Interaction versus Media Transmission. Which one works better? Why?

doctors spread the message by talking to people directly, than by only describing the benefits of ORS on the radio (see Figure 6.3). These days transmission through visual media such as television and the Internet are similar to face-to-face interaction, but not a substitute for the latter.

- *Target characteristics :* Qualities of the target, such as **persuasibility**, **strong prejudices**, **self-esteem**, and **intelligence** influence the likelihood and extent of attitude change. People, who have a more open and flexible personality, change more easily. Advertisers benefit most from such people. People with strong prejudices are less prone to any attitude change than those who do not hold strong prejudices. Persons who have a low self-esteem, and do not have sufficient confidence in themselves, change their attitudes more easily than those who are high on self-esteem. More intelligent people may change their attitudes less easily than those with lower intelligence. However, sometimes more intelligent persons change their attitudes more willingly than less intelligent ones, because they base their attitude on more information and thinking.

Attitude-Behaviour Relationship

We usually expect behaviour to follow logically from attitudes. However, an individual's attitudes may not always be exhibited through behaviour. Likewise, one's actual behaviour may be contrary to one's attitude towards a particular topic.

Psychologists have found that there would be consistency between attitudes and behaviour when :

- the attitude is strong, and occupies a central place in the attitude system,
- the person is aware of her/his attitude,
- there is very little or no external pressure for the person to behave in a particular way. For example, when there is no group pressure to follow a particular norm,
- the person's behaviour is not being watched or evaluated by others, and
- the person thinks that the behaviour would have a positive consequence, and therefore, intends to engage in that behaviour.

In the days when Americans were said to be prejudiced against the Chinese, Richard LaPiere, an American social psychologist, conducted the following study. He asked a Chinese couple to travel across the United States, and stay in different hotels. Only once during these occasions they were refused service by one of the hotels. Sometime later, LaPiere sent out questionnaires to managers of hotels and tourist homes in the same areas where the Chinese couple had travelled, asking them if they would give accommodation to Chinese guests. A very large percentage said that they would *not* do so. This response showed a negative attitude towards the Chinese, which was inconsistent with the positive behaviour that was actually shown towards the travelling Chinese couple. Thus, attitudes may not always predict actual pattern of one's behaviour.

Activity 6.1

Cut out an advertisement from a newspaper or magazine, that contains something special and catches your attention. Write down the following details about that advertisement, and present it to your class.

- *The topic of the advertisement (for example, whether the advertisement is about a consumer product, some food, a company, a health matter, a national theme, etc.).*
- *Good and bad consequences of the advertisement.*
- *Whether it contains an emotional appeal or a rational appeal.*
- *Whether it contains a popular figure : an expert source, or a well-liked person.*

Sometimes it is behaviour that decides the attitude. In the experiment by Festinger and Carlsmith (see Box 6.2), students who got only one dollar for telling others that the experiment was interesting, discovered that they liked the experiment. That is, on the basis of their behaviour (telling others that the experiment was interesting, for only a small amount of money), they concluded that their attitude towards the experiment was positive ("I would not have told a lie for this small amount of money, which means that the experiment was actually interesting").

Prejudice and Discrimination

Prejudices are examples of attitudes towards a particular group. They are usually negative, and in many cases, may be based on **stereotypes** (the cognitive component) about the specific group. As will be discussed below in the section on social cognition, a stereotype is a cluster of ideas regarding the characteristics of a specific group. All members belonging to this group are assumed to possess these characteristics. Often, stereotypes consist of undesirable characteristics about the target group, and they lead to negative attitudes or prejudices towards members of specific groups. The cognitive component of prejudice is frequently accompanied by dislike or hatred, the affective component. Prejudice may also get translated into discrimination, the behavioural component, whereby people behave in a less positive way towards a particular target group compared to another group which they favour. History contains numerous examples of discrimination based on race and social class or caste. The genocide committed by the Nazis in Germany against Jewish people is an extreme example of how prejudice can lead to hatred, discrimination and mass killing of innocent people.

Prejudices can exist without being shown in the form of discrimination. Similarly, discrimination can be shown without prejudice. Yet, the two go together very often. Wherever prejudice and discrimination exist, conflicts are very likely to arise between groups within the same society. Our own society has witnessed many deplorable instances of discrimination, with and without prejudice, based on gender, religion, community, caste, physical handicap, and illnesses such as AIDS. Moreover, in many cases discriminatory behaviour can be curbed by law. But, the cognitive and emotional components of prejudice are more difficult to change.

Social psychologists have shown that prejudice has one or more of the following sources :

- *Learning :* Like other attitudes, prejudices can also be learned through association, reward and punishment, observing others, group or cultural norms and exposure to information that encourages prejudice. The family, reference groups, personal experiences and the media may play a role in the learning of prejudices (see section on 'Attitude Formation and Change'). People who learn prejudiced attitudes may develop a 'prejudiced personality', and show low adjusting capacity, anxiety, and feelings of hostility against the outgroup.
- *A strong social identity and ingroup bias :* Individuals who have a strong sense of social identity and have a very positive attitude towards their own group boost this attitude by holding negative attitudes towards other groups. These are shown as prejudices.
- *Scapegoating :* This is a phenomenon by which the majority group places the blame on a minority outgroup for its own social, economic or political problems. The minority is too weak or too small in

number to defend itself against such accusations. Scapegoating is a group-based way of expressing frustration, and it often results in negative attitudes or prejudice against the weaker group.

- *Kernel of truth concept* : Sometimes people may continue to hold stereotypes because they think that, after all, there must be some truth, or '**kernel of truth**' in what everyone says about the other group. Even a few examples are sufficient to support the 'kernel of truth' idea.
- *Self-fulfilling prophecy :* In some cases, the group that is the target of prejudice is itself responsible for continuing the prejudice. The target group may behave in ways that justify the prejudice, that is, confirm the negative expectations. For example, if the target group is described as 'dependent' and therefore unable to make progress, the members of this target group may actually behave in a way that proves this description to be true. In this way, they strengthen the existing prejudice.

Strategies for Handling Prejudice

Knowing about the causes or sources would be the first step in handling prejudice. Thus, the strategies for handling prejudice would be effective if they aim at :

(a) minimising opportunities for learning prejudices,
(b) changing such attitudes,
(c) de-emphasising a narrow social identity based on the ingroup, and
(d) discouraging the tendency towards self-fulfilling prophecy among the victims of prejudice.

These goals can be accomplished through :

- *Education and information dissemination*, for correcting stereotypes related to specific target groups, and tackling the problem of a strong ingroup bias.
- *Increasing intergroup contact* allows for direct communication, removal of mistrust between the groups, and even discovery of positive qualities in the outgroup. However, these strategies are successful only if :
  - the two groups meet in a cooperative rather than competitive context,
  - close interactions between the groups helps them to know each other better, and
  - the two groups are not different in power or status.
- *Highlighting individual identity rather than group identity*, thus weakening the importance of group (both ingroup and outgroup) as a basis of evaluating the other person. More details about social identity and intergroup conflict have been presented in the next chapter on Social Influence and Group Processes.

Social Cognition

'Cognition' refers to all those mental processes that deal with obtaining and processing of information. Extending this idea to the social world, the term '**social cognition**' refers to all those psychological processes that deal with the gathering and processing of information related to social objects. These include all the processes that help in understanding, explaining and interpreting social behaviour.

The processing of information related to *social* objects (particularly individuals, groups, people, relationships, social issues, and the like) differs from the processing of information related to *physical* objects. People as social objects may themselves change as the cognitive process takes place. For instance, a teacher who observes a student in school may draw conclusions about her/him that are quite different from the conclusions drawn by the student's

mother, who observes her/him at home. The student may show a difference in her/his behaviour, depending on who is watching her/him — the teacher or the mother. Social cognition is guided by mental units called *schemas*.

Schemas and Stereotypes

A ***schema*** is defined as a mental structure that provides a framework, set of rules or guidelines for processing information about any object. Schemas (or 'schemata') are the basic units stored in our memory, and function as shorthand ways of processing information, thus reducing the time and mental effort required in cognition. In the case of social cognition, the basic units are *social schemas*. Some attitudes may also function like social schemas. We use many different schemas, and come to know about them through analysis and examples.

Most of the schemas are in the form of categories or classes. Schemas that function in the form of categories are called **prototypes**, which are the entire set of features or qualities that help us to define an object completely. In social cognition, category-based schemas that are related to groups of people are called **stereotypes**. These are category-based schemas that are overgeneralised, are not directly verified, and do not allow for exceptions. For example, suppose you have to define a group G. If you have never directly known or interacted with a member of this group, you will most likely use your 'general knowledge' about the typical member of group G. To that information you will add your likes and dislikes. If you have heard more positive things about group G, then your social schema about the whole group will be more positive than negative. On the other hand, if you have heard more negative things about group G, your social schema will be in the form of a negative stereotype. The inferences you have drawn are not the result of your logical thinking or direct experience, but are based on pre-conceived ideas about a particular group. The next time you actually meet a member of group G, your impression of this person, and your behaviour towards her/him will be influenced by your stereotype. It was mentioned earlier that stereotypes provide fertile ground for the growth of prejudices and biases against specific groups. But prejudices can also develop without stereotypes.

Impression Formation and Explaining Behaviour of Others through Attributions

Every social interaction begins with the formation of an impression about the person(s) we meet. Public figures and applicants appearing for job interviews are good examples that show it is very important to 'make a good impression' on others. The process of coming to know a person can be broadly divided into two parts : (a) Impression formation, and (b) Attribution.

The person who forms the impression is called the **perceiver**. The individual about whom the impression is formed is called the **target**. The perceiver gathers information, or responds to a given information, about the qualities of the target, organises this information, and draws inferences about the target.

In attribution, the perceiver goes further, and explains why the target behaved in a particular way. Attaching or assigning a cause for the target's behaviour is the main idea in attribution. Often perceivers may form only an impression about the target, but if the situation requires it, they may also make attributions to the target.

Impression formation and attribution are influenced by :

- the nature of information available to the perceiver,
- social schemas in the perceiver (including stereotypes),
- personality characteristics of the perceiver, and
- situational factors.

Impression Formation

The following aspects have been found in impression formation :

- The process of impression formation consists of the following three sub-processes :
  (a) *Selection :* we take into account only some bits of information about the target person,
  (b) *Organisation :* the selected information is combined in a systematic way, and
  (c) *Inference :* we draw a conclusion about what kind of person the target is.
- Some specific qualities influence impression formation more than other traits do.
- The order or sequence in which information is presented affects the kind of impression formed. Mostly, the information presented first has a stronger effect than the information presented at the end. This is called the **primacy effect** (first impressions are the lasting impressions). However, if the perceiver may be asked to pay attention to all the information, and not merely to the first information, whatever information comes at the end may have a stronger influence. This is known as the **recency effect**.
- We have a tendency to think that a target person who has one set of positive qualities must also be having other specific positive qualities that are associated with the first set. This is known as the **halo effect**. For example, if we are told that a person is 'tidy' and 'punctual', we are likely to think that this person must also be 'hard-working'.

Activity 6.2

This exercise will help you to see the factors in impression formation. You will need two participants, a girl and a boy (who are not students in your class, and who have not read about this topic).

Give the following instruction to the participants. For the female participant, please write a male name in the blank. For the male participant, please write a female name.

"_____ is a hard-working student. In your opinion, which of the following qualities would also be found in this student? Please underline all those qualities."

Intelligent Helpful Selfish
Friendly Punctual Dishonest
Nervous Hot-tempered

See (a) what qualities have been chosen?, and (b) whether there is a difference between the female and the male participants?

Attribution of Causality

After forming an impression, we often go through the process of assigning causes to a person's behaviour. This is also a systematic process, as indicated by the researches done on attribution. The following aspects of attribution have been found.

- When we assign a cause to a person's behaviour, we can broadly classify the cause as being **internal** — something within the person, or **external** — something outside the person. For example, if we see a person A hitting another person B, as observers we may explain the hitting behaviour by saying that (i) A hit B because A is a hot-tempered person, which is an internal (personality-related) cause, or that (ii) A hit B because B behaved in a nasty way,

which is an external, situational cause.

- When people make attributions for success and failure, the causes they give can be classified into *internal* or *external* factors, and also into *stable* or *unstable* factors. Bernard Wiener suggested a classification which is shown in Figure 6.4. Stable factors refer to those causes that do not change with time, while unstable factors are those that do change.
- In making attributions, there is an overall tendency for people to give greater weightage to internal or dispositional factors, than to external or situational factors. This is called the **fundamental attribution error**. This tendency is stronger in some cultures than it is in others. For instance, research shows that Indians tend to make more external (situational) attributions than Americans do.
- There is a difference between the attribution made for success, and the attribution made for failure. In general, people attribute success to internal factors, such as their ability or hard work. They attribute failure to external factors, such as bad luck, the difficulty of the task, and so on.
- A distinction is also found between the attribution that a person makes for her/his own positive and negative experiences (*actor-role*), and the attribution made for another person's positive and negative experiences (*observer-role*). This is called the **actor-observer effect**. For example, if you yourself get good marks in a test, you will attribute it to your own ability or hard work (actor-role, internal attribution for a positive experience). If you get bad marks, you will say that this was because you were unlucky, or that the test was too difficult (actor-role, external attribution for a negative experience). On the other hand, if one of your classmates gets good marks in the test, you will attribute her/his success to good luck or an easy test (observer-role, external attribution for a positive experience). If the same classmate gets bad marks, you are likely to say that her/his failure was because of low ability or lack of effort (observer-role, internal attribution for a negative experience). The basic reason for the difference between the actor and observer roles is that people want to have a nice image of themselves, as compared to others.

So far in this chapter, we have highlighted the cognitive, or thought-related aspects of social behaviour. Let us now examine some aspects of actual behaviour that can be observed from outside.

	Internal Factors	External Factors
Stable Factors	Ability	Fate
Unstable Factors	Effort, Hard Work	Task Characteristics

Fig.6.4 : Wiener's Classification of Causal Factors

Behaviour in the Presence of Others

One of the first observations made about social behaviour was that performance on specific tasks is influenced by the mere presence of others. This is called **social facilitation**. For example, Reena is about to participate in a music contest. She is very talented, yet she is feeling very nervous about the event. If you were in Reena's place, would you perform better *in front of an audience*, or *when you are alone*? As early as 1897, Norman Triplett observed that individuals show better performance in the presence of others, than when they are performing the same task alone. For instance, cyclists racing with each other perform better than when they cycle alone. With time more details came to be known about this phenomenon.

- Better performance in the presence of others is because the person experiences **arousal**, which makes the person react in a more intense manner. This explanation was given by Zajonc (this name is pronounced to rhyme with 'science').
- The arousal is because the person feels she or he is being evaluated. Cottrell called this idea **evaluation apprehension**. The person will be praised if the performance is good (reward), or criticised if it is bad (punishment). We wish to get praise and avoid criticism, therefore we try to perform well and avoid mistakes.
- The **nature of the task** to be performed also affects the performance in the presence of others. For example, in the case of a simple or familiar task, the person is more sure of performing well, and the eagerness to get praise or reward is stronger. So the individual performs better in the presence of others than s/he does when alone. But in the case of a complex or new task, the person may be afraid of making mistakes. The fear of criticism or punishment is stronger. So the individual performs worse in the presence of others than s/he does when alone.
- If the others present are also performing the same task, this is called a situation of **co-action**. In this situation, there is social comparison and competition. Once again, when the task is simple or a familiar one, performance is better under co-action than when the person is alone.

In short, task performance can be facilitated and improved, or inhibited and worsened by the presence of others. Many other kinds of social influence have been noticed. For example, if we are working together in a group, the larger the group, the less effort each member puts in. This

Activity 6.3

Consider these two situations :
Situation X. A person is performing a solo dance in front of an audience.
Situation Y. A person is running in a race with five other athletes.

Which of the following factors is present in Situation Y, but not in Situation X?

(a) Arousal
(b) Evaluation apprehension
(c) Competition
(d) Difficult task

Based on the given situations, choose the correct alternative.

In the presence of an audience, evaluation apprehension leads to :

A. Improvement in performance of both familiar and new tasks. Yes No
B. Decline in performance of both familiar and new tasks. Yes No
C. Improvement in performance of familiar tasks, and decline in performance of new tasks. Yes No
D. Arousal, which leads to C. Yes No

phenomenon is called **social loafing**, based on *diffusion of responsibility*. You will read about social loafing in the next chapter.

Diffusion of responsibility, which is often the basis of social loafing, can also be frequently seen in situations where people are expected to help. We will look into this aspect and other factors in helping behaviour in the section that follows.

Pro-social Behaviour

Throughout the world, doing good to others and being helpful is described as a virtue. All religions teach us that we should help those who are in need. This behaviour is called helping or **pro-social behaviour**. Pro-social behaviour is very similar to 'altruism', which means doing something for or thinking about the welfare of others without any self-interest (in Latin '*alter*' means 'other', the opposite of '*ego*' which means 'self'). Some common examples of pro-social behaviour are sharing things, cooperating with others, helping during natural calamities, showing sympathy, doing favours to others, and making charitable donations.

Pro-social behaviour has the following characteristics. It must :

- aim to benefit or do good to another person or other persons,
- be done without expecting anything in return,
- be done willingly by the person, and not because of any kind of pressure, and
- involve some difficulty or 'cost' to the person giving help.

For instance, if a rich person donates a lot of money that is obtained illegally, with the idea that her/his photograph and name will appear in the newspapers, this cannot be called 'pro-social behaviour' although the donation may do good to many people.

In spite of the great value and importance attached to pro-social behaviour, people do not show such behaviour very often. Immediately after the Mumbai blasts on 11 July, 2006, the community stepped forward to help the blast victims in any way they could. By contrast, on an earlier occasion, nobody came forward to help a girl on a moving suburban train in Mumbai, when her purse was being snatched. The other passengers did nothing to help, and the girl was thrown out of the train. Even as the girl was lying injured on the railway tracks, people living in the buildings around the area did not come to help her.

The question then is : under what conditions, and with what motives do people help others? Research on pro-social behaviour has brought out several factors that affect pro-social behaviour.

Factors Influencing Pro-social Behaviour

- Pro-social behaviour is based on an inborn, natural tendency in human beings to help other members of their own species. This inborn tendency facilitates survival of the species.
- Pro-social behaviour is influenced by learning. Individuals who are brought up in a family environment that sets examples of helping others, emphasises helping as a value, and praises helpfulness, and showing more pro-social behaviour than individuals who are brought up in a family environment devoid of these features.
- Cultural factors influence pro-social behaviour. Some cultures actively encourage people to help the needy and distressed. In cultures that encourage independence, individuals will show less pro-social behaviour, because people are expected to take care of themselves, and not to depend on help from others. Individuals in cultures suffering from a shortage of resources may not show a high level of pro-social behaviour.

- Pro-social behaviour is expressed when the situation activates certain **social norms** that require helping others. Three norms have been mentioned in the context of pro-social behaviour :
  (a) The norm of **social responsibility** : We should help anyone who needs help, without considering any other factor.
  (b) The norm of **reciprocity** : We should help those persons who have helped us in the past.
  (c) The norm of **equity** : We should help others whenever we find that it is fair to do so. For example, many of us may feel that it is more fair to help a person who has lost all belongings in a flood, than to help a person who has lost everything through gambling.
- Pro-social behaviour is affected by the expected reactions of the person who is being helped. For example, people might be unwilling to give money to a needy person because they feel that the person might feel insulted, or may become dependent.
- Pro-social behaviour is more likely to be shown by individuals who have a high level of **empathy**, that is, the capacity to feel the distress of the person who is to be helped, such as Baba Saheb Amte and Mother Teresa. Pro-social behaviour is also more likely in situations that arouse empathy, such as the picture of starving children in a famine.
- Pro-social behaviour may be reduced by factors such as a bad mood, being busy with one's own problems, or feeling that the person to be helped is responsible for her/his own situation (that is, when an internal attribution is made for the need state of the other person).
- Pro-social behaviour may also be reduced when the number of bystanders is more than one. For example, the victim of a road accident sometimes does not get help because there are many people standing around the scene of the accident. Each person thinks that it is not her/his responsibility alone to give help, and that someone else may take the responsibility. This phenomenon is called **diffusion of responsibility**. On the other hand, if there is only one bystander, this person is more likely to take the responsibility and actually help the victim.

In this chapter, you have learnt about the basic concepts of attitudes and social cognition, and got a glimpse of some forms of social behaviour. In the next chapter, you will read about the influence of groups on the individual.

Activity 6.4

A. Go to the school library with a pile of heavy books and other articles. Outside the library, at a convenient point, when you find that (a) only one person (bystander) is present, (b) more than one person (bystanders) is present, drop the books and articles as though that happened accidentally. Observe the following :
(a) when there was only one bystander, did that person come forward to help you to pick up the fallen articles ?
(b) when there was more than one bystander, how many of them came forward to help you to pick up the fallen articles?
Have a detailed class discussion.

Go through some recent newspapers and magazines. Collect at least one report of bystanders giving help. Make sure you attach newspaper/ magazine clippings along with the report. Discuss why the bystanders gave help in the situation that is described. You can also present descriptions about people you know personally, who have helped others in emergencies. Write a brief description of those reports and present them in your class.

Key Terms

Actor-observer effect, Arousal, Attitudes, Attribution, Balance, Beliefs, Centrality of attitude, Co-action, Cognitive consistency, Cognitive dissonance, Congruent attitude change, Diffusion of responsibility, Discrimination, Empathy, Evaluation apprehension, Extremeness of attitude, Fundamental attribution error, Halo effect, Identification, Incongruent attitude change, Kernel of truth, Persuasibility, Prejudice, Primacy effect, Pro-social behaviour, Prototype, Recency effect, Scapegoating, Schema, Self-fulfilling prophecy, Simplicity or complexity (multiplexity) of attitude, Social facilitation, Social loafing, Stereotype, Valence of attitude, Values.

Summary

- *Human beings have a need to interact with and relate to others, and to explain their own as well as others' behaviour.*
- *People develop attitudes, or thoughts and behavioural tendencies, through learning processes, family and school influences, reference groups and the media. Attitudes have an affective, cognitive and behavioural component, and can be understood in terms of valence, extremeness, simplicity or complexity (multiplexity) and centrality.*
- *Attitude change takes according to the balance concept, cognitive consonance and the two-step concept. Attitude change is affected by characteristics of the source, the target, and the message. Negative attitudes (prejudices) towards a group often create conflicts within a society, and are expressed through discrimination, but there are practical strategies for handling prejudice.*
- *The entire set of processes involved in understanding the social world around us is called social cognition, which is guided by mental structures known as social schemas. One kind of social schema, a stereotype, contains overgeneralised beliefs about a particular group, often leads to and strengthens prejudices.*
- *Impression formation takes place in a systematic way, and exhibits effects such as primacy and recency, and the halo effect.*
- *People also assign causes to their own and others' behaviour, and to experiences such as success and failure, by attributing internal or external causes. Attribution shows effects such as the fundamental attribution error and actor-observer effect.*
- *Because of arousal and evaluation apprehension in the presence of others, performance of familiar tasks may improve (social facilitation) and performance of unfamiliar or new tasks may decline (social inhibition).*
- *People respond to others who are in need by helping them (pro-social behaviour), but this is determined by several factors.*

Review Questions

1. Define attitude. Discuss the components of an attitude.
2. Are attitudes learnt? Explain how?
3. What are the factors that influence the formation of an attitude?
4. Is behaviour always a reflection of one's attitude? Explain with a relevant example.
5. Highlight the importance of schemas in social cognition.
6. Differentiate between prejudice and stereotype.
7. Prejudice can exist without discrimination and vice versa. Comment.
8. Describe the important factors that influence impression formation.
9. Explain how the attribution made by an 'actor' would be different from that of an 'observer'.
10. How does social facilitation take place?
11. Explain the concept of pro-social behaviour.
12. Your friend eats too much junk food, how would you be able to bring about a change in her/his attitude towards food?

Project Ideas

1. *Attitudes Towards and Awareness of Waste Management : A Survey*

The problem of household garbage (domestic waste) is common in most Indian cities. The concern for a clean environment is increasing, but we do not know to what extent citizens know how to dispose of the garbage that collects in their household. Along with some of your classmates, conduct a survey in your own colony to find out what people do about household garbage. Each student may visit two houses in their colony, and ask the heads of the household the following questions. Their answers must be written down.

1. What do you do with old newspapers, magazines, tins, and bottles ?
2. What do you do with plastic packets, and other plastic objects (for example, toys, containers etc.)?
3. How do you dispose of kitchen waste (e.g., vegetable and fruit peels, used tea leaves or tea-bags, left-over food that cannot be eaten etc.)?
4. How do you dispose of other used objects that contain chemical substances (e.g. torch cells, used or damaged CDs, cassettes, insecticide and pesticide containers etc.)?
5. Do you put all the garbage collected in your house everyday in the same place, or do you put different kinds of garbage in separate dustbins/waste-baskets?
6. What happens to the garbage that is collected from your house and neighbourhood and where is it taken?
7. What is the meaning of 'recycling'?
8. What can you do (personally) to make your colony/neighbourhood more clean?

Compare the responses collected by all the students, and see what kind of attitudes and awareness people show about waste management at the household level.

2. *Interpersonal Judgment Exercise*

The following exercise will help you to see how well you and your best friend know each other.

For each quality listed below, give ratings for yourself (Column 1) and for your best friend in your class (Column 2). Also ask your friend to do the same kind of rating, for himself/herself (Column 1) and for you (Column 2). Use the following rating scale :

1	2	3	4	5
Very low on the quality	Low	Neither low nor high	High	Very high on the quality

After you and your friend have completed the ratings, copy Column 2 ratings from your friend's sheet on your sheet, under Column 3. Compare Column 3 ratings with Column 1 ratings in the case of each quality. Ask your friend to do the same task – that is, copy Column 2 ratings from your sheet on her/his sheet, under Column 3, and compare these ratings with her/his Column 1 ratings. Enter Column 3 minus Column 1 under Column 4.

	Column 1	Column 2	Column 3	Column 4
	You rate yourself	You rate your friend	Rating of you by your friend	Column 3 minus Column 1
Friendly				
Tense				
Sincere				
Pleasant				
Open to new ideas				

Examine the following. Are there any zeros in Column 4? On which quality is the difference greatest? On which quality is the difference smallest (other than zero)?

In general, have you given yourself a higher or lower rating than what your friend has given you? Has your friend given herself/himself a higher or lower rating than what you have given your friend? The sign of the difference (plus or minus) should be noted only to see the direction of the difference.

The closer the ratings between Column 1 and Column 3 for both of you, the better you know each other. You can also compare your Column 1 with your friend's Column 1. The more similar these two ratings are, the greater the similarity between you and your friend.

Weblinks

http://tip.psychology.org/attitude.html
http://changingminds.org/explanations/theories/schema.htm
http://www.12manage.com/methods_heider_attribution_theory.html
http://www.answers.com/topic/social-facilitation

Pedagogical Hints

1. In the topic of attitudes, students should be made to understand the distinction between attitudes as such (with the A-B-C components) on one hand, and behaviour related to the attitude, on the other.
2. To explain attitude change, students may be encouraged to think of real-life examples of attitude change, for instance, attempts made by advertisers to promote their products through media. Then discuss whether these attempts to change attitude are actually successful or not.
3. To enable students to understand the relationships among schemas, prototypes and prejudice, give examples of how stereotypes, as forms of prototypes, may lead to prejudice.
4. In the topic of social cognition, students should be able to understand that impression formation and attribution are basic cognitive processes that help in processing information about other persons. The role of schemas has to be emphasised in this context.
5. Social facilitation and pro-social behaviour must be discussed as aspects that highlight the behavioural rather than cognitive aspects of social life.

SOCIAL INFLUENCE AND GROUP PROCESSES

7

After reading this chapter, you would be able to:

- understand the nature and types of groups and know how they are formed,
- examine the influence of group on individual behaviour,
- describe the process of cooperation and competition,
- reflect on the importance of social identity, and
- understand the nature of intergroup conflict and examine conflict resolution strategies.

CONTENTS

Introduction
Nature and Formation of Groups
Groupthink (Box 7.1)
Type of Groups
The Minimal Group Paradigm Experiments (Box 7.2)
Influence of Group on Individual Behaviour
Social Loafing
Group Polarisation
Conformity, Compliance, and Obedience
The Autokinetic Effect (Box 7.3)
Group Pressure and Conformity : The Asch Experiment (Box 7.4)
Cooperation and Competition
Sherif's Summer Camp Experiments (Box 7.5)
Determinants of Cooperation and Competition
Social Identity
Intergroup Conflict : Nature and Causes
Conflict Resolution Strategies

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

Think about your day-to-day life and the various social interactions you have. In the morning, before going to school, you interact with your family members; in school, you discuss topics and issues with your teachers and classmates; and after school you phone up, visit or play with your friends. In each of these instances, you are part of a group which not only provides you the needed support and comfort but also facilitates your growth and development as an individual. Have you ever been away to a place where you were without your family, school, and friends? How did you feel? Did you feel there was something vital missing in your life?

Our lives are influenced by the nature of group membership we have. It is, therefore, important to be part of groups which would influence us positively and help us in becoming good citizens. In this chapter, we shall try to understand what groups are and how they influence our behaviour. At this point, it is also important to acknowledge that not only do others influence us, but we, as individuals, are also capable of changing others and the society. The benefits of cooperation and competition and how they influence our personal and social lives will also be examined. We will also see how identity develops — how we come to know ourselves. Similarly, we would try to understand why sometimes group conflicts arise; examine the perils of group conflict and apprise ourselves of various conflict resolution strategies so that we are able to contribute towards making a harmonious and cohesive society.

Nature and Formation of Groups

What is a Group?

The preceding introduction illustrates the importance of groups in our lives. One question that comes to mind is: "How are groups (e.g., your family, class, and the group with which you play) different from other collections of people?" For example, people who have assembled to watch a cricket match or your school function are at one place, but are not interdependent on each other. They do not have defined roles, status and expectations from each other. In the case of your family, class, and the group with which you play, you will realise that there is mutual interdependence, each member has roles, there are status differentials, and there are expectations from each other. Thus, your family, class and playgroup are examples of groups and are different from other collections of people.

A group may be defined as an organised system of two or more individuals, who are interacting and interdependent, who have common motives, have a set of role relationships among its members, and have norms that regulate the behaviour of its members.

Groups have the following salient characteristics :

- A social unit consisting of two or more individuals who perceive themselves as belonging to the group. This characteristic of the group helps in distinguishing one group from the other and gives the group its unique identity.
- A collection of individuals who have common motives and goals. Groups

function either working towards a given goal, or away from certain threats facing the group.

- A collection of individuals who are interdependent, i.e. what one is doing may have consequences for others. Suppose one of the fielders in a cricket team drops an important catch during a match — this will have consequence for the entire team.
- Individuals who are trying to satisfy a need through their joint association also influence each other.
- A gathering of individuals who interact with one another either directly or indirectly.
- A collection of individuals whose interactions are structured by a set of roles and norms. This means that the group members perform the same functions every time the group meets and the group members adhere to group norms. Norms tell us how we ought to behave in the group and specify the behaviours expected from group members.

Groups can be differentiated from other collections of people. For example, a **crowd** is also a collection of people who may be present at a place/situation by chance. Suppose you are going on the road and an accident takes place. Soon a large number of people tend to collect. This is an example of a crowd. There is neither any structure nor feeling of belongingness in a crowd. Behaviour of people in crowds is irrational and there is no interdependence among members.

Teams are special kinds of groups. Members of teams often have complementary skills and are committed to a common goal or purpose. Members are mutually accountable for their activities. In teams, there is a positive synergy attained through the coordinated efforts of the members. The main differences between groups and teams are:

- In groups, performance is dependent on contributions of individual members. In teams, both individual contributions and teamwork matter.
- In groups, the leader or whoever is heading the group holds responsibility for the work. However in teams, although there is a leader, members hold themselves responsible.

Picture A

Picture B

Fig.7.1 : Look at these Two Pictures

Picture A shows a football team — a group in which members interact with one another, have roles and goals. Picture B depicts an audience watching the football match — a mere collection of people who by some coincidence (may be their interest in football) happened to be in the same place at the same time.

An **audience** is also a collection of people who have assembled for a special purpose, may be to watch a cricket match or a movie. Audiences are generally passive but sometimes they go into a frenzy and become mobs. In mobs, there is a definite sense of purpose. There is polarisation in attention, and actions of persons are in a common direction. Mob behaviour is characterised by homogeneity of thought and behaviour as well as impulsivity.

Why Do People Join Groups?

All of you are members of your family, class and groups with which you interact or play. Similarly, other people are also members of a number of groups at any given time. Different groups satisfy different needs, and therefore, we are simultaneously members of different groups. This sometimes creates pressures for us because there may be competing demands and expectations. Most often we are able to handle these competing demands and expectations. People join groups because these groups satisfy a range of needs. In general, people join groups for the following reasons :

- **Security** : When we are alone, we feel insecure. Groups reduce this insecurity. Being with people gives a sense of comfort, and protection. As a result, people feel stronger, and are less vulnerable to threats.
- **Status** : When we are members of a group that is perceived to be important by others, we feel recognised and experience a sense of power. Suppose your school wins in an inter-institutional debate competition, you feel proud and think that you are better than others.
- **Self-esteem** : Groups provide feelings of self-worth and establish a positive social identity. Being a member of prestigious groups enhances one's self-concept.
- **Satisfaction of one's psychological and social needs** : Groups satisfy one's social and psychological needs such as sense of belongingness, giving and receiving attention, love, and power through a group.
- **Goal achievement** : Groups help in achieving such goals which cannot be attained individually. There is power in the majority.
- **Provide knowledge and information** : Group membership provides knowledge and information and thus broadens our view. As individuals, we may not have all the required information. Groups supplement this information and knowledge.

Group Formation

In this section, we will see how groups are formed. Basic to group formation is some contact and some form of interaction between people. This interaction is facilitated by the following conditions:

- **Proximity** : Just think about your group of friends. Would you have been friends if you were not living in the same colony, or going to the same school, or may be playing in the same playground? Probably your answer would be 'No'. Repeated interactions with the same set of individuals give us a chance to know them, and their interests and attitudes. Common interests, attitudes, and background are important determinants of your liking for your group members.
- **Similarity** : Being exposed to someone over a period of time makes us assess our similarities and paves the way for formation of groups. Why do we like people who are similar? Psychologists have given several explanations for this. One explanation is that people prefer consistency and like relationships that are consistent. When two people are

similar, there is consistency and they start liking each other. For example, you like playing football and another person in your class also loves playing football; there is a matching of your interests. There are higher chances that you may become friends. Another explanation given by psychologists is that when we meet similar people, they reinforce and validate our opinions and values, we feel we are right and thus we start liking them. Suppose you are of the opinion that too much watching of television is not good, because it shows too much violence. You meet someone who also has similar views. This validates your opinion, and you start liking the person who was instrumental in validating your opinion.

- **Common motives and goals** : When people have common motives or goals, they get together and form a group which may facilitate their goal attainment. Suppose you want to teach children in a slum area who are unable to go to school. You cannot do this alone because you have your own studies and homework. You, therefore, form a group of like-minded friends and start teaching these children. So you have been able to achieve what you could not have done alone.

Stages of Group Formation

Remember that, like everything else in life, groups develop. You do not become a group member the moment you come together. Groups usually go through different stages of *formation*, *conflict*, *stabilisation*, *performance*, and *dismissal*. Tuckman suggested that groups pass through five developmental sequences. These are: forming, storming, norming, performing and adjourning.

- When group members first meet, there is a great deal of uncertainty about the group, the goal, and how it is to be achieved. People try to know each other and assess whether they will fit in. There is excitement as well as apprehensions. This stage is called the **forming stage**.
- Often, after this stage, there is a stage of intragroup conflict which is referred to as **storming**. In this stage, there is conflict among members about how the target of the group is to be achieved, who is to control the group and its resources, and who is to perform what task. When this stage is complete, some sort of hierarchy of leadership in the group develops and a clear vision as to how to achieve the group goal.
- The storming stage is followed by another stage known as **norming**. Group members by this time develop norms related to group behaviour. This leads to development of a positive group identity.
- The fourth stage is **performing**. By this time, the structure of the group has evolved and is accepted by group members. The group moves towards achieving the group goal. For some groups, this may be the last stage of group development.
- However, for some groups, for example, in the case of an organising committee

Activity 7.1

Identifying Stages of Group Formation

Select 10 members from your class randomly and form a committee to plan an open house. See how they go ahead. Give them full autonomy to do all the planning. Other members of the class observe them as they function.

Do you see any of these stages emerging? Which were those? What was the order of stages? Which stages were skipped?

Discuss in the class.

for a school function, there may be another stage known as **adjourning stage**. In this stage, once the function is over, the group may be disbanded.

However, it must be stated that all groups do not always proceed from one stage to the next in such a systematic manner. Sometimes several stages go on simultaneously, while in other instances groups may go back and forth through the various stages or they may just skip some of the stages.

During the process of group formation, groups also develop a structure. We should remember that **group structure** develops as members interact. Over time this interaction shows regularities in distribution of task to be performed, responsibilities assigned to members, and the prestige or relative status of members. Four important elements of group structure are :

- **Roles** are socially defined expectations that individuals in a given situation are expected to fulfil. Roles refer to the typical behaviour that depicts a person in a given social context. You have the role of a son or a daughter and with this role, there are certain *role expectations*, i.e. including the behaviour expected of someone in a particular role. As a daughter or a son, you are expected to respect elders, listen to them, and be responsible towards your studies.
- **Norms** are expected standards of behaviour and beliefs established, agreed upon, and enforced by group members. They may be considered as a group's 'unspoken rules'. In your family, there are norms that guide the behaviour of family members. These

Box 7.1

Groupthink

Generally teamwork in groups leads to beneficial results. However, Irving Janis has suggested that cohesion can interfere with effective leadership and can lead to disastrous decisions. Janis discovered a process known as "groupthink" in which a group allows its concerns for unanimity. They, in fact, "override the motivation to realistically appraise courses of action". It results in the tendency of decision makers to make irrational and uncritical decisions. Groupthink is characterised by the appearance of consensus or unanimous agreement within a group. Each member believes that all members agree upon a particular decision or a policy. No one expresses dissenting opinion because each person believes it would undermine the cohesion of the group and s/he would be unpopular. Studies have shown that such a group has an exaggerated sense of its own power to control events, and tends to ignore or minimise cues from the real world that suggest danger to its plan. In order to preserve the group's internal harmony and collective well-being, it becomes increasingly out-of-touch with reality. Groupthink is likely to occur in socially homogenous, cohesive groups that are isolated from outsiders, that have no tradition of considering alternatives, and that face a decision with high costs or failures. Examples of several group decisions at the international level can be cited as illustrations of groupthink phenomenon. These decisions turned out to be major fiascos. The Vietnam War is an example. From 1964 to 1967, President Lyndon Johnson and his advisors in the U.S. escalated the Vietnam War thinking that this would bring North Vietnam to the peace table. The escalation decisions were made despite warnings. The grossly miscalculated move resulted in the loss of 56,000 American and more than one million Vietnamese lives and created huge budget deficits. Some ways to counteract or prevent groupthink are: (i) encouraging and rewarding critical thinking and even disagreement among group members, (ii) encouraging groups to present alternative courses of action, (iii) inviting outside experts to evaluate the group's decisions, and (iv) encouraging members to seek feedback from trusted others.

norms represent shared ways of viewing the world.

- **Status** refers to the relative social position given to group members by others. This relative position or status may be either *ascribed* (given may be because of one's seniority) or *achieved* (the person has achieved status because of expertise or hard work). By being members of the group, we enjoy the status associated with that group. All of us, therefore, strive to be members of such groups which are high in status or are viewed favourably by others. Even within a group, different members have different prestige and status. For example, the captain of a cricket team has a higher status compared to the other members, although all are equally important for the team's success.
- **Cohesiveness** refers to togetherness, binding, or mutual attraction among group members. As the group becomes more cohesive, group members start to think, feel and act as a social unit, and less like isolated individuals. Members of a highly cohesive group have a greater desire to remain in the group in comparison to those who belong to low cohesive groups. Cohesiveness refers to the team spirit or 'we feeling' or a sense of belongingness to the group. It is difficult to leave a cohesive group or to gain membership of a group which is highly cohesive. Extreme cohesiveness however, may sometimes not be in a group's interest. Psychologists have identified the phenomenon of **groupthink** (see Box 7.1) which is a consequence of extreme cohesiveness.

Type of Groups

Groups differ in many respects; some have a large number of members (e.g., a country), some are small (e.g., a family), some are short-lived (e.g., a committee), some remain together for many years (e.g., religious groups), some are highly organised (e.g., army, police, etc.), and others are informally organised (e.g., spectators of a match). People may belong to different types of group. Major types of groups are enumerated below :

- primary and secondary groups
- formal and informal groups
- ingroup and outgroup.

Primary and Secondary Groups

A major difference between primary and secondary groups is that primary groups are pre-existing formations which are usually given to the individual whereas secondary groups are those which the individual joins by choice. Thus, family, caste, and religion are primary groups whereas membership of a political party is an example of a secondary group. In a primary group, there is a face-to-face interaction, members have close physical proximity, and they share warm emotional bonds. Primary groups are central to individual's functioning and have a very major role in developing values and ideals of the individual during the early stages of development. In contrast, secondary groups are those where relationships among members are more impersonal, indirect, and less frequent. In the primary group, boundaries are less permeable, i.e. members do not have the option to choose its membership as compared to secondary groups where it is easy to leave and join another group.

Formal and Informal Groups

These groups differ in the degree to which the functions of the group are stated explicitly and formally. The functions of a formal group are explicitly stated as in the case of an office organisation. The roles to be performed by group members are stated

in an explicit manner. The formal and informal groups differ on the basis of structure. The formation of formal groups is based on some specific rules or laws and members have definite roles. There are a set of norms which help in establishing order. A university is an example of a formal group. On the other hand, the formation of informal groups is not based on rules or laws and there is close relationship among members.

Ingroup and Outgroup

Just as individuals compare themselves with others in terms of similarities and differences with respect to what they have and what others have, individuals also compare the group they belong to with groups of which they are not a member. The term 'ingroup' refers to one's own group, and 'outgroup' refers to another group. For ingroup members, we use the word '**we**' while for outgroup members, the word '**they**' is used. By using the words they and we, one is categorising people as similar or different. It has been found that persons in the ingroup are generally supposed to be similar, are viewed favourably, and have desirable traits. Members of the outgroup are viewed differently and are often perceived negatively in comparison to the ingroup members. Perceptions of ingroup and outgroup affect our social lives. These differences can be easily understood by studying Tajfel's experiments given in Box 7.2.

Although it is common to make these categorisations, it should be appreciated that these categories are not real and are created by us. In some cultures, plurality is celebrated as has been the case in India. We have a unique composite culture which is reflected not only in the lives we live, but also in our art, architecture, and music.

Activity 7.2

Ingroup and Outgroup Distinctions

Think of any interinstitutional competition held in the near past. Ask your friends to write a paragraph about your school and its students, and about another school and students of that school. Ask the class and list the behaviour and characteristics of your schoolmates, and students of the other school on the board. Observe the differences and discuss in the class. Do you also see similarities? If yes, discuss them too.

Box 7.2

The Minimal Group Paradigm Experiments

Tajfel and his colleagues were interested in knowing the minimal conditions for intergroup behaviour. 'Minimal group paradigm' was developed to answer this question. British school-boys expressed their preference for paintings by two artists — Vassily Kandinsky and Paul Klee. Children were told that it was an experiment on decision-making. They knew the groups in which they were grouped (*Kandinsky group* and *Klee group*). The identity of other group members was hidden using code numbers. The children then distributed money between recipients only by code number and group membership.

Sample distribution matrix :

Ingroup member —	7 8 9 10 11 12 13 14 15 16 17 18 19
Outgroup member —	1 3 5 7 9 11 13 15 17 19 21 23 25

You will agree that these groups were created on a flimsy criterion (i.e. preference for paintings by two artists) which had no past history or future. Yet, results showed that children favoured their own group.

Influence of Group on Individual Behaviour

We have seen that groups are powerful as they are able to influence the behaviour of individuals. What is the nature of this influence? What impact does the presence of others have on our performance? We will discuss two situations : (i) an individual performing an activity alone in the presence of others (**social facilitation**), and (ii) an individual performing an activity along with the others as part of a larger group (**social loafing**). Since social facilitation has been briefly discussed in Chapter 6, we would try to understand the phenomenon of social loafing in this section.

Social Loafing

Social facilitation research suggests that presence of others leads to arousal and can motivate individuals to enhance their performance if they are already good at solving something. This enhancement occurs when a person's efforts are individually evaluated. What would happen if efforts of an individual in a group are pooled so that you look at the performance of the group as a whole? Do you know what often happens? It has been found that individuals work less hard in a group than they do when performing alone. This points to a phenomenon referred to as *'social loafing'*. Social loafing is a reduction in individual effort when working on a collective task, i.e. one in which outputs are pooled with those of other group members. An example of such a task is the game of tug-of-war. It is not possible for you to identify how much force each member of the team has been exerting. Such situations give opportunities to group members to relax and become a free rider. This phenomenon has been demonstrated in many experiments by Latane and his associates who asked group of male students to clap or cheer as loudly as possible as they *(experimenters)* were interested in knowing how much noise people make in social settings. They varied the group size; individuals were either alone, or in groups of two, four and six. The results of the study showed that although the total amount of noise rose up, as size increased, the amount of noise produced by each participant dropped. In other words, each participant put in less effort as the group size increased. Why does social loafing occur? The explanations offered are:

- Group members feel less responsible for the overall task being performed and therefore exert less effort.
- Motivation of members decreases because they realise that their contributions will not be evaluated on individual basis.
- The performance of the group is not to be compared with other groups.
- There is an improper coordination (or no coordination) among members.
- Belonging to the same group is not important for members. It is only an aggregate of individuals.

Social loafing may be reduced by:

- Making the efforts of each person identifiable.
- Increasing the pressure to work hard (making group members committed to successful task performance).
- Increasing the apparent importance or value of a task.
- Making people feel that their individual contribution is important.
- Strengthening group cohesiveness which increases the motivation for successful group outcome.

Group Polarisation

We all know that important decisions are taken by groups and not by individuals

alone. For example, a decision is to be taken whether a school has to be established in a village. Such a decision has to be a group decision. We have also seen that when groups take decisions, there is a fear that the phenomenon of groupthink may sometimes occur (see Box 7.1). Groups show another tendency referred to as '*group polarisation*'. It has been found that groups are more likely to take extreme decisions than individuals alone. Suppose there is an employee who has been caught taking bribe or engaging in some other unethical act. Her/his colleagues are asked to decide on what punishment s/he should be given. They may let her/him go scot-free or decide to terminate her/his services instead of imposing a punishment which may be commensurate with the unethical act s/he had engaged in. Whatever the initial position in the group, this position becomes much stronger as a result of discussions in the group. This strengthening of the group's initial position as a result of group interaction and discussion is referred to as group polarisation. This may sometimes have dangerous repercussions as groups may take extreme positions, i.e. from very weak to very strong decisions.

Why does group polarisation occur? Let us take an example whether capital punishment should be there. Suppose you favour capital punishment for heinous crimes, what would happen if you were interacting with and discussing this issue with like-minded people? After this interaction, your views may become stronger. This firm conviction is because of the following three reasons:

- In the company of like-minded people, you are likely to hear newer arguments favouring your viewpoints. This will make you more favourable towards capital punishment.
- When you find others also favouring capital punishment, you feel that this view is validated by the public. This is a sort of **bandwagon effect**.
- When you find people having similar views, you are likely to perceive them as ingroup. You start identifying with the group, begin showing conformity, and as a consequence your views become strengthened.

Activity 7.3

Assessing Polarisation

Give the class a short, 5-item attitude scale developed by your teacher to assess attitudes towards capital punishment. Based on their responses, divide the class into two groups, i.e. those pro-capital punishment and those anti-capital punishment. Now seat these groups into two different rooms and ask them to discuss a recent case in which death sentence has been given by the court. See how the discussion proceeds in the two groups. After the discussion, re-administer the attitude scale to the group members. Examine if, in both groups, positions have hardened in comparison to their initial position as a result of group discussion.

Conformity, Compliance, and Obedience

Groups and individuals exert influence on us. This influence may force us to change our behaviours in a particular direction. The term '**social influence**' refers to those processes whereby our attitudes and behaviours are influenced by the real or imagined presence of other people. Throughout the day you may encounter a number of situations where others have tried to influence you and make you think in ways they want. Your parents, teachers, friends, radio and television commercials create one or the other kind of social influence. Social influence is a part of our life. In some situations, social influence on

us is very strong as a result of which we tend to do things which we otherwise would have not done. On other occasions, we are able to defy influence of others and may even influence them to adopt our own viewpoint. This section describes three important group influence processes, i.e. *conformity*, *compliance* and *obedience*.

Imagine the following situation in your school. Some of your friends come to you with a letter of protest against a rule that has been recently announced, i.e. banning use of mobile phones in the school. Personally you believe that the rule is very sensible and should be enforced. But you also know that if you do not sign the letter, you will lose many friends and get a bad name for not keeping 'student unity'. What would you do in such a situation? What do you think most people of your age would do? If your answer is that you would agree to sign the letter, you have expressed a form of social influence called '*conformity*' which means behaving according to the group norm, i.e. the expectations of other group members. Persons who do not conform (called '*deviants*' or '*non-conformists*') get noticed more than those who do conform.

Kelman distinguished three forms of social influence, viz. **compliance**, **identification**, and **internalisation**. In compliance, there are external conditions that force the individual to accept the influence of the significant other. Compliance also refers to behaving in a particular way in response to a request made by someone. Thus, in the example described above, you may sign the letter with the thought that you were accepting the request, not because you agree with other students, but because you have been requested to do so by a significant member. This would be a case of compliance also called '*external/public conformity*'. Compliance could take place even without a norm. For example, a member of a community group for 'clean environment' requests you to put a sticker on your bike that reads, 'Say No to Plastic Bags'. You agree to do so, not because of a group norm, or even because you personally believe in banning plastic bags, but because you see no harm or problem in putting such a sticker on your bike. At the same time, you find it easier to say 'yes' rather than 'no' to such a harmless (and eventually meaningful) request. Identification, according to Kelman, refers to influence process based on agreement-seeking or identity-seeking. Internalisation, on the other hand, is a process based on information-seeking.

Yet another form of behaviour is '*obedience*'. A distinguishing feature of obedience is that such behaviour is a response to a person in authority. In the example given above, you may sign the letter more readily if a senior teacher or a student leader asks you to do so. In such a situation, you are not necessarily following a group norm but rather carrying out an instruction or an order. The presence of an authority figure immediately makes this behaviour different from conformity. For instance, you may stop talking loudly in the classroom when the teacher asks you to keep quiet, but not when your classmate tells you to do the same thing.

We can see that there are some similarities between conformity, compliance, and obedience, but there are also some differences. All three indicate the influence of others on an individual's behaviour. Obedience is the most direct and explicit form of social influence, whereas compliance is less direct than obedience because someone has requested and thus you comply (here, the probability of refusal is there). Conformity is the most indirect form (you are conforming because you do not want to deviate from the norm).

Conformity

Why do people follow group norms, when the only 'punishment' they may face if they do not, is the displeasure of the group, or being perceived as 'different'? Why do people conform even when they know that the norm itself is not desirable?

It seems that the tendency to follow a norm is natural, and does not need any special explanation. Yet, we need to understand why such a tendency appears to be natural or spontaneous. First, norms represent a set of unwritten and informal 'rules' of behaviour that provide information to members of a group about what is expected of them in specific situations. This makes the whole situation clearer, and allows both the individual and the group to function more smoothly. Second, in general, people feel uncomfortable if they are considered 'different' from others. Behaving in a way that differs from the expected form of behaviour may lead to disapproval or dislike by others, which is a form of social punishment. This is something that most people fear, often in an imagined way. Recall the question we ask so often: "What will people ('then') say?" Following the norm is, thus, the simplest way of avoiding disapproval and obtaining approval from others. Third, the norm is seen as reflecting the views and beliefs of the majority. Most people believe that the majority is more likely to be right rather than wrong. An instance of this is often observed in quiz shows on television. When a contestant is at a loss for the correct answer to a question, s/he may opt for an audience opinion, the person most often tends to choose the same option that the majority of the audience chooses. By the same reasoning, people conform to the norm because they believe that the majority must be right.

The pioneering experiments on conformity were carried out by Sherif and Asch. They illustrate some of the conditions that determine the extent of conformity, and also methods that may be adopted for the study of conformity in groups. These experiments demonstrate what Sherif called the '**autokinetic effect**' (Box 7.3) and the '**Asch technique**' (Box 7.4).

What lessons are to be learned from the results of these experiments on conformity? The main lesson is that the degree of conformity among the group members is determined by many factors which are situation-specific.

Box 7.3

The Autokinetic Effect

Sherif conducted a series of experiments to demonstrate how groups form their norms, and members make their judgments according to these norms.

Participants were seated in a darkroom, and asked to concentrate on a point of light. After watching this point of light, each person was asked to estimate the distance through which the point had moved. This kind of judgment had to be made over a number of trials. After each trial, the group was given information about the average distance judged by the members. It was observed that on subsequent trials, subjects modified their judgments in a way that made them more similar to the group average. The interesting aspect of this experiment was that the point of light actually did not move at all. The light was only seen as moving by the participant (therefore, the effect has been called the 'autokinetic effect'). Yet in response to instructions from the experimenter, the participants not only judged the distance the light moved, but also created a norm for this distance. Note that the participants were not given any information regarding the nature of change, if any, in their judgments over trials.

Determinants of Conformity

(i) **Size of the group** : Conformity is greater when the group is small than when the group is large. Why does it happen? It is easier for a deviant member (one who does not conform) to be noticed in a small group. However, in a large group, if there is strong agreement among most of the members, this makes the majority stronger, and therefore, the norm is also stronger. In such a case, the minority member(s) would be more likely to conform because the group pressure would be stronger.

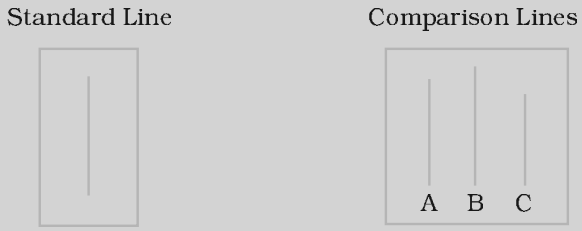
(ii) **Size of the minority** : Take the case of the Asch experiment (see Box 7.4). Suppose the subject finds that after some rounds of judgment of the lines, there is another participant who starts agreeing with the subject's answer. Would the subject now be more likely to conform, or less likely to do so? When the dissenting or deviating minority size increases, the likelihood of conformity decreases. In fact, it may increase the number of dissenters or non-conformists in the group.

(iii) **Nature of the task** : In Asch's experiment, the task required an answer that could be verified, and could be correct or incorrect. Suppose the task involves giving an opinion about some topic. In such a case, there is no correct or incorrect

Box 7.4

Group Pressure and Conformity : The Asch Experiment

Asch examined how much conformity there would be when one member of a group experiences pressure from the rest of the group to behave in a specific way, or to give a particular judgment. A group of seven persons participated in an experiment that was a 'vision test'. There was actually only one true subject. The other six participants were associates of the experimenter, or 'confederates' as they are called in social psychology. These confederates were given instructions to give specific responses. Of course, this was not known to the true subject. All participants were shown a vertical line *(standard line)* that had to be compared with three vertical lines of different lengths, A, B, and C *(comparison lines)*. Participants had to state which of the comparison lines, A, B, or C, was equal to the standard line.



When the experiment began, each participant, by turn, announced her/his answer. The first five persons gave wrong answers (as they had been instructed to do so). The true subject's turn came last-but-one in each round. So the true subject had the experience of 5 persons giving incorrect answers before her/him. The last person (also a confederate) gave the same incorrect answer as the first five persons. Even if the true subject felt that these answers were incorrect, a norm had been presented to her/him. There were twelve trials. Did the true subject conform to the majority answer, or did s/he give her/his own judgments ?

It was observed that 67 per cent subjects showed conformity, and gave the same incorrect answer as the majority. Remember that this was a situation in which the answers were to be given publicly.

answer. In which situation is there likely to be more conformity, the first one where there is something like a correct or an incorrect answer, or the second one where answers can vary widely without any answer being correct or incorrect? You may have guessed right; conformity would be less likely in the second situation.

(iv) **Public or private expression of behaviour** : In the Asch technique, the group members are asked to give their answers publicly, i.e. all members know who has given which response. However, there can be other situations (for example, voting by secret ballot) in which the behaviour of members is private (not known to others). Less conformity is found under private expression than it is seen under public expression.

(v) **Personality** : The conditions described above show how the features of the situation are important in determining the degree of conformity shown. We also find that some individuals have a conforming personality. Such persons have a tendency to change their behaviour according to what others say or do in most situations. By contrast, there are individuals who are independent, and do not look for a norm in order to decide how to behave in a specific situation. Research has shown that highly intelligent people, those who are confident of themselves, those who are strongly committed and have a high self-esteem are less likely to conform.

Conformity takes place because of *informational influence*, i.e. influence that results from accepting evidence rather than reality. This kind of rational conformity can be thought of as learning about the world from the actions of others. We learn by observing people, who are the best source of information about many social conventions. New group members learn about the group's customs by observing the actions of other group members. Conformity may also occur because of *normative influence*, i.e. influence based on a person's desire to be accepted or admired by others. In such cases, people conform because deviation from group may lead to rejection or at the least, non-acceptance of some form of punishment. It is generally observed that the group majority determines the final decision, but in certain conditions, a minority may be more influential. This occurs when the minority takes a firm and uncompromising stand, thereby creating a doubt on the correctness of the majority's viewpoint. This creates a conflict within the group (see Box 7.4).

Compliance

It was stated earlier that compliance refers simply to behaving in response to a request from another person or group even in the absence of a norm. A good example of compliance is the kind of behaviour shown when a salesperson comes to our door. Very often, this person comes with some goods that we really do not wish to buy. Yet, sometimes to our own surprise, we find that the salesperson has spoken to us for a few minutes and the conversation has ended with a purchase of what he or she wished to sell. So why do people comply?

In many situations, this happens because it is an easy way out of the situation. It is more polite and the other party is pleased. In other situations, there could be other factors at work. The following techniques have been found to work when someone wants another person to comply.

- **The foot-in-the-door technique** : The person begins by making a small request that the other person is not likely to refuse. Once the other person carries out the request, a bigger request is made. Simply because the other person has already complied with the

smaller request, he or she may feel uncomfortable refusing the second request. For example, someone may come to us on behalf of a group and give us a gift (something free), saying that it is for promotion. Soon afterwards, another member of the same group may come to us again, and ask us to buy a product made by the group.

- **The deadline technique** : In this technique, a 'last date' is announced until which a particular product or 'an offer' will be available. The aim is to make people 'hurry' and make the purchase before they miss the rare opportunity. It is more likely that people will buy a product under this deadline condition than if there is no such deadline.
- **The door-in-the-face technique** : In this technique, you begin with a large request and when this is refused a later request for something smaller, the one that was actually desired, is made, which is usually granted by the person.

Obedience

When compliance is shown to an instruction or order from a person in authority, such as parents, teachers, leaders, or policemen, that behaviour is called obedience. Why people show obedience is easy to understand. Most often it is because if we disobey, some punishment might follow. Sometimes, it is because we believe that persons in authority must be obeyed. People in authority have effective means for enforcing their orders. Milgram conducted an experiment to show that individuals obey commands from people who are strangers. The experimenter informed the respondents in the study that they were participating in an experiment to study the effects of punishment on learning. The experiment was conducted on pairs. One person in each pair was the "learner", whose work was to memorise pairs of words. The other participant was the "teacher", who would read these words aloud and punish the learner when s/he made errors by giving her/him shock. The learner would make errors according to prearranged instructions. The teacher was asked to deliver a shock each time the learner made errors. The teacher was further told to increase the strength of the shock each time the learner made an error. In reality, no shocks were given. The instructions were so arranged that the teacher was faced with a dilemma — should s/he continue shocks even when they were increasingly painful? The experimenter kept on motivating the teacher to continue. In all, 65 per cent showed total obedience. Some participants, however, protested and asked the session to end. Milgram's study suggests that even ordinary people are willing to harm an innocent person if ordered by someone in authority.

Why do people obey even when they know that their behaviour is harming others? Psychologists have identified several reasons for this. Some of these reasons are :

- People obey because they feel that they are not responsible for their own actions, they are simply carrying out orders from the authority.
- Authority generally possesses symbols of status (e.g., uniform, title) which people find difficult to resist.
- Authority gradually increases commands from lesser to greater levels and initial obedience binds the followers for commitment. Once you obey small orders, slowly there is an escalation of commitment for the person who is in authority and one starts obeying bigger orders.

- Many times, events are moving at such a fast speed, for example in a riot situation, that one has no time to think, just obey orders from above.

Activity 7.4

Demonstrating Obedience in Daily Life

Do you believe the results of Milgram studies on obedience to authority? See for yourself whether obedience occurs or not.

Take permission from your teacher to go to one of the junior classes. Go and make a series of requests to the students. Some examples of such requests are :

Ask students to change their seats with another student.
Ask students to croak like a frog.
Ask students to say 'jai hind'.
Ask students to put their hands up.
(Feel free to add your own ideas)

What did you see? Did students obey you? Ask them why they did so? Explain to them that you were studying why we obey seniors. Come back and discuss what you saw in the class with your teacher and classmates.

Cooperation and Competition

People interact with each other in different contexts. Behaviours in most social situations are characterised by either *'cooperation'* or *'competition'*. When groups work together to achieve shared goals, we refer to it as cooperation. The rewards in cooperative situations are group rewards and not individual rewards. However, when members try to maximise their own benefits and work for the realisation of self-interest, competition is likely to result. Social groups may have both competitive as well as cooperative goals. Competitive goals are set in such a way that each individual can get her/his goal only if others do not attain their goals. For example, you can come first in a competition only if others do not perform to such a level that they can be judged as first. A cooperative goal, on the other hand, is one in which each individual can attain the goal only if other members of the group also attain the goal. Let us try to understand this from an example from athletics. In a hundred metres race between six people, only one can be the winner. Success depends on individual performance. In a relay race, victory depends on the collective performance of all members of a team. Deutsch investigated cooperation and competition within groups. College students were assigned to groups of five persons and were required to solve puzzles and problems. One set of groups, referred to as the 'cooperative group', were told that they would be rewarded collectively for their performance. The other set of groups, labelled as 'competitive group' were told that there was a reward for individual excellence. Results showed that in cooperative groups, there was more coordination, there was acceptance for each other's ideas, and members were more friendly than those in the competitive group. The main concern of the members of the cooperative group was to see that the group excels.

Although competition between individuals within a group may result in conflict and disharmony, competition between groups may increase within group cohesion and solidarity.

Prisoner's Dilemma Game, which is a two person game in which both parties are faced with cooperation or competition, and depending upon their choices both can win or lose, is often used to study cooperation or competition. This game is based on an anecdote. Two suspects were quizzed by detectives separately. The detectives had only enough evidence to convict them for a small offence. Separately the two convicts

Box 7.5

Sherif's Summer Camp Experiments : A Journey from Ingroup Formation to Intergroup Competition and Finally Intergroup Cooperation

Sherif conducted a series of experiments on 11–12 year old boys who did not know each other. The boys were attending a summer camp. Unknown to the boys, there were researchers in the camp who examined their (the boys) behaviour. The experiment consisted of four phases, viz. friendship formation, group formation, intergroup competition, and intergroup cooperation.

- **Friendship formation** : When the boys arrived at the camp, they spent their initial time together. They mixed freely with each other and chose their friends for games and other activities.
- **Ingroup formation** : The boys were then divided into two groups by the experimenter. The boys belonging to the two groups lived separately. Members within the group engaged in cooperative projects to increase cohesiveness. The groups were given separate names. Over time, they developed their own norms.
- **Intergroup competition** : The two groups were brought together in several competitive situations. Matches were organised in which the groups competed against each other. This competition brought in tension and hostility against each other as a group; so much so that the groups started calling each other names. At the same time, ingroup cohesion and loyalty became stronger.
- **Intergroup cooperation** : To reduce the hostility generated by intergroup competition, the researchers created a problem which affected both the groups, and both groups wanted to solve them. Superordinate goals could be achieved only through cooperation between the groups. The water supply of both groups was disrupted. Members of both groups helped each other to overcome this. This intergroup cooperation phase reduced the hostility. This resulted in the development of a superordinate goal, i.e. a goal to which personal goals were subordinated.

This research is important as it showed that antagonistic and hostile behaviour can be generated by group situations. At the same time, it shows that hostility between groups can be reduced by focusing on superordinate goals, which are important and beneficial to both groups alike.

were offered a chance to confess. If one confesses and the other does not, the one who confesses will get no punishment and her/his confession will be used to convict the other with a serious offence. If both confess, the punishment to both will be mild. If neither confesses, each will receive a light sentence. This game has been used in hundreds of experiments to demonstrate that when two parties are involved, there is a conflict between motive to cooperate and motive to compete (see Figure 7.2).

For example, there are two players, A and B. If both cooperate, both get three points each. If player A competes and wins,

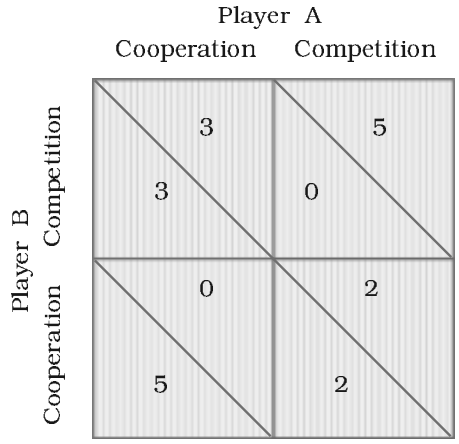


Fig.7.2 : Cooperation vs. Competition

s/he gets 5 points and B gets 0 points. If B competes and wins s/he gets 5 points and A gets 0 points. If both A and B compete, both get two points each. What outcomes do you expect? Why do you expect so? Give reasons.

Determinants of Cooperation and Competition

What factors determine whether people will cooperate or compete? Some of the important ones are given below:

(i) **Reward structure** : Psychologists believe that whether people will co-operate or compete will depend on the reward structure. Cooperative reward structure is one in which there is promotive interdependence. Each is beneficiary of the reward and reward is possible only if all contribute. A competitive reward structure is one in which one can get a reward only if others do not get it.

(ii) **Interpersonal communication** : When there is good interpersonal communication, then cooperation is the likely consequence. Communication facilitates interaction, and discussion. As a result, group members can convince each other and learn about each other.

(iii) **Reciprocity** : Reciprocity means that people feel obliged to return what they get. Initial cooperation may encourage more cooperation. Competition may provoke more competition. If someone helps, you feel like helping that person; on the other hand, if someone refuses to help you when you need help, you would not like to help that person also.

Social Identity

Have you ever asked the question "who am I?" What was your answer to this question? Probably your answer was that you are a hard-working, happy-go-lucky girl/boy. This answer tells you about your *social identity* which is one's self-definition of who s/he is. This self-definition may include both personal attributes, e.g. hard working, happy-go-lucky, or attributes which you share with others, e.g. girl or boy. Although some aspects of our identity are determined by physical characteristics, we may acquire other aspects as a consequence of our interaction with others in society. Sometimes we perceive ourselves as unique individuals and at other times we perceive ourselves as members of groups. Both are equally valid expressions of self. Our personal identities derived from views of oneself as a unique individual, and social identities derived from groups we perceive ourselves to be members of, are both important to us. The extent to which we define ourselves either at personal or at social levels is flexible. From your own experience, you would realise that identification with social groups can have a great deal of importance for your self-concept. How do you feel when India wins a cricket match? You feel elated and proud. You feel so because of your social identity as an Indian. Social identity is, thus, that aspect of our self-concept which is based on our group membership. Social identity places us, i.e. tells us what and where we are in the larger social context, and thus helps us to locate ourselves in society. You have a social identity of a student of your school. Once you have this identity of a student of your school, you internalise the values emphasised in your school and make these values your own. You strive to fulfil the motto of your school. Social identity provides members with a shared set of values, beliefs and goals about themselves and about their social world. Once you internalise the values of your school, this helps to coordinate and regulate your attitudes and behaviour. You

work hard for your school to make it the best school in your city/state. When we develop a strong identity with our own group, the categorisation as ingroup and outgroup becomes salient. The group with which you identify yourself becomes the ingroup and others become the outgroup. The negative aspect of this own group and outgroup categorisation is that we start showing favouritism towards our ingroup by rating it more favourably in comparison to the outgroup, and begin devaluating the outgroup. This devaluation of the outgroup is the basis of a number of intergroup conflicts.

Intergroup Conflict : Nature and Causes

Conflict is a process in which either an individual or a group perceives that others (individual or group) have opposing interests, and both try to contradict each other. There is this intense feeling of '**we**' and '**other**' (also referred to as '**they**'). There is also a belief by both parties that the other will protect only its own interests; their (the other side's) interests will, therefore, not be protected. There is not only opposition of each other, but they also try to exert power on each other. Groups have been found to be more aggressive than individuals. This often leads to escalation of conflict. All conflicts are costly as there is a human price for them. In wars, there are both victories and defeats, but the human cost of war is far beyond all this. Various types of conflict are commonly seen in society, which turn out to be costly for both sides as well as for society.

Mentioned below are some of the major reasons for group conflicts.

- One major reason is lack of communication and faulty communication by both parties. This kind of communication leads to suspicion, i.e. there is a lack of trust. Hence, conflict results.
- Another reason for intergroup conflict is relative deprivation. It arises when members of a group compare themselves with members of another group, and perceive that they do not have what they desire to have, which the other group has. In other words, they feel that they are not doing well in comparison to other groups. This may lead to feelings of deprivation and discontentment, which may trigger off conflict.
- Another cause of conflict is one party's belief that it is better than the other, and what it is saying should be done. When this does not happen, both parties start accusing each other. One may often witness a tendency to magnify even smaller differences, thereby conflict gets escalated because every member wants to respect the norms of her/his group.
- A feeling that the other group does not respect the norms of my group, and actually violates those norms because of a malevolent intent.
- Desire for retaliation for some harm done in the past could be another reason for conflict.
- Biased perceptions are at the root of most conflicts. As already mentioned earlier, feelings of 'they' and 'we' lead to biased perceptions.
- Research has shown that when acting in groups, people are more competitive as well as more aggressive than when they are on their own. Groups compete over scarce resources, both material resources, e.g. territory, and money as well as social resources, e.g. respect and esteem.
- Perceived inequity is another reason for conflict. Equity refers to distribution of rewards in proportion to an individual's contributions, if:

$$\frac{\text{Your rewards}}{\text{Your contributions}} = \frac{\text{Your friends' rewards}}{\text{Your friends' contributions}}$$

But, if you contribute more and get less, you are likely to feel irritated and exploited.

Conflicts between groups give impetus to a series of social and cognitive processes. These processes harden the stand of each side leading to ingroup polarisation. This may result in coalition formation of like-minded parties, thereby increasing the apprehensions of both parties resulting in misperceptions, and biased interpretations and attributions. The result is increased conflict. Present-day society is fraught with various intergroup conflicts. These are related to caste, class, religion, region, language, just to name a few of them. Gardner Murphy wrote a book entitled *'In the Minds of Men'*. Most conflicts begin in the minds of men and then go to the field. Explanations of such conflicts can be at the *structural*, *group*, and *individual* levels. Structural conditions include high rates of poverty, economic and social stratification, inequality, limited political and social opportunity, etc. Research on group level factors has shown that social identity, realistic conflict between groups over resources, and unequal power relations between groups lead to escalation of conflict. At the individual level, beliefs, biased attitudes, and personality characteristics are important determinants. It has been found that at the individual level, there is a progression along a continuum of violence. Very small acts that initially may have no significance, like calling the other group a name, may lead to psychological changes that make further destructive actions possible.

Deutsch identified the following consequences of intergroup conflict.

- Communication between the groups becomes poor. The groups do not trust each other, thereby leading to a breakdown in communication and this generates suspicion for each other.
- Groups start magnifying their differences and start perceiving their behaviour as fair and the other's behaviour as unfair.
- Each side tries to increase its own power and legitimacy. As a consequence, the conflict gets escalated shifting from few specific issues to much larger issues.
- Once conflict starts, several other factors lead to escalation of conflict. Hardening of ingroup opinion, explicit threats directed at the outgroup, each group retaliating more and more, and other parties also choosing to take sides lead to escalation of conflict.

Conflict Resolution Strategies

Conflicts can be reduced if we know about their causes. The processes that increase conflict can be turned around to reduce it also. A number of strategies have been suggested by psychologists. Some of these are :

Introduction of superordinate goals : Sherif's study, already mentioned in the section on cooperation and competition, showed that by introducing superordinate goals, intergroup conflict can be reduced. A superordinate goal is mutually beneficial to both parties, hence both groups work cooperatively.

Altering perceptions : Conflicts can also be reduced by altering perceptions and reactions through persuasion, educational and media appeals, and portrayal of groups differently in society. Promoting empathy for others should be taught to everyone right from the beginning.

Increasing intergroup contacts : Conflict can also be reduced by increasing contacts between the groups. This can be done by involving groups in conflict on neutral grounds through community projects and events. The idea is to bring them together so that they become more appreciative of each other's stand. However, for contacts to be successful, they need to be maintained, which means that they should be supported over a period of time.

Redrawing group boundaries : Another technique that has been suggested by some psychologists is redrawing the group boundaries. This can be done by creating conditions where groups boundaries are redefined and groups come to perceive themselves as belonging to a common group.

Negotiations : Conflict can also be resolved through negotiations and third party interventions. Warring groups can resolve conflict by trying to find mutually acceptable solutions. This requires understanding and trust. Negotiation refers to reciprocal communications so as to reach an agreement in situations in which there is a conflict. Sometimes it is difficult to dissipate conflict through negotiations; at that time mediation and arbitration by a third party is needed. Mediators help both parties to focus their discussions on the relevant issues and reach a voluntary agreement. In arbitration, the third party has the authority to give a decision after hearing both parties.

Structural solutions : Conflict can also be reduced by redistributing the societal resources according to principles based on justice. Research on justice has identified several principles of justice. Some of these are : equality (allocating equally to every one), need (allocating on the basis of needs), and equity (allocating on the basis of contributions of members).

Respect for other group's norms : In a pluralist society like India, it is necessary to respect and be sensitive to the strong norms of various social and ethnic groups. It has been noticed that a number of communal riots between different groups have taken place because of such insensitivity.

Key Terms

Arbitration, Cohesiveness, Competition, Compliance, Conflict, Conformity, Cooperation, Goal achievement, Group, Group formation, Groupthink, Identity, Ingroup, Interdependence, Intergroup, Negotiation, Norms, Obedience, Outgroup, Proximity, Roles, Social facilitation, Social influence, Social inhibition, Social loafing, Status, Structure, Superordinate goals.

Summary

- *Groups are different from other collections of people. Mutual interdependence, roles, status, and expectations are the main characteristics of groups.*
- *Groups are organised systems of two or more individuals.*
- *People join groups because they provide security, status, self-esteem, satisfaction of one's psychological and social needs, goal achievement, and knowledge and information.*
- *Proximity, similarity, and common motives and goals facilitate group formation.*
- *Generally, group work leads to beneficial results. However, sometimes in cohesive and homogeneous groups, the phenomenon of groupthink may occur.*
- *Groups are of different types, i.e. primary and secondary, formal and informal, and ingroup and outgroup.*

- *Groups influence individual behaviour. Social facilitation and social loafing are two important influences of groups.*
- *Conformity, compliance, and obedience are three important forms of social influence.*
- *Conformity is the most indirect form of social influence; obedience the most direct form; compliance is in-between the two.*
- *People interact in social situations by either cooperating or competing.*
- *One's self-definition of who s/he is referred to as social identity.*
- *Group conflicts occur in all societies.*
- *Group conflicts can be reduced if we know the causes of such conflicts.*

Review Questions

1. Compare and contrast formal and informal groups, and ingroups and outgroups.
2. Are you a member of a certain group? Discuss what motivated you to join that group.
3. How does Tuckman's stage model help you to understand the formation of groups?
4. How do groups influence our behaviour?
5. How can you reduce social loafing in groups? Think of any two incidents of social loafing in school. How did you overcome it?
6. How often do you show conformity in your behaviour? What are the determinants of conformity?
7. Why do people obey even when they know that their behaviour may be harming others? Explain.
8. What are the benefits of cooperation?
9. How is one's identity formed?
10. What are some of the causes of intergroup conflict? Think of any international conflict. Reflect on the human price of this conflict.

Project Ideas

1. "S/he who does not ask will never get a bargain." Collect the newspapers of last one month. List the different bargains that were offered by shopkeepers. What compliance techniques were used by them? Ask your friends how many were attracted by these bargains.
2. Make a list of different conflicts that have occurred among different houses in the school. How were these conflicts resolved?
3. Identify any Test series in cricket which India played recently. Collect the newspapers of that period. Evaluate the reviews of the matches and comments made by Indian and rival commentators. Do you see any difference between the comments?
4. Imagine that you have to collect money to help an NGO working for the girl child. What techniques of social influence would you use? Try any two techniques and see the difference.

Weblinks

http://www.mapnp.org/library/grp_skill/theory/theory.htm
http://www.socialpsychology.org/social.htm
http://www.stanleymilgram.com/main.htm
http://www.psychclassics.yorku.ca/sheriff/chap1.htm

Pedagogical Hints

1. In the topic of nature and formation of groups, students should be made to understand the importance of groups in real-life. Here, it needs to be emphasised that they should be careful in choosing groups. Teachers can ask a few students how they have become members of different groups, and what do they get from membership in these groups.
2. For explaining social loafing, simple experiments can be conducted in the class by asking students to perform some activities in groups and then asking them about their contributions in the activities undertaken. Learning experience for students should be on ways to avoid social loafing.
3. In the topic of cooperation and competition, students should be told the benefits of both cooperation and competition. They should be able to appreciate that cooperation is a better strategy in society. Some cases of real-life where cooperative efforts have been successful can be discussed.
4. Students should be able to appreciate that identities are important and how our identities influence our social behaviour.
5. In the section on intergroup conflict, emphasis should be on conflict resolution strategies rather than conflict per se.

PSYCHOLOGY AND LIFE

8

After reading this chapter, you would be able to:

- understand how psychology can be applied to common problems in our lives,
- appreciate the relationship between human beings and the environment,
- analyse how pro-environmental behaviour helps to deal with environmental stressors,
- explain the causes and consequences of social problems from a psychological perspective, and
- learn about the possible remedies of problems such as poverty, aggression, and health.

CONTENTS

Introduction
Human-Environment Relationship
Different Views of the Human-Environment Relationship
The Bishnois and the Chipko Movement (Box 8.1)
Environmental Effects on Human Behaviour
Human Influence on the Environment
Noise
Pollution
Crowding
Natural Disasters
Promoting Pro-environmental Behaviour
Psychology and Social Concerns
Poverty and Discrimination
Aggression, Violence, and Peace
Mahatma Gandhi on Non-violence : Why Does Non-violence Work (Box 8.2)
Health
Impact of Television on Behaviour

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

In the previous two chapters, you read about some topics related to social behaviour and groups. We will now reflect on a set of social concerns with a wider scope, which are linked to each other and involve psychological aspects. These issues have to be understood and resolved at the level of the community rather than the individual. It is now known that besides affecting our physical health, the environment also influences our psychological processes and behaviour. Human beings also influence the environment through their behaviour, and some of these effects are demonstrated in stress-producing environmental conditions, such as noise, pollution and crowding. At the same time, environmental stressors such as natural disasters are not under human control. Many damaging environmental effects can be reduced with the help of environment-friendly behaviour and a state of preparedness. You will read about the causes and consequences of some social problems such as aggression and violence, health, and poverty and discrimination. You will also get a glimpse of how poverty and deprivation can make people victims of discrimination and social exclusion. An environment of poverty and deprivation has far-reaching implications for developing human potential, social harmony and mental health. Some ways of reducing poverty are also described. In addition, psychological aspects of health, and the impact of television viewing on violence as well as other forms of behaviour are explained. This chapter will show you how psychological understanding can be applied practically to aspects such as pro-environmental behaviour, the reduction of violence and discrimination, and promotion of positive health attitudes.

Human-Environment Relationship

Take a moment and try to answer these questions : Can a tree be your 'best friend'? When it gets hot, or when it is crowded, do people become more aggressive? If rivers are said to be holy, why do people make them dirty? How can one remedy the traumatic effects of a natural disaster such as an earthquake or tsunami, or of a man-made disaster such as a poisonous gas leak in a factory? Compare two children who grow up in different physical environments, one in an environment filled with colourful toys, pictures and books, and the other in an environment that contains only the bare necessities of life. Will the two children develop the same kind of cognitive skills? People might give different answers to these questions.

A common idea that comes out of these questions is that the relationship between human behaviour and the environment plays a special role in our lives. These days, there is a growing awareness that environmental problems such as noise, air, water and soil pollution, and unsatisfactory ways of garbage disposal have damaging effects on physical health. Less known is the fact that these forms of pollution, along with many other hidden factors in the environment, influence psychological health and functioning as well. A branch of psychology called **environmental psychology** deals with various psychological issues pertaining to the human-environment interaction in a very broad sense of the term.

The word '**environment**' refers to all that is around us, literally everything that

surrounds us, including the physical, social, work, and cultural environment. In general, it includes all the forces outside human beings to which they respond in some way. In the present section, the discussion will centre around the physical environment. '**Ecology**' is the study of the relationships between living beings and their environment. In psychology, the focus is on the interdependence between the environment and people, as the environment becomes meaningful with reference to the human beings who live in it. In this context, a distinction can be made between the **natural environment** and the **built environment**. As the name itself suggests, that part of nature which remains untouched by human hand is the natural environment. On the other hand, whatever has been created by human beings within the natural environment is the built environment. Cities, houses, offices, factories, bridges, shopping malls, railway tracks, roads, dams, and even artificially created parks and ponds are some examples of the built environment which show how human beings have made changes in the environment given by nature.

The built environment usually involves the concept of **environmental design**. The idea of 'design' contains some psychological features, such as :

- The creativity of the human mind, as expressed in the work of architects, town planners and civil engineers.
- The sense of human control over the natural environment, as shown in the building of dams to regulate the natural flow of rivers.
- The influence on the kind of social interaction that takes place in the designed environment. This feature is reflected, for instance, in the distance between houses in a colony, the location of rooms within a home, or in the arrangement of work desks and seats in an office for formal and informal gatherings.

Different Views of the Human-Environment Relationship

There is more than one way of looking at the human-environment relationship, depending largely on how this relationship is perceived by human beings. A psychologist named Stokols (1990) describes three approaches that may be adopted to describe the human-environment relationship.

(a) The **minimalist perspective** assumes that the physical environment has minimal or negligible influence on human behaviour, health and well-being. The physical environment and human beings exist as parallel components.

(b) The **instrumental perspective** suggests that the physical environment exists mainly for use by human beings for their comfort and well-being. Most of the human influences on the environment reflect the instrumental perspective.

(c) The **spiritual perspective** refers to the view of the environment as something to be respected and valued rather than exploited. It implies that human beings recognise the interdependent relationship between themselves and the environment, i.e. human beings will exist and will be happy only as long as the environment is kept healthy and natural.

The traditional Indian view about the environment supports the spiritual perspective. We have at least two examples of this perspective in our country, viz. the customs of the Bishnoi community of Rajasthan, and the *Chipko* movement in the Uttarakhand region (see Box 8.1). By contrast, we also find examples of people damaging or destroying the environment,

Box 8.1

The Bishnois and the *Chipko* Movement

The Bishnois, a small community in Rajasthan, value their trees and wildlife as much as their lives. Following one of the 29 rules given by their *guru*, the Bishnois would do anything to prevent the destruction of trees by human beings, including hugging the trees if they are threatened in any way; the destroyer cannot cut the trees without cutting these human bodies. Similarly, the forest cover in the Himalayan Uttarakhand region has been protected through the *Chipko* movement ('*chipko*' literally means 'sticking to' or hugging trees). The aim of this movement is to conserve forests, prevent landslides and soil erosion in the region, and to support the livelihood of the inhabitants. In the 1960s, when the forest department of the government was not quite successful in curbing the indiscriminate felling of trees in large numbers, people of the economically backward Uttarakhand region expressed their concern through the *Chipko* movement, which became stronger because of devastating floods in 1970.

The *Chipko* movement's memorandum of demands included six principles: (a) only specific trees and vegetation suitable for a particular geographical region should be grown, (b) forests in landslide and soil erosion zones need to be identified and renewed, (c) those who have been customarily living near the forests and depending on them for survival should be given the right to do so, (d) the contractor system for commercial timber exploitation should be abolished, (e) trees used by the villagers must be planted near the villages, and (f) village cottage industries based on minor forest products should be set up to provide jobs to locals for checking migration from villages. This movement has been recognised by environmentalists in India and abroad as well as by the government.

which is a negative instance of the instrumental perspective.

Environmental Effects on Human Behaviour

The human-environment relationship can be appreciated fully by understanding that the two influence each other, and depend on each other for their survival and maintenance. When we focus our attention on the effects of the natural environment on human beings, we find a variety of environmental influences, ranging from physical effects such as a change of clothing in response to climate changes to severe psychological effects such as serious depression after a natural disaster. Some of the effects pointed out by psychologists are described below.

- **Environmental influences on perception** : Some aspects of the environment influence human perception. For example, as you have studied in Class XI, a tribal society of Africa lives in circular huts, that is, in houses without angular walls. They show less error in a geometric illusion (the Muller-Lyer illusion) than people from cities, who live in houses with angular walls.
- **Environmental influences on emotions** : The environment affects our emotional reactions as well. Watching nature in any form, whether it is a quietly flowing river, a smiling flower, or a tranquil mountain top, provides a kind of joy that cannot be matched by any other experience. Natural disasters, such as floods, droughts, landslides, quakes on the earth or under the ocean, can affect people's emotions to such an extent that they experience deep depression and sorrow, a sense of complete helplessness and lack of control over their lives. Such an

influence on human emotions is a traumatic experience that changes people's lives forever, and can last for a very long time after the actual event in the form of **post-traumatic stress disorder** (PTSD).

- **Ecological influences on occupation, living style and attitudes** : The natural environment of a particular region determines whether people living in that region rely on agriculture (as in the plains), or on other occupations such as hunting and gathering (as in forest, mountainous or desert regions), or on industries (as in areas that are not fertile enough for agriculture). In turn, the occupation determines the lifestyle and attitudes of the residents of a particular geographical region. Compare the daily routine followed by a person living in a desert with one living in a mountainous region, and with one living on the plains. It has been observed that an agricultural society has to depend on the collective efforts of its members. Therefore, the members of an agricultural society develop an attitude of cooperativeness, and consider group interests more important than the individual's wishes. They are also closer to nature, more dependent on natural events such as the monsoon, and may face situations in which necessary natural resources such as water are in limited supply. Accordingly, the members of an agricultural society may become more fatalistic in their beliefs. On the other hand, highly industrialised societies feel less close to and less dependent on nature. Members of industrialised societies may value independent thinking, develop an attitude of competitiveness, and cultivate a belief of personal control over what happens to them.

Human Influence on the Environment

Human beings also exert their influence on the natural environment for fulfilling their physical needs and other purposes. All the examples of the built environment express human influence over the environment. For example, the human being started building something called 'houses' by changing the natural environment in order to provide shelter for herself/himself. Some of these human actions harm and damage the environment, and ultimately harm themselves, in numerous ways. For example, human beings use appliances such as refrigerators and airconditioners that generate chemical substances (e.g., CFCs, or chlorofluorocarbons) that pollute the air and, in the long run, may be responsible for physical diseases such as some forms of cancer. Smoking is known to pollute the air around us, and the burning of plastic or metal articles has disastrous polluting effects on the environment. Cutting down trees, or deforestation, may disrupt the carbon cycle and the water cycle. This may eventually affect the pattern of rainfall in a region, and increase soil erosion and desertification. Industries that discharge effluents, and pump this untreated sewage into rivers, seem to be unconcerned about the dangerous physical and psychological consequences of this kind of pollution.

What is the psychological message in all of these examples? The message is that although most of the effects mentioned above are physical in nature, human beings have brought about these effects in order to exhibit their control and power over the natural environment. It is somewhat paradoxical that human beings are using technology to change the natural environment in order to improve the quality of their life but, in reality, they may actually be worsening the quality of life!

Noise, **pollution**, **crowding**, and **natural disasters** are some examples of

environmental stressors, which are stimuli or conditions in the environment that create a stress for human beings. As you have already read in Chapter 3, stress is an unpleasant psychological state which creates tension and anxiety in the individual. However, human reactions to these varying stressors may differ. Some of the damaging environmental effects are described below.

Noise

Any sound that is annoying or irritating, and felt to be unpleasant is said to be noise. From common experience it is known that noise, especially for long periods of time, is uncomfortable, and puts people in an unpleasant mood. Exposure to noise for a long period of time may lead to hearing loss. Apart from that, noise has negative effects on mental activity because it reduces concentration. Many of you might have experienced this when you tried to study for your examination, with the neighbours celebrating a marriage with loud music.

Three characteristics of noise have been found to determine its effect on task performance, namely, **intensity**, **predictability**, and **controllability** of noise. Systematic research on the effects of noise on human beings shows the following :

- When the task being performed is a simple mental task, such as addition of numbers, noise does not affect overall performance, whether it is loud or soft. In such situations, people adapt, or 'get used' to noise.
- If the task being performed is very interesting, then, too, the presence of noise does not affect performance. This is because the nature of the task helps the individual to pay full attention to the task, and ignore the noise. This may also be one kind of adaptation.
- When the noise comes at intervals, and in an unpredictable way, it is experienced as more disturbing than if the noise is continuously present.
- When the task being performed is difficult, or requires full concentration, then intense, unpredictable, and uncontrollable noise reduces the level of task performance.
- When tolerating or switching off the noise is within the control of the person, the number of errors in task performance decreases.
- In terms of emotional effects, noise above a certain level causes annoyance, and can also lead to sleep disturbance. These effects are also reduced if the noise is controllable, or is necessary as a part of the person's occupation. However, continued exposure to uncontrollable and annoying noise can have harmful effects on mental health.

From these observations, one may conclude that the stressful effects of noise are determined, not only by its high or low intensity, but also by the extent to which people are able to adapt to it, the nature of the task being performed, and whether noise is predictable and controllable.

Pollution

Environmental pollution may be in the form of air, water, and soil pollution. Waste or garbage that comes from households or from industries are a big source of air, water, and soil pollution. Scientists know it very well that any of these forms of pollution is hazardous to physical health. However, there are some research studies that have shown direct or indirect *psychological effects* of these forms of pollution as well. It has to be understood that in general, any form of environmental pollution may affect the nervous system because of the presence of toxic substances and, to that extent, influence

psychological processes in some way. Another form of influence is seen in the emotional reactions to pollution which, in turn, create discomfort, and have consequences such as decreased work efficiency, lowered interest in the job, and increase in anxiety level. People do not like to live or work in a locality that is littered with garbage, or has a constant foul smell. Similarly, the presence of dust particles, or other suspended particles, may give a feeling of suffocation and difficulty in breathing, and may actually lead to respiratory disorders. People who experience this kind of discomfort cannot pay full attention to their work, or be in a pleasant mood.

Specific psychological effects of air pollution have been reported by some researchers. For example, in one part of Kolkata, the psychological reactions to air pollution were compared between a group living in an industrial area, and a group living in a non-industrial residential area. Those living in the industrial area reported greater tension and anxiety than those living in a non-industrial residential area. In a study conducted in Germany, the presence of pollutants such as sulphur dioxide in the air was found to decrease the ability to concentrate on a task, and lowering performance efficiency.

Pollution caused by leaks of dangerous chemical substances can cause other kinds of harm. The infamous Bhopal gas tragedy of December 1984 that claimed many lives, also left behind psychological effects because of the gas. Many of those who had inhaled the poisonous gas, methyl-isocyanate (MIC) along with other substances, showed disturbances in memory, attention and alertness.

There can be harmful air pollution in the home and office environment (indoor environments) also. For example, tobacco smoke pollution, that is, pollution through cigarette, cigar or *beedi* smoking, can also cause psychological effects. Such effects are supposed to be more dangerous for the smoker; however, those who inhale tobacco smoke (passive smoking) can also suffer the negative effects. One researcher found that inhaling tobacco smoke can increase the aggression level of individuals.

The presence of polluting substances in water and soil are hazardous for physical health. Some of these chemicals can also have damaging psychological effects. The presence of specific chemicals such as lead can cause mental retardation by affecting brain development. Such toxic substances affect human beings through various routes, i.e. through water, or through soil by being absorbed by vegetables grown in polluted soil.

Another source of toxicity is household and industrial waste, or garbage, which are non-biodegradable. Common examples of such waste are plastics, tin or any metal container. This kind of waste material should be destroyed or burned through special techniques, and the smoke should not be allowed to escape into the air that people breathe.

In general, there is sufficient evidence to show that toxic chemicals in the air, water and soil may lead to harmful effects not only on normal psychological functioning, but may also cause serious mental disorders. Therefore, there is absolutely no doubt that all forms of pollution need to be curbed.

Crowding

Most of us are familiar with crowds, which are large informal groups of persons coming together temporarily without any particular goal. For example, when a famous person suddenly appears on the road, people who are present in the situation at the time often collect around the scene, just to watch this person. But **crowding** has a different meaning. It refers

to a feeling of discomfort because there are too many people or things around us, giving us the experience of physical restriction, and sometimes the lack of privacy. Crowding is the person's reaction to the presence of a large number of persons within a particular area or space. When this number goes beyond a certain level, it causes stress to individuals caught in that situation. In this sense, crowding is another example of an environmental stressor.

The experience of crowding has the following features :

- Feeling of discomfort,
- Loss or decrease in privacy,
- Negative view of the space around the person, and
- Feeling of loss of control over social interaction.

The psychological consequences of crowding in our country have been systematically studied by several Indian psychologists in many Indian cities such as Allahabad, Ahmedabad, Pune, Varanasi, and Jaipur as well as some rural areas of Rajasthan. Some of these research investigations of crowding have been conducted in the psychology laboratory, but many more have been carried out in commonly encountered settings such as households, offices, traffic, public transport such as autorickshaw, cinema halls, etc. The large population of our country makes crowding much more here than in other less populated countries. This feature has prompted some foreign psychologists to study the effects of crowding in India.

It should be understood that the experience of crowding is brought about not merely because of the large number of persons as such, nor merely because of the shortage of space. It is related to **density**, that is, the number of persons within the available space. For example, if there are fifteen persons trying to squeeze into four seats in a railway compartment, each person is likely to experience crowding. Place the same fifteen persons in a large hall, and nobody experiences crowding.

One may ask : Is crowding always experienced in high density settings, and do all people experience its negative effects to the same extent? If you answered both questions by saying 'no', you are right. When we go to a fair (*mela*) or a wedding ceremony, usually the physical setting has high density, and we enjoy it in that form. After all, what is a *mela* or wedding ceremony if there are very few people? On the other hand, if there are many people sharing a small room, everyone feels uncomfortable.

The stressful effects of crowding can be completely understood only when we look into its consequences. A summary is given below of the effects of crowding and high density as reported in several research studies conducted in India and other countries.

- Crowding and high density may lead to *abnormal behaviour* and *aggression*. This was shown many years ago in a study of rats. These animals were placed in an enclosure, initially in small numbers. As their population increased within this enclosed space, they started showing aggressive and unusual behaviour, such as biting the tails of other rats. This aggressive behaviour increased to such an extent that ultimately the animals died in large numbers, thus decreasing the population in the enclosure. Among human beings also, an increase in population has sometimes been found to be accompanied by an increase in violent crime.
- Crowding leads to lowered performance on difficult tasks that involve cognitive processes, and has adverse effects on memory and the emotional state. These

negative effects are seen to a smaller extent in people who are used to crowded surroundings.

- Children growing up in very crowded households show lower academic performance. They also show a weaker tendency to continue working on a task if they are unsuccessful at it, compared to children growing up in non-crowded households. They experience greater conflict with their parents, and get less support from their family members.
- The *nature of social interaction* determines the degree to which an individual will react to crowding. For example, if the interaction is on a happy social occasion, such as a party or public celebration, the presence of a large number of persons in the same physical setting may cause no stress at all. Rather, it may lead to positive emotional reactions. At the same time, crowding, in turn, also influences the nature of social interaction.
- Individuals differ in the degree to which they show negative effects of crowding, and also in the nature of these reactions. Two kinds of tolerance can be mentioned that may explain these individual differences, i.e. **crowding tolerance** and **competition tolerance**.

  Crowding tolerance refers to the ability to mentally deal with a high density or crowded environment, such as a crowded residence (a large number of persons within a small room). People who are used to an environment containing many persons around them (for example, individuals growing up in a large family that lives in a small house) develop more crowding tolerance than people who are used to only a few persons around them. Our country has a large population and many people live with large families in small houses. This might lead us to expect that Indians in general should have more crowding tolerance than people from other, less populated countries.

  Competition tolerance is the ability to put up with a situation in which individuals would have to compete with many others for even basic resources, including physical space. Since there is a greater possibility of competition for resources in a crowded setting, the reaction to that setting would be influenced by the extent of tolerance for competition for resources.
- *Cultural characteristics* may determine the extent to which a particular environment is judged to be subjectively more crowded or less crowded. They may also affect the nature and extent of negative reactions to crowding. For example, in cultures that emphasise the importance of the group or collectivity over the individual, the presence of a large number of people in the surroundings is not taken as an undesirable state. On the other hand, in cultures that emphasise the importance of the individual over the group or collectivity, the presence of many other persons in the environment around us may make us uncomfortable. Overall, though, regardless of whether the culture considers the group more important than the individual, or the other way round, it is clear that in all cultures, crowding is experienced as being stressful.
- **Personal space**, or the comfortable physical space one generally likes to maintain around oneself, is affected by a high density environment. In a crowded context, there is a restriction on personal space, and this can also be a cause of negative reactions to crowding.

We find many examples of people responding to the physical environment in

terms of space. In social situations, human beings like to maintain a certain physical distance from the person with whom they are interacting. This is called **interpersonal physical distance**, and is a part of a broader concept called personal space, i.e. the physical space we like to have all around us. One reason for the negative reactions to crowding, as described earlier, is the decrease in personal space. Personal space can vary between people, between situations and settings, and between cultures. Some average distances have been observed in certain cultures. Edward Hall, an anthropologist, mentioned four kinds of interpersonal physical distance, depending on the situation:

- *Intimate distance* (upto 18 inches) : The distance you maintain when you are talking privately to someone, or interacting with a very close friend or relative.
- *Personal distance* (18 inches to 4 feet) : The distance you maintain when you are interacting one-to-one with a close friend, relative, or even with someone not very close to you in a work setting or other social situation.
- *Social distance* (4 to 10 feet) : The distance you maintain when the interaction is formal, and not close.
- *Public distance* (10 feet to infinity) : The distance you maintain in a formal setting, where there is a large number of persons. For example, the distance of an audience from a public speaker, or a teacher in a classroom.

It may be noted that these distances are maintained *voluntarily*, keeping in mind the comfort experienced by the persons involved in the interaction. However, when there is a shortage of space, people are forced to maintain much smaller physical distance from each other (for instance, in a lift, or in a train compartment where there are too many people). In such cramped spaces, an individual is likely to feel crowded, even though objectively, the number of persons is not very large. In short, people react to available space as a part of the physical environment. When freedom of movement, the sense of privacy, and personal space cannot be maintained normally, the person experiences stress and responds negatively — with a bad mood, or aggressively, and tries to leave the situation as soon as possible.

The concept of personal space is important for the following reasons. *First*, it explains many of the negative effects of crowding as an environmental stressor. *Second*, it tells us about social relationships. For example, two persons sitting or standing close together are seen to be friends or related to each other. When you visit your school library, and if your friend is sitting at a table and the place next to her/him is empty, you like to sit next to her/him. But if a person you do not know is sitting at the table, even if the place next to her/him is empty, it is unlikely that you will sit next to this person. *Third*, it gives us some idea about how physical space can be modified in order to reduce stress or discomfort in social situations, or to make social interaction more enjoyable and fruitful.

Here are some simple examples. Suppose the staff in your school have to decide how to arrange chairs when (i) there is a social event, such as a cultural programme, (ii) there is a meeting between parents and teachers, and (iii) some guest speakers have been invited to address the students and teachers. Should the arrangement of chairs be the same in all three situations? You will find out more about what kind of seating arrangement people choose in non-crowded settings if you conduct Activity 8.1.

Activity 8.1

What Kind of Seating Arrangements Do People Prefer?

*Show the following diagrams, **A**, **B**, and **C** to 5 persons you know, and ask them where they would like to sit by writing '**P**' in that place. [The '**X**' in these pictures indicates the person who is already sitting there.]*

Note the places chosen by these 5 persons. Do these persons choose the same places? You may repeat this exercise by comparing the chosen places, when, in diagram A, X is a friend, in diagram B, X is someone you do not know, and in diagram C, X is someone you know well.

A. *X is your friend : you are joining her/him for tea in the canteen.*

B. *X is someone you do not know well, and you have to do some work with her/him as a team member.*

C. *X is someone you know well, both of you are participating in a competition, and each one wants to win.*

Where would you like to sit? Indicate by writing 'P' in the chosen place.

Diagram A

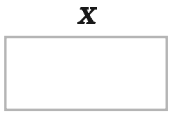


Diagram B

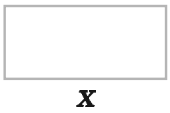


Diagram C

Natural Disasters

Environmental stressors such as noise, various forms of pollution and crowding are the result of human behaviour. By contrast, natural disasters are stressful experiences that are the result of nature's fury, i.e. the consequence of disturbances in the natural environment. Common examples of natural disasters are earthquakes, tsunamis, floods, cyclones, and volcanic eruptions. One finds examples of other disasters also, such as wars, industrial accidents such as the leaking of poisonous or radioactive elements in industrial plants, or epidemics (e.g., the plague that affected some parts of our country in 1994). However, wars and epidemics are human-made events, although their effects can also be as severe as those of natural disasters. These events are called 'disasters' because they cannot be prevented, usually come without any warning, and result in immense damage to human lives and property. Sadly, they also lead to a psychological disorder, called post-traumatic stress disorder (PTSD). Science and technology have now progressed sufficiently to make it possible for human beings to predict these events, to some extent. Yet the psychological effects of natural disasters need to be understood and remedied.

What are the effects of natural disasters? First, they leave people poverty-stricken, homeless, without any resources, usually along with a loss of everything they owned. Second, the sudden loss of all their belongings as well as their dear ones leaves people shocked and stunned. This is sufficient to create a deep-seated psychological disorder. Natural disasters are **traumatic experiences**, i.e. emotionally wounding and shocking to those who survive the disaster. Post-traumatic stress disorder (PTSD) is a severe psychological problem that results from traumatic events such as natural

disasters. This disorder has the following features.

- The *immediate reaction* to a disaster is commonly one of disorientation. People take some time to understand the full meaning of what the disaster has done to them. They may actually deny to themselves that something terrible has happened. Following the immediate reaction are the physical reactions.
- *Physical reactions*, such as bodily exhaustion even without physical activity, difficulty in sleeping, change in the eating pattern, increased heartbeat and blood pressure, and getting startled easily can be found among the victims.
- *Emotional reactions*, such as grief and fear, irritability, anger ("Why should this happen to me?"), helplessness, hopelessness ("I could do nothing to prevent this event"), depression, sometimes absolute lack of emotion (numbness), guilt feelings for having survived while someone else in the family died, blaming oneself, and lack of interest in even routine activities.
- *Cognitive reactions*, such as worry, difficulty in concentration, reduced span of attention, confusion, loss of memory, or vivid memories that are unwanted (or nightmares of the event).
- *Social reactions*, such as withdrawal from others, getting into conflict with others, having frequent arguments with even loved ones, and feeling rejected or left out. Surprisingly, very often, in the midst of severe emotional reactions to stress, some survivors may actually help in the healing processes. Having been through the experience, yet survived it and staying alive, these persons may develop a positive outlook on life and, with empathy, pass on this attitude to other survivors.

These reactions may last for a long time, in some cases throughout life. However, with proper counselling and psychiatric treatment, PTSD can be remedied at least upto a level where the victims can be motivated, and helped to start life afresh. The poor, women who have lost all their relatives, and orphaned children who are survivors of natural disasters need special treatment and care. As in the case of the other environmental stressors, people react with different intensities to natural disasters. In general, the intensity of reaction is affected by :

- The severity of the disaster, and the loss incurred (both in terms of property and life),
- The individual's general coping ability, and
- Other stressful experiences before the disaster. For example, people who have experienced stress before may find it more difficult to deal with yet another difficult and stressful situation.

Although we are aware that most natural disasters can be predicted only in a limited way, there are ways of being prepared to minimise their devastating consequences in the form of (a) warnings, (b) safety measures that can be taken immediately after the event, and (c) treatment of psychological disorders. These measures, usually taken at the community level, are described below.

- **Warnings** : If you have been listening to the radio in the recent past, you might have heard advertisements that mention what people should do when it is announced that some natural disaster, such as a flood, is likely. When cyclones or high tides are predicted, fishermen are asked not to venture into the sea.
- **Safety measures** : Unfortunately, in the case of some natural disasters such as earthquakes, even if prediction is possible, the events come too suddenly for people to be warned or to be mentally prepared. Therefore, tips are

given beforehand about what to do when there is an earthquake.

- **Treatment of psychological disorders** : This includes self-help approaches as well as professional treatment. Often, the very first step involves *providing material relief* in the form of food, clothing, medical help, shelter, and financial help. *Counselling* at the individual and group level is the next step. This can take many forms, such as encouraging the survivors to talk about their experiences and emotional state, and giving them time for their emotional wounds to heal. According to some experts who deal with PTSD, one of the key attitudes to be developed in the survivors is that of **self-efficacy**, i.e. the belief that 'I can do it!', or 'I can come out of this phase successfully.' *Psychiatric help* may be needed for those showing extreme stress reactions. Finally, *rehabilitation* in the form of employment and a gradual return to the normal routine should be undertaken. At some stage, *follow-up* of the victims and survivors is also needed in order to ensure that they have, indeed, recovered sufficiently from their traumatic experience.

Activity 8.2

Ask your teacher to help you to conduct the following role play, along with your classmates. Some students enact the role of victims of a natural disaster, showing symptoms of PTSD, while some others enact the role of counsellors. Get the opinions of your classmates and teacher about the behaviour shown by the counsellors.

It may be pointed out that although pollution due to noise, air and water is now here to stay, some practices on the part of the community can go a long way in making our precious environment less polluted and healthier for all of us. With regard to crowding, it is entirely a human-made problem. Natural disasters, of course, are beyond human control. Yet one can take the necessary precautions. Some thoughts regarding environment-friendly behaviour are stated in the next section.

Promoting Pro-environmental Behaviour

Pro-environmental behaviour includes both actions that are meant to protect the environment from problems, and to promote a healthy environment. Some promotive actions to protect the environment from pollution are :

- *Reducing air pollution* by keeping vehicles in good condition, or changing to non-fuel driven vehicles, stopping the practice of smoking.
- *Reducing noise pollution* by ensuring that noise levels are low, for example, discouraging needless honking on the road, or making rules regarding noisy music at certain hours.
- *Managing disposal of garbage sensibly*, for example, by encouraging separation of biodegradable garbage from non-biodegradable waste, or composting of kitchen waste. These practices need to be adopted both at home and in public places. Special attention has to be paid to the management of industrial and hospital waste.
- *Planting trees and ensuring their care*, keeping in mind that those plants and trees should not be planted that have adverse health effects.
- *Saying 'no' to plastics in any form*, thus reducing toxic wastes that pollute water, air and the soil.
- *Reducing the non-biodegradable packaging of consumer goods.*
- *Laws related to construction (especially in urban areas) that violate optimal environmental design.*

Psychology and Social Concerns

If you ask someone to list the main problems that our society faces today, you can be fairly sure that two problems will be mentioned, among others — *poverty* and *violence*. Both of these phenomena have noticeable effects on the physical as well as psychological health of people. It has to be understood that poverty is not merely an economic problem, and violence is not merely a question of breaking the law. Rather, these problems can be resolved only if we examine their psychological causes. Psychologists have actively explored these issues, and have focused on the causes and consequences of these phenomena. Each of these social concerns is discussed below.

Poverty and Discrimination

Everyone agrees that poverty is a curse on society, and the more quickly we get rid of it, the better it will be for society. Some experts define **poverty** mainly in economic terms, and measure it in terms of income, nutrition (the daily calorie intake per person), and the amount spent on basic necessities of life such as food, clothing and shelter. Some other indicators are also used, such as physical health and literacy. Such measures continue to be used in some contexts. However, from the social and psychological points of view, economic and other physical aspects tell only a small part of the story about poverty. From the socio-psychological point of view, the most commonly accepted definition of poverty is that it is a condition in which there is a lack of necessities of life in the context of unequal distribution of wealth in society.

Some authors add that the sense of **deprivation** and **social disadvantage** are additional features of poverty. A distinction between deprivation and poverty is that deprivation refers to the state in which a person feels that s/he has lost something valuable, and is not getting something what s/he deserves. Poverty refers to an actual shortage of the resources necessary for living, and thus can be somewhat objectively defined. In deprivation, it is more a question of perceiving or thinking that one has got less than what one should have got. Thus, a poor person may experience deprivation, but poverty is not a necessary condition for experiencing deprivation. The situation of the poor is worsened if they also experience deprivation. In reality, usually the poor also feel deprived.

Both poverty and deprivation are linked to social disadvantage, i.e. a condition because of which some sections of society are not allowed to enjoy the same privileges as the rest of society. Social disadvantage poses an obstacle to the growth of these sections. In our society, the caste system has been largely the source of social disadvantage, but poverty, irrespective of caste, has also played a role in creating social disadvantage.

Further, social disadvantage because of caste and poverty has created the problem of **discrimination**. You may recall from Chapters 6 and 7 that discrimination is often linked to prejudice. In the context of poverty, discrimination refers to the behaviour that makes a distinction between the rich and the poor, favouring the rich and the advantaged over the poor and the disadvantaged. This distinction can be seen in matters of social interaction, education, and employment. Thus, even if the poor or disadvantaged have the capability, they are kept away from opportunities that are enjoyed by the rest of society. The children of the poor do not get a chance to study in good schools, or get good health facilities, and employment. Social disadvantage and discrimination prevent the poor from improving their socio-economic condition through their

own efforts, and this makes the poor even poorer. In short, poverty and discrimination are related in such a way that discrimination becomes both a cause and a consequence of poverty. Clearly, discrimination based on poverty or caste is socially unjust, and has to be removed.

Every society wishes to do away with poverty. To proceed in this direction, it is important to know the psychological dimensions of poverty and deprivation, and their major causes.

Psychological Characteristics and Effects of Poverty and Deprivation

Considering that poverty and deprivation are among the glaring problems of our society, Indian social scientists, including sociologists, psychologists and economists, have undertaken systematic research on the poor and deprived sections. Their findings and observations show that poverty and deprivation do have adverse effects on *motivation*, *personality*, *social behaviour*, *cognitive processes*, and *mental health*.

- In terms of motivation, the poor have low aspirations and low achievement motivation, and high need for dependence. They explain their successes in terms of luck or fate rather than ability or hard work. In general, they believe that events in their lives are controlled by factors outside them, rather than within them.
- With regard to personality, the poor and deprived have low self-esteem, are high on anxiety and introversion, and dwell on the immediate present rather than being future-oriented. They prefer smaller immediate rewards to larger rewards in the long run, because in their perception, the future is too uncertain. They live with a sense of hopelessness, powerlessness, felt injustice, and experience a loss of identity.
- With respect to social behaviour, the poor and deprived sections exhibit an attitude of resentment towards the rest of society.
- Among the effects of prolonged deprivation on cognitive functioning, it has been found that intellectual functioning and performance on tasks (such as classification, verbal reasoning, time perception, and pictorial depth perception) is lower among the highly deprived compared to those who are less deprived. It has also been clarified that the effect of deprivation is because the nature of the environment in which children grow up — whether it is enriched or impoverished — makes a difference in their cognitive development, and this is reflected in cognitive task performance.
- With regard to mental health, there is an unquestionable relationship between mental disorders and poverty or deprivation. The poor are more likely to suffer from specific mental illnesses compared to the rich, possibly due to constant worriness about basic necessities, feelings of insecurity, or inability to get medical facilities, especially for mental illnesses. In fact, it has been suggested that depression may be a mental disorder largely of the poor. Besides, the poor experience a sense of hopelessness and a loss of identity, as though they do not belong to society. As a result, they also suffer from emotional and adjustment problems.

Major Causes of Poverty

Poverty is sometimes caused by natural disasters such as earthquakes, floods, and cyclones, or man-made disasters such as poisonous gas leaks. When such events take place, people suddenly lose all their possessions and have to face poverty.

Similarly, one generation of the poor may be unable to eradicate their poverty, and the next generation continues to remain in poverty. Apart from these causes, other factors responsible for poverty have been mentioned below. However, there are some differences of opinion regarding the importance of these factors.

- The poor themselves are responsible for their poverty. According to this view, the poor lack the ability and motivation to put in effort, and make use of available opportunities. In general, such a view about the poor is rather negative, and does not help at all in making them better.
- It is not the individual, but a belief system, a way of life, and values, in which she/he is brought up, that is the cause of poverty. This belief system, called the '**culture of poverty**', convinces the person that she/he will continue to remain poor, and the belief is carried over from one generation of the poor to the next.
- Economic, social and political factors together account for poverty. Because of discrimination, certain sections of society are denied the opportunities needed for getting even the basic necessities of life. The economic system is made to grow in a disproportionate way, through social and political exploitation, so that the poor are left out of the race. All these factors can be summed up in the idea of social disadvantage, because of which the poor experience social injustice, deprivation, discrimination, and exclusion.
- The geographic region in which one lives is said to be a significant cause of poverty. For example, people living in regions (such as deserts) that have a shortage of natural resources and a harsh climate (such as extreme heat or cold) end up being poor. This factor cannot be controlled by human beings. However, attempts can be made to help people in such regions to find alternative means of livelihood, and to provide special facilities for their education and employment.
- The **poverty cycle** is another important cause of poverty that explains why poverty tends to continue among the same sections of society. Poverty begets poverty. Beginning with a low income and lack of resources, the poor go through low health and nutrition, lack of education, and lack of skills. This leads to low employment opportunities, which, in turn, continue their low income condition, and low health and nutrition status. The resulting lowered motivational level only makes the situation worse; the cycle starts and continues again. Thus, the poverty cycle involves an interaction between the factors mentioned above, and results in declining individual motivation, hope, and sense of control.

The only way to tackle the problems associated with poverty and deprivation is to work actively as well as earnestly towards the removal or reduction of poverty. Some measures in that direction are described below.

Measures for Poverty Alleviation

Several steps are being taken by the government and other groups to work towards alleviation or reduction of poverty and its negative consequences.

- Breaking the poverty cycle, and helping the poor to attain self-sufficiency — Initially, financial relief, medical and other facilities may have to be provided to the poor. Care should be taken to see that this financial and other help does not make the poor dependent on these sources for their livelihood.
- Creating a context for making the poor take responsibility instead of blame for

their poverty — This step will help them to regain a sense of hope, control and identity.

- Providing educational and employment opportunities, following the principles of social justice — This step may help the poor to discover their own abilities and skills, thus enabling them to come up to the level of other sections of society. This will also help in reducing crime and violence by reducing frustration, and by encouraging the poor to earn their livelihood through legal rather than illegal means.
- Measures for improved mental health — Many of the poverty reduction measures help to improve the physical health of the poor, but their mental health still remains a problem to be tackled effectively. With greater awareness of this problem, it is hoped that more attention will be paid to this aspect of poverty.
- Steps for empowering the poor — Through the measures mentioned above, the poor should be made more powerful, capable of living independently and with dignity, without depending on the help given by the government or other groups.

The concept of '*Antyodaya*', or the rise of the 'last person' in society, i.e. the poorest or the most disadvantaged, has helped a large section of the poor to get uplifted to a better economic condition than they have experienced earlier. Under *Antyodaya* programmes, there is provision for health facilities, nutrition, education and training for employment — all the areas in which the poor need help. Many of these programmes are more active in rural than in urban regions, as the rural poor have even fewer facilities than the urban poor. In addition, the poor are encouraged to start their own small-scale businesses. Initial capital for these ventures is provided through small loans or micro-credit facilities. This facility is similar to the idea of the Grameen Bank in Bangladesh.

Following the 73rd amendment of the Constitution, the aim is to give more power to people for their development through decentralised planning, and through people's participation. ActionAid, an international group dedicated to the cause of the poor, has goals of making the poor more sensitive to their rights, to equality and justice, and ensuring for them adequate nutrition, health, and facilities for education and employment. The Indian branch of this organisation has been working for poverty alleviation in our country.

These measures cannot be expected to have magical effects in a short time. But, if these efforts towards poverty alleviation are continued in the right spirit and right direction, we may see positive results in the very near future.

Activity 8.3

You must have heard the proverb, 'A bird in hand is worth two in the bush'.

Would people experiencing poverty 'Agree' or 'Disagree' with this proverb? Why? Discuss in class with your teacher.

Aggression, Violence and Peace

Aggression and violence are among the major problems in today's society, and they cover a wide range of behaviours — from ragging of newcomers in educational institutes, through child abuse, domestic violence, murder and rape, to riots and terrorist attacks.

Psychologists use the term '**aggression**' to refer to any behaviour by one person/persons that is intended to cause harm to another person/persons. It can be demonstrated in actual action or through the use of harsh words or criticism, or even

hostile feelings against others. Forceful destructive behaviour towards another person or object is described as **violence**. Some psychologists distinguish aggression from violence by pointing out that aggressive behaviour involves the intention to harm or injure another person, whereas violence may or may not involve such an intention. For example, burning buses or other public property during a riot is called violence as well as aggression. But, suppose you see a person kicking a motorbike violently. Her/his intention may be only to start the vehicle and, therefore, this act will not be considered a case of aggression. On the other hand, the person may also perform the violent act in order to damage the vehicle, because it belongs to a person s/he dislikes. In this case, because harm was intended, the act would be called a case of aggression.

A distinction is also made between **instrumental aggression** and **hostile aggression**. In instrumental aggression, the act of aggression is meant to obtain a certain goal or object. For example, a bully slaps a new student in school so that s/he can snatch the newcomer's chocolate. Hostile aggression is that which is shown as an expression of anger towards the target, with the intention of harming her/him, even if the aggressor does not wish to obtain anything from the victim. For example, a criminal may beat up a person in the community for mentioning his name to the police.

Causes of Aggression

Social psychologists have explored the issue of aggression for several years, and have come up with the following views about the causes of aggression.

1. *Inborn tendency* : Aggressiveness is an inborn tendency among human beings (as it is in animals). Biologically, this inborn tendency may be meant for self-defence.
2. *Physiological mechanisms* : Aggression could also be indirectly triggered by physiological mechanisms, especially by the activation of certain parts of the brain that play a role in emotional experience. A general physiological state of arousal, or feeling activated, might often be expressed in the form of aggression. There could be several factors that cause arousal. For example, as was seen earlier in this chapter, aggression can result from a sense of crowding, especially in hot and humid weather.
3. *Child-rearing* : The way an individual is brought up often influences her/his aggressiveness. For example, children whose parents use physical punishment end up becoming more aggressive than children whose parents use other disciplinary techniques. This could be because the parent has set an example of aggressive behaviour, which the child imitates. It could also be because physical punishment makes the child angry and resentful; as the child grows up, s/he expresses this anger through aggressive behaviour.
4. *Frustration* : Aggression is an expression, and consequence of frustration, i.e. an emotional state that arises when a person is prevented from reaching a goal, or attaining an object that s/he wants. The person may be very close to the goal, and yet does not attain it. It has been found that people in frustrated situations show more aggression than those who are not frustrated. In one of the experiments conducted to examine the effects of frustration, children were prevented from getting some attractive toys that were visible through a screen. As a result, these children were found to be more destructive in play than those children who were allowed access to toys.

An American psychologist, John Dollard along with his collaborators, conducted research specifically to examine the **frustration-aggression theory**. This theory proposes that it is frustration that leads to aggression. As expected, frustrated persons did demonstrate more aggression than non-frustrated persons. Moreover, such aggression was often shown towards a weaker person who was unlikely, or unable, to react to the aggression. This phenomenon has been called **displacement**. Often it is observed that members of a majority group in society may be prejudiced (Chapter 6) against members of a minority group, and may show aggressive behaviour towards a minority group member, such as using abusive language, or even physically assaulting the minority group member. This may be a case of displaced aggression arising out of frustration.

Later on, as more information was gathered about the causes of aggression, it became clear that frustration is not the only, or even a major cause of aggression. Observations showed that (i) being frustrated does not necessarily make a person aggressive, and (ii) many other situational factors may lead to aggression. Some of these situational factors are described below.

- *Learning :* Among human beings, aggression is largely the result of learning rather than an expression of an inborn tendency. Learning of aggression can take place in more than one mode. Individuals may exhibit aggression because they have found it rewarding (for example, hostile aggression allows the aggressive person to get what s/he wants). This would be a case of learning through direct reinforcement. Individuals also learn to be aggressive by observing others showing aggression. This is a case of learning through **modelling**.
- *Observing an aggressive model :* Many research studies conducted by psychologists such as Albert Bandura and his collaborators show the role of modelling in learning aggression. If a child observes aggression and violence on television, s/he may start imitating that behaviour. Without doubt violence and aggression shown on television and the film media have a powerful influence on the viewers, especially the children. But the question is : Does merely seeing violence on television make a person aggressive? Or are there other situational factors that actually make a person show aggression? The answer is obtained through information about specific situational factors.
- *Anger-provoking action by others :* If a person watches a movie that shows violence, and is then made to feel angry (for example, through insults or threats, physical aggression, or dishonesty) by another person, s/he may be more likely to show aggression than if s/he is not made to feel angry. In studies that tested the frustration-aggression theory, provoking the person and making her/him angry was one way of inducing frustration.
- *Availability of weapons of aggression :* Some researchers have found that observing violence leads to a greater likelihood of aggression on the part of the observer only if weapons of aggression like a stick, pistol or knife are easily available.
- *Personality factors :* When interacting with people we notice that some of them seem to be 'naturally' more hot-tempered, and show more aggression than others. We may conclude that aggressiveness is thus a personal quality. It has been observed that people who have very low self-esteem and feel insecure may behave aggressively in order to 'boost their ego'.

Likewise, people who have very high self-esteem may also show aggression, because they feel that others do not place them at the high 'level' at which they have placed themselves.

- *Cultural factors :* The culture in which one grows up can teach its members to be aggressive or not by encouraging and praising aggressive behaviour, or discouraging and criticising such behaviour. Some tribal communities are traditionally peace-loving, whereas others see aggression as necessary for survival.

Reducing Aggression and Violence : Some Strategies

Knowing that aggression can have more than one cause, can anything be done to reduce aggression and violence in society? Some of the remedies suggested for curbing violence and aggression are described below. It may not be easy to ensure a society or environment that is free from frustrating situations. However, the learning of aggression can be curtailed by creating the appropriate attitude towards the general problem of growing aggression.

- Parents and teachers should be specially careful not to encourage or reward aggression in any form. The use of punishment to bring about discipline also needs to be changed.
- Opportunities to observe and imitate the behaviour of aggressive models should be reduced drastically. Portraying aggression as heroic behaviour should be particularly avoided, because this may set the stage for learning through observation.
- Poverty and social injustice may be a prominent cause of aggression, because they can cause frustration in certain sections of society. Implementing social justice and equality in society may help in reducing frustration levels and thereby curb aggressive tendencies at least to some extent.
- Apart from these strategies, at the level of the community or society, it is important to inculcate a positive attitude towards peace. We should not only reduce aggression, but should also

Box 8.2

Mahatma Gandhi on Non-violence: Why Does Non-violence Work?

"Non-violence is an active force of the highest order. It is the soul-force or the power of the Godhead within us. Imperfect man cannot grasp the whole of that Essence — he would not be able to bear its full blaze, but even an infinitesimal fraction of it, when it becomes active within us, can work wonders.

I am not a visionary; I claim to be a practical idealist. The religion of non-violence is not meant for the *rishis* or saints. It is meant for the common people as well. Non-violence is the law of our species as violence is the law of the brute .... The dignity of man requires obedience to a higher law — to the strength of the spirit. Non-violence does not require any outside or outward training. It simply requires the will not to kill even in retaliation and the courage to face death without revenge. This is no sermon on *ahimsa* but cold reason and the statement of a universal law. Given the unquenchable faith in the law, no provocation should prove too great for the exercise of forbearance.

With *satya* (truth) combined with *ahimsa* (non-violence), you can bring the world under your feet. *Satyagrah* in its essence is nothing but the introduction of truth and gentleness in the political, i.e. national life .... By its very nature, non-violence cannot seize power, nor can that be its goal. However, non-violence can do more; it can effectively control and guide power without capturing the machinery of government. That is its beauty."

actively develop and maintain peace. Our own cultural values have always favoured peaceful and harmonious co-existence. The father of our nation, Mahatma Gandhi, gave the world a new view on peace that was not simply the absence of aggression. This was the idea of **non-violence**, which he himself practiced throughout his life (see Box 8.2).

Health

Our understanding about health and well-being has undergone a major change in recent times. It is now conceded that various health outcomes are not only a function of disease but the way we think and behave. This finds reflection in the definition of 'health' provided by the World Health Organisation (WHO), which includes biological, psychological and social aspects of health. It focuses not only on physical but also on mental and spiritual aspects of health. We will concern ourselves with physical health in this section as you have already read about mental health in the previous chapters.

Health and illness are a matter of degree. One may be suffering from a physically disabling disease but may be quite healthy otherwise. You may recall the names of Baba Amte or Stephen Hawkins, both of whom suffer from crippling diseases but have made great contributions in their fields. We also find that people differ across cultures in their thinking about when and how people fall ill and, therefore, in the models which they use in prevention of diseases and promotion of health. There are traditional cultures like Chinese, Indian, and Latin American which hold that good health results from the harmonious balance of various elements in the body, and ill-health results when such a balance is lost. On the contrary, the Western cultures view health as a result of fully functioning machine which has no blockage. The different systems of medicine developed in different cultures are based on these models. There is another fact that you may want to know. The World Health Reports by the WHO show that in developing countries such as in Asia, Africa, and Latin America, more people die due to communicable diseases including HIV/AIDS, tuberculosis (TB), malaria, respiratory infections, and nutritional deficiencies. In the developed countries, the leading causes are various cardiovascular diseases, cancers, and psychiatric disorders. Such differences may be explained in terms of how these societies are economically and socially structured and their psychological underpinnings.

At the individual level, psychologists point to various factors such as health-related cognitions including attitudes and beliefs, behaviours and social factors which are associated with physical well-being or illness.

(a) **Cognitions** : You may have observed how some people are quick to seek doctor's help while others do not if they are suffering from such symptoms as nausea, cold, diarrhoea, smallpox, etc. The variations in seeking help are due to differences in mental representations people make relating to disease, its severity and the causes of disease. One may not seek doctor's help for a cold if one attributes it to eating curd or for leprosy or smallpox if these are attributed to God's annoyance.

The level of awareness or information about disease; and beliefs about how it is caused; and about possible ways of relieving the distress or improving health affect help seeking behaviour as well as sticking to a doctor's regimen. Another factor which influences our help-seeking from a doctor is the perception of pain, which is a function of personality, anxiety and social norms.

(b) **Behaviour** : Psychologists have found strong evidence which shows that behaviours we engage in and our lifestyles greatly influence health. People differ greatly in terms of such behavioural risk factors as smoking or tobacco use, alcohol and drug abuse, and unsafe sexual behaviour, diet and physical exercise. It is well accepted now that such behaviours are associated with incidence of coronary heart disease (CHD), cancer, and HIV/AIDS besides many other diseases. A new discipline called **Behaviour Medicine** has emerged, which seeks to alleviate stress due to diseases through modification in behaviour.

(c) **Social and cultural factors** : There is now a growing body of research which shows that social and cultural differences may influence our physiological responses, and may not be the same across all cultures. For instance, the relationship between hostility and anger and CHD is not found to be the same in all cultures, (e.g., in India and China). While interaction between culture and physiological responses requires more evidence, social and cultural norms associated with roles, and gender, etc. greatly influence our health behaviour. In Indian society, medical advice by or for a female is often delayed because of various reasons — they are less valued, or because of the belief that they are hardy, or the shame associated with the disease.

Impact of Television on Behaviour

There is no doubt that television has been a useful product of technological progress. However, from the point of its psychological impact on human beings, both positive and negative effects have been observed. Many research studies have inquired into the effects of television viewing on cognitive processes and social behaviour, especially in Western cultures. Their findings show a mixed impact. Most of the research studies have been carried out on children because they are seen as being more vulnerable to the impact of television than adults.

First, television provides a large amount of infotainment in an attractive form, and in the visual mode, for which it became a powerful medium of instruction. At the same time, because the programmes are attractive, children spend huge amounts of time watching them. This reduces their habit of reading and writing, and also their outdoor activities such as playing.

Second, television watching may have an effect on children's ability to concentrate on one target, their creativity and ability to understand, and also their social interactions. On one hand, there are excellent programmes that emphasise positive interpersonal attitudes and provide useful factual information, teaching children how to design and construct certain objects. On the other hand, these programmes may distract young viewers and interfere with their ability to concentrate on one target.

Third, about forty years ago a serious debate was raised in the USA and Canada regarding the effect of television viewing on aggressiveness and violence among the viewers, especially children. As discussed earlier in the context of aggression, the results of research showed that watching violence on television was, indeed, linked to greater aggressiveness in the viewers. If the viewers were children, they tended to imitate what they saw; they were not mature enough to think of the consequences of such behaviour. However, some other studies pointed out that merely watching violence on the television does not make children more aggressive. Other factors need to be present in the situation. Other research findings show that watching violence may actually reduce the

natural aggressive tendency of the viewers : what is 'bottled up' gets an outlet, and thus cleans the system, like a choked drainpipe being cleaned. This process is called **catharsis**.

Fourth, in the case of adults as well as children, it is said that a consumerist attitude has developed, and this is due to television watching. Numerous products are advertised, and it is very natural for the viewer to get carried away.

No matter how these results are interpreted, there seems to be sufficient evidence to pose a warning to unlimited television watching.

Activity 8.4

Make a list of all those pieces of information that you obtained by watching TV in the last one week, and write down the answers to the following questions :

Which shows did you watch?

Which pieces of information indicate a positive form of behaviour, and which ones indicate a negative form?

Key Terms

Aggression, Air pollution, Communicable diseases, Competition tolerance, Crowding tolerance, Crowding, Disaster, Displacement, Ecology, Environment, Environmental psychology, Instrumental perspective, Modelling, Noise, Peace, Personal space, Physical environment, Post-traumatic stress disorders, Poverty alleviation, Poverty, Pro-environmental behaviour, Self-efficacy, Social Environment, Spiritual perspective, Transactional approach.

Summary

- *We take renewable and non-renewable resources from the physical environment to meet the needs of growing population, rapid industrialisation and human consumption. Undesirable human activities have altered the conditions in the environment that have resulted in pollution, noise, crowding and intensified the occurrence of natural disasters.*
- *The environmental crises and their solutions can be understood through transactional and traditional Indian approach.*
- *Pollution adversely affects our mental and physical health and psychological processes.*
- *Noise also adversely affects our thinking, memory and learning. The elevated sound levels can cause permanent hearing loss, increase heartbeat, blood pressure and muscle tension.*
- *Crowding is the psychological feeling of not having enough space available. Crowding negatively affects cognitive performance, interpersonal relationships, and physical and mental health.*
- *A natural disaster disrupts the normalcy within a society and causes damage, destruction and human suffering. In the aftermath of a disaster, post-traumatic stress disorder is the most common feature. Counselling the disaster-affected people and creating scope for collective activities can reduce such stress. Also, preparedness of individuals and communities to respond rapidly and effectively to possible disasters can lessen the adverse effects.*
- *Pro-environmental behaviour includes both actions that are meant to protect the environment from problems, and to promote a healthy environment.*
- *Social and psychological concerns arise out of vexed problems that affect a large segment of people in a society.*

- *Lower economic status entails poverty. It relates to deprivation and disadvantage. It adversely affects cognitive performance, personality and social behaviour. Many programmes are being implemented for social and economic empowerment of the poor.*
- *Aggression and violence are among the major problems in today's society. The learning of aggression can be curtailed by creating the appropriate attitude towards the general problem of growing aggression.*
- *Health is a state of complete physical, mental and social well-being. The challenge before the nation is to reduce communicable diseases like diarrhoea, tuberculosis and HIV/AIDS, and non-communicable diseases like anaemia, cancer, diabetes and stress-related disorders. Positive lifestyle habits can induce positive emotions, physical fitness and reduce the health problems.*
- *Both positive and negative effects of television viewing on human behaviour have been observed. Most of the research studies have been carried out on children because they are seen as being more vulnerable to the impact of television than adults.*

Review Questions

1. What do you understand by the term 'environment'? Explain the different perspectives to understand the human-environment relationship.
2. "Human beings affect and are affected by the environment". Explain this statement with the help of examples.
3. What is noise? Discuss the effects of noise on human behaviour.
4. What are the salient features of crowding? Explain the major psychological consequences of crowding.
5. Why is the concept of 'personal space' important for human beings? Justify your answer with the help of an example.
6. What do you understand by the term 'disaster'? List the symptoms of post-traumatic stress disorder. How can it be remedied?
7. What is pro-environmental behaviour? How can the environment be protected from pollution? Suggest some strategies.
8. How is 'poverty' related to 'discrimination'? Explain the major psychological effects of poverty and deprivation.
9. Distinguish between 'instrumental aggression' and 'hostile aggression'. Suggest some strategies to reduce aggression and violence.
10. Discuss the psychological impact of television viewing on human behaviour. How can its adverse consequences be reduced? Explain.

Project Ideas

1. Conduct a survey of 10 households in your locality. Prepare an interview schedule and meet the head of each household and ask: What pollutions do you experience? What are the effects of each pollution on the health of your family members? Summarise the data, and divide the health effects into physical and mental symptoms or diseases. Prepare a report and offer suggestions on how pollution can be abetted.
2. Conduct a survey of 20 elderly people in your locality to understand their social problems and their remedies. Prepare a list of the social problems, and write them on cards (4" × 4"). Request each elderly person to arrange the cards in order of priority, keeping the most important social problem first and the least important social problem last. Enter the rank in your schedule against each problem and ask the causes and remedies of each problem arranged on the card. Prepare a report and discuss it with your teacher.

Weblinks

http://library.thinkquest.org/25009/causes/causes.cycle.html
http://www.news.cornell.edu/Chronicle/99/2.18.99/crowding.html
http://www.helpguide.org/mental/psychological_trauma.htm
http://joannecantor.com/montrealpap_fin.htm

Pedagogical Hints

1. Students could be asked to share their views, by giving real-life examples, on psychological effects of noise, pollution, crowding and natural disasters on human behaviour.
2. Students may be encouraged to think of various initiatives taken by the government and the NGOs working in the field of environment, while discussing the topic of promoting pro-environmental behaviour.
3. Teachers could adopt strategies like questions, stories, anecdotes, games, experiments, discussion, dialogues, examples, analogies, role-playing, etc. which are helpful in promoting peace-related values while transacting the contents of the chapter.
4. In the topic of psychology and social concerns, teachers should attempt to shift from mere imparting of information to debate and discussion. This approach to learning will keep the students alive to social realities.

DEVELOPING PSYCHOLOGICAL SKILLS

9

After reading this chapter, you would be able to:

- understand the need to develop skills among psychologists,
- describe the basic aspects of observational skills,
- know the significance of developing communication skills,
- understand the importance of psychological testing skills in individual assessment, and
- explain the nature and process of counselling.

CONTENTS

Introduction
Developing as an Effective Psychologist
General Skills
Intellectual and Personal Skills; Sensitivity to Diversity : Individual and Cultural Differences (Box 9.1)
Observational Skills
Specific Skills
Communication Skills
Characteristics of Communication (Box 9.2)
Some Tips to Improve Your Listening Skills (Box 9.3)
Psychological Testing Skills
Essentials of Psychological Assessment Skills (Box 9.4)
Interviewing Skills
Types of Interview Questions (Box 9.5)
Counselling Skills

Key Terms
Summary
Review Questions
Project Ideas
Weblinks
Pedagogical Hints

Introduction

As you have already studied in the previous class, psychology began as an application-oriented discipline. Psychological testing stands as a prime example of psychology in action. Psychology touches on many questions related to our lives. For example, what kind of personality make-up is required to become a successful human being? Or what would be the right vocation for a student studying in Class XII ? Similarly, there are other questions and curiosities about human beings which psychologists are asked to answer.

Psychology has two kinds of application-related images: first, as a service-oriented discipline and second, as a scientific method-driven research discipline. Both of these are interrelated and inseparable. It would be important to learn that there are certain factors which contribute in making psychology application-oriented. First, psychologists have found, both in the past and present, that solutions to many problems faced by the individuals, groups, organisations and societies require an understanding of psychological principles. As problems encountered by individuals as well as societies have become more evident and acute, psychologists have responded with concrete solutions. For instance, rapid increase in depressive tendencies and suicidal rates among adolescents is one such area, where psychological knowledge dedicated to the issues of adolescent development is utilised for getting a clearer understanding of the occurrence of these phenomena, and certain intervention models are developed to assist the youth experiencing such problems early in their lives. The other reason is that expertise of psychologists has been highly valued in the marketplace. Over the past few years, there is a growing acceptability and demand of psychology as a profession. Various sections of society have developed a keen interest towards integrating the knowledge of psychology within their core activities. It can be seen particularly in the army or in the field of education, where in some states it has become mandatory for the schools to have a trained counsellor, in the field of management, which seeks help of psychologists to combat problems related to recruitment and assessment, employee behaviour, workplace stress, etc., in management of health-related problems and more recently even in sports. These are not the only areas. Almost all areas of life are calling for help from psychologists.

One aspect common to all the applied areas within psychology is a universal agreement on the basic assumptions about human nature and the role of a psychologist in different settings. It is generally assumed that psychologists have interest in people, their abilities and temperaments. A psychologist from any field is required to have interest in other people and exhibits a willingness to provide help by using her/his knowledge of the discipline. One can find active involvement of a psychologist in obtaining the client's history, her/his socio-cultural environment, assessment of her/his personality and also on other important

dimensions. One might think that client is a special term, which is mostly used in a clinical or counselling set-up. In psychology, a client may refer to an individual/group/organisation who on her/his own seeks help, guidance or intervention from a psychologist with respect to any problem faced by her/him.

The term '**skill**' may be defined as *proficiency, facility or dexterity that is acquired or developed through training and experience. The Webster dictionary* defines it as *"possession of the qualities required to do something or get something done"*.

American Psychological Association (1973) in their task force constituted with the objective to identify skills essential for professional psychologists recommended at least three sets of skills. These are: *assessment of individual differences, behaviour modification skills,* and *counselling and guidance skills*. Recognition and application of these skills and competencies have strengthened the foundation and practices of applied psychology in a positive way. How can one develop into a professional psychologist?

Developing as an Effective Psychologist

Most people think that they are some kind of psychologists. We, at times, talk about intelligence, inferiority complex, identity crisis, mental blocks, attitude, stress, communication barriers and so many other terms. Generally people pick up such terms from popular writings and media. There are a lot of common sense notions about human behaviour that one develops in the course of their lives. Some regularity in human behaviour is frequently observed by us to warrant generalisation. This kind of everyday amateur psychology often misfires, sometimes even proves disastrous. *There still remains a question of how to differentiate between a pseudo-psychologist from a real psychologist.*

An answer can be constructed by asking such questions like professional training, educational background, institutional affiliation, and her/his experience in providing service. However, what is critical is training as a researcher and internalisation of certain professional values. It is now recognised that the knowledge of tools used by psychologists, their methods and theories are required to develop psychological expertise. For example, a professional psychologist addresses the problem at the scientific level. They take their problem to the laboratory or study it in field settings to answer various problems. S/he tries to find the answer in terms of mathematical probability. Only then does s/he arrive at psychological principles or laws that can be depended upon.

Here, another distinction should be made. Some psychologists carry out research to propound or investigate theoretical formulations while others are concerned with our daily life activities and behaviour. We need both types of psychologists. We need some scientists to develop theories and others to find solutions to human problems. It is important to know about the conditions and competencies that are necessary besides research skills for a psychologist. There are conditions and competencies for psychologists which have come to be recognised internationally.

They cover a range of knowledge that a psychologist should possess when entering the profession after completing their education and training. These apply to practitioners, academicians, and researchers whose roles involve consulting with students, business, industry, and broader community. It is recognised that it is difficult to develop, implement and

measure competencies required in a subject like psychology as the criteria for specification, identification and evaluation are not yet fully agreed upon.

The basic skills or competencies which psychologists have identified for becoming an effective psychologist fall into three broad sections, namely, (a) **General Skills**, (b) **Observational Skills**, and (c) **Specific Skills**. These are discussed in detail here.

General Skills

These skills are generic in nature and are needed by all psychologists irrespective of their field of specialisation. These skills are essential for all professional psychologists, whether they are working in the field of clinical and health psychology, industrial/organisational, social, educational, or in environmental settings, or are acting as consultants. These skills include personal as well as intellectual skills. It is expected that it will not be proper to provide any form of professional training (in clinical or organisational fields) to students who do not possess these skills. Once a student has these skills, subsequent training in her/his area of specialisation would only refine and further hone these skills required by a professional within her/his field of specialisation. Some examples of such skills are given in Box 9.1.

Observational Skills

A great deal of what psychologists as researchers and practitioners do in the field is to pay attention, watch and listen carefully. They use all the senses, noticing

Box 9.1

Intellectual and Personal Skills

1. Interpersonal Skills: ability to listen and be empathic, to develop respect for/interest in others' cultures, experiences, values, points of view, goals and desires, fears, openness to receive feedback, etc. These skills are expressed verbally and/or non-verbally.
2. Cognitive Skills: ability to solve problems, engage in critical thinking and organised reasoning, and having intellectual curiosity and flexibility.
3. Affective Skills: emotional control and balance, tolerance/understanding of interpersonal conflict, tolerance of ambiguity and uncertainty.
4. Personality/Attitude: desire to help others, openness to new ideas, honesty/integrity/value ethical behaviour, personal courage.
5. Expressive Skills: ability to communicate one's ideas, feelings and information in verbal, non-verbal, and written forms.
6. Reflective Skills: ability to examine and consider one's own motives, attitudes, behaviours and ability to be sensitive to one's own behaviour or others.
7. Personal Skills: personal organisation, personal hygiene, time management, and appropriate dress.

Sensitivity to Diversity : Individual and Cultural Differences

- Knowledge of self (one's own attitudes, values, and related strengths/limitations) as one operates in the professional settings with diverse others.
- Knowledge about the nature and impact of individual and cultural diversity in different situations.
- Ability to work effectively with diverse backgrounds in assessment, treatment, and consultation.
- Ability to respect and appreciate different cultural norms and beliefs.
- Being sensitive to one's preferences and also to one's preference for own group.
- Ability to promote diversity in cultural beliefs and respecting it to promote positive life outcomes.

what is seen, heard, smelt, tasted, or touched. A psychologist, thus, is like an instrument that absorbs all sources of information from the environment. You have already studied about observation in Class XI. We will, therefore, focus more on developing observational skills this year.

A psychologist engages in observing various facets of surroundings including people and varying events. To begin with, a psychologist may begin with carefully scrutinising the physical setting in order to capture its "atmosphere". S/he might look at the colour of the floor/ceiling, size of the window/doors, type of lighting, artefacts/paintings/sculptures, etc. These small, subtle, and irrelevant looking signals influence human behaviour, which is why a psychologist notes such signals in the surroundings. In addition to physical surroundings, a psychologist actively engages in observing people and their actions. This may include the demographic features (age, gender, stature, race, etc.), ways of dealing and relating with others, pattern of behaviours in the presence of others, etc. A psychologist records such details because something of significance may be revealed in the process of observation. The following points are taken into consideration while making an observation:

- Observe patiently;
- Pay close attention to your physical surroundings — who, what, when, where, and how;
- Be aware of people's reactions, emotions, and motivations;
- Ask questions that can be answered while observing;
- Be yourself, give information about yourself, if asked;
- Observe with an optimistic curiosity; and
- Be ethical, you have to respect privacy, norms of people you are observing; take care not to disclose any information to anyone.

You are already familiar with two major approaches to observation, viz. *naturalistic observation* and *participant observation*. Let us now consider developing skills about them.

Naturalistic Observation is one of the primary ways of learning about the way people behave in a given setting. Suppose, you want to learn how people behave in response to a heavy discount provided by a company while visiting a shopping mall. For this, you could visit the shopping mall where the discounted items are showcased and systematically observe what people do and say before and after the purchases have been made. Making comparison of this kind may provide you with useful insights into what is going on.

Participant Observation is the variation of the method of naturalistic observation. Here the observer is actively involved in the process of observing by becoming an active member of the setting where the observation takes place. For instance, for the problem mentioned above, an observer may take a part-time job in a shopping mall showroom to become an insider in order to observe variations in the behaviour of customers. This technique is widely used by anthropologists whose objective is to gain a firsthand perspective of a system from within which otherwise may not be readily available to an outsider.

Advantages and Disadvantages of Observation

- Its major advantage is that it allows behaviour to be seen and studied in its natural setting.
- People from outside, or those already working in a setting, can be trained to use it.
- One disadvantage of it is that events being observed are subject to bias due

to the feelings of the people involved as well as of the observers.

- Generally day-to-day activities in a given setting are fairly routine, which can go unnoticed by the observer.
- Another potential pitfall is that the actual behaviour and responses of others may get influenced by the presence of the observer, thus, defeating the very purpose of observation.

Activity 9.1

Evaluating Your Interpersonal Skills

Write down on a piece of paper how you would describe yourself on the following aspects :

(a) Friendliness
(b) Mood
(c) Sense of humour
(d) Career motivation
(e) Ability to work in teams and groups
(f) Independence
(g) Desire to be accepted by others
(h) Discipline

Now form groups of three to five members. Have each member evaluated by other members in the group as best as you can on the dimensions given above. Each member concludes by analysing the similarities and differences between their self-perceptions on these dimensions and how they are perceived by other members of the groups.

Specific Skills

These skills are core/basic to the field of psychological service. For example, psychologists working in clinical settings need to be trained in various techniques of therapeutic interventions, psychological assessment, and counselling. Similarly, organisational psychologists working in the organisational context need to have skills in assessment, facilitation and consultation, behavioural skills to bring about individual, group, team and organisational development besides research skills, etc. Though, specific skills and competencies are required for a very specialised professional functioning, nonetheless, all skill sets do overlap quite a bit. They are not exclusive to an area. Relevant specific skills and competencies can be classified as follows:

(a) **Communication Skills**
- *Speaking*
- *Active listening*
- *Body language or non-verbal skills*

(b) **Psychological Testing Skills**

(c) **Interviewing Skills**

(d) **Counselling Skills**
- *Empathy*
- *Positive regard*
- *Authenticity*

Communication Skills

The skills we are going to discuss may appear abstract. You will, however, understand them better when you engage in exercises related to them. Let us understand the basics of communication process and see what role it plays in fostering relationships and personal effectiveness. Learning how to be an effective communicator is not just an academic exercise. It is one of the most important skills you will need to succeed in life. Your success in this class may well depend on your ability to communicate. For example, to do well you should be able to ask and answer questions, summarise opinions, distinguish facts from opinions, and interact fruitfully with your peers and teachers. For this, you will also need listening skills in order to comprehend the information presented in class and what others say verbally or non-verbally. You will be required to have good presentation

Box 9.2

Characteristics of Communication

Communication is dynamic because the process is constantly in a state of change. As the expectations, attitudes, feelings, and emotions of the persons who are communicating change, the nature of their communication also changes.

Communication is continuous because it never stops, whether we are asleep or awake we are always processing ideas or thoughts. Our brain remains active.

Communication is irreversible because once we send a message we cannot take it back. Once we have made a slip of tongue, given a meaningful glance, or engaged in an emotional outburst, we cannot erase it. Our apologies or denials can make it light but cannot stamp out what was communicated.

Communication is interactive because we are constantly in contact with other people and with ourselves. Others react to our speech and actions, and we react to our own speech and actions, and then react to those reactions. Thus, a cycle of action and reaction is the basis of our communication.

skills to give briefings or to present reports on projects that are part of classroom assignments. So, what do we mean by communication process. It can be said that *communication is a conscious or unconscious, intentional or unintentional process in which feelings and ideas are expressed as verbal and/or non-verbal messages that are sent, received, and comprehended.* The characteristics of communication are outlined in Box 9.2.

The process of communication can be accidental (having no intent), expressive (resulting from the emotional state of the person), or rhetorical (resulting from the specific goal of the communicator). Human communication occurs on the intra-personal, interpersonal, and public levels. **Intrapersonal communication** involves communicating with yourself. It encompasses such activities as thought processes, personal decision making, and focusing on self. **Interpersonal communication** refers to the communication that takes place between two or more persons who establish a communicative relationship. Forms of interpersonal communication include face-to-face or mediated conversations, interview and small group discussions. **Public communication** is characterised by a speaker sending a message to an audience. It may be direct, such as face-to-face messages delivered by the speaker to an audience, or indirect, such as message relayed over radio or television.

Components of Human Communication

When we communicate, we communicate selectively. That is, from the wide range of repertory of words, actions, etc. available to us, we choose that which we believe is best suited for the idea we wish to express. When we communicate, we **encode** (i.e., take ideas, give them meaning and put them into message forms), and send the idea through a channel. It is composed of our primary signal system based on our senses (i.e., seeing, hearing, tasting, smelling, and touching). The message is sent to someone who receives it using her or his primary signal system. S/he **decodes** (i.e., translates message into understandable forms). For example, you may say that you heard a bell or an object feels soft. These are examples of verbal communication which express how you

understand the signals your senses have received. You can also respond at a non-verbal level. You touch a hot stove, your fingers pull away quickly, and your eyes well up with tears. The pulling away of fingers and welling up of eyes with tears will communicate to an onlooker the pain suffered by you.

The model given in Figure 9.1 shows the process of communication involving different stages.

As you can see that in any communication process, the degree to which the communication is effective depends on the communicators' mutual understanding of the signals or codes being used in transmitting a message and in receiving. Suppose you are about to take an examination and suddenly realise that you have not brought your pen to class. You ask your friend, "Do you have an extra pen that you can spare for me?" She says "yes" and gives you the pen. You have just participated in an effective communication transaction. You (communicator A) encoded a message (you need a pen) and used a channel for transmitting it (vocal chords producing sound waves) to your friend (communicator B). Your friend received the message using her sensory agent (ears) and decoded it (understood that you want a pen). Your friend's feedback (the word "yes" and appropriate behaviour of giving a pen to you) indicated that the message was successfully received and decoded. The communication would have been still effective if she had said, "Sorry, I cannot, because I am carrying only one pen."

You may remember that the act of speech itself is not communication. Speech is only a biological act; the utterance of sound, possibly the use of language. Communication is broader; it involves a relationship among two or more people in which they attempt to share meaning so that the intent of message received is the same as the intent of the message sent.

Speaking

One important component of communication is speaking with the use of language. Language involves use of symbols which package meaning within them. To be effective, a communicator must know how to use language appropriately. Because language is

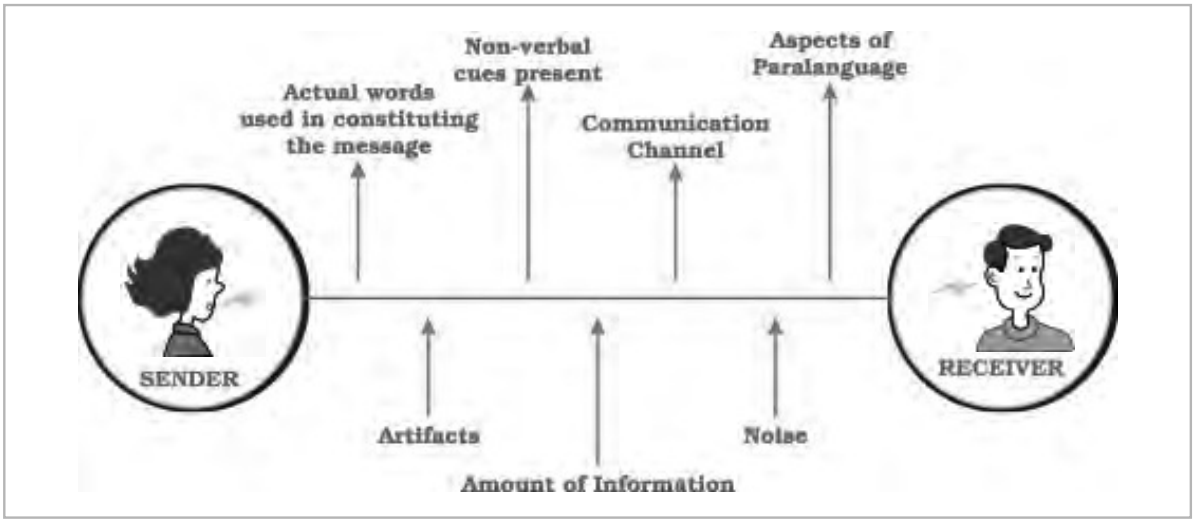


Fig.9.1 : Basic Communication Process

symbolic, it is necessary to be as clear and precise as possible when using words. Communication takes place within a context. So one needs to consider the other's frame of reference, that is, the context used by the sender to say something. Also whether s/he shares your interpretation. If not, it is important to adjust your vocabulary level and choice of words to fit the level of the listener. Remember that slang expressions, words unique to a culture or region, and euphemism can sometimes become obstacles in good communication.

Listening

Listening is an important skill that we use daily. Your academic success, employment achievement, and personal happiness, to a large extent, depend upon your ability to listen effectively. At first, listening may appear to you as a passive behaviour, as it involves silence. But this image of passivity is far from true. Listening requires a person to be attentive. S/he should be patient, non-judgmental and yet have the capacity to analyse and respond.

Hearing and listening are not the same. Hearing is a biological activity that involves reception of a message through sensory channels. It is only a part of listening, a process that involves reception, attention, assignment of meaning, and listener's response to the message presented.

Reception

The initial step in the listening process is the reception of a stimulus or message. A message could be auditory and/or visual. The hearing process is based on a complex set of physical interactions that take place involving the ear and the brain. In addition to using the hearing mechanism, people listen through their visual system. They observe a person's facial expressions, posture, movement, and appearance, which provide important cues that may not be obvious merely by listening to the verbal part of the message.

Attention

Once the stimulus, i.e. the word or visual, or both, is received, it reaches the attention stage of the human processing system. In this phase, the other stimuli recede so that we can concentrate on specific words or visual symbols. Normally your attention is divided between what you are attempting to listen to, and what is happening around you, and what is going on in your mind. Consider, you are watching a movie. The person in front of you is constantly whispering to her/his friend. There is a buzz in the sound system. You are also worried about the forthcoming examination. So your attention is being pulled in different directions. Divided attention makes it difficult for you to receive signals or messages.

Paraphrasing

How would you know that someone has been listening? Ask her/him to restate what you had said. The person in doing this does not repeat your exact words. S/he makes a summary of the ideas just received and provides you with a restatement of what s/he understands. This is called '**paraphrasing**'. It allows you to understand how much s/he understood of what was communicated. If someone cannot repeat or write down a summary of what was said, then s/he probably did not get the whole message or did not understand it. We can keep this in mind when we are listening to our teacher in the class or to others. Try to paraphrase what you heard and if you cannot do so, you should seek immediate clarification, if possible.

Try verbally paraphrasing the next time you are engaged in a demanding conversation, such as when you are receiving directions or when you are in a conflict situation with a friend. Repeat to the speaker what you think she or he had just said in order to check whether you both received and understood the same thing. You will be surprised how many times conflicts result from miscommunication.

Assignment of Meaning

The process of putting the stimulus we have received into some predetermined category develops as we acquire language. We develop mental categories for interpreting the message we receive. For instance, our categorising system for the word *'cheese'* may include such factors as a dairy product, its peculiar taste and colour, all of which help us to relate the word *'cheese'* to the sense in which it is used.

Role of Culture in Listening

Like the brain, the culture in which we have been brought up also influences our listening and learning abilities. Asian cultures, such as India, emphasise on listening by being a silent communicator when receiving messages from seniors or elders. Some cultures focus on controlling attention. Buddhism, for instance, has a notion called 'mindfulness'. This means devoting your complete attention to whatever you are doing. Training in 'mindfulness' which starts in childhood can help to develop longer attention spans and therefore, lead not only to better listening but also to sympathetic listening. However, in many cultures, such listening enhancing concepts are not present. Box 9.3 gives some tips to improve your listening skills.

Body Language

Do you believe that when you communicate with another person, your words communicate the complete meaning of the message? If your answer is yes, then you are mistaken. We all know that it is possible to communicate a great deal even without using verbal language. We are aware that non-verbal acts are symbolic and closely connected to any talk in progress. Such non-verbal acts are part of what is called '**body language**'.

Body language is composed of all those messages that people exchange besides

Box 9.3

Some Tips to Improve Your Listening Skills

- Recognise that both the sender as well as the receiver have equal responsibility in making effective communication.
- Refrain from forming an early judgment about information that is being communicated. Be open to all ideas.
- Be a patient listener. Do not be in a hurry to respond.
- Avoid ego speak. That is, do not talk only about what you want to talk about. Give consideration also to others and to what they say.
- Be careful to the emotional responses which certain words are likely to bring about.
- Be aware that your posture affects your listening.
- Control distractions.
- If in doubt, try to paraphrase. Also check with the sender whether s/he has been correctly understood by you.
- Visualise what is being said. That is, try to translate the message in the form of a concrete action.

words. While reading body language, we must remember that a single non-verbal signal does not carry complete meaning. Factors such as gestures, postures, eye contact, clothing style, and body movement — all of them have to be considered together, that is, in a **cluster**. Also, in verbal communication, non-verbal signs can have many different meanings. For example, crossing arms over the chest may suggest that a person likes to keep aloof. But, crossed arms accompanied by an erect posture, tightened body muscles, a set clenched jaw, and narrowing of the eyes are likely to communicate anger.

A person's background and past patterns of behaviour are also considered when we analyse body language. The consistency between current and past patterns of behaviour, as well as harmony between verbal and non-verbal communication, is termed as **congruency**. When you say to your friend, "you do not look well today", you are basing your statement on an evaluation of the person's appearance today and comparing it with how s/he looked in the past. In other words, something has changed, and you see that difference. If you did not have experience to draw on, you would not have noticed the change. Let us recall how much we use body language to encourage or discourage conversation. For instance, we consciously wave at waiters or friends to catch their attention. Much of the use of body language occurs in conversing with others without conscious realisation.

Activity 9.2

Observing Non-verbal Behaviour in Communication

Carefully observe members of your family. Note their non-verbal behaviour or body language when they are talking to someone. Then focus on your own non-verbal behaviour in a similar way. Do you find any similarities between your non-verbal behaviour or body language and theirs? Share it with the class.

Psychological Testing Skills

The next set of competencies which psychologists require is concerned with the knowledge base of the discipline of psychology. They involve psychological assessment, evaluation and problem solving with individuals and groups, organisation, and the community. Psychologists have always been interested in understanding individual differences from the time of Galton in the late 19th century. Psychological tests have been devised and are primarily used for the determination and analysis of individual differences in general intelligence, differential aptitudes, educational achievement, vocational fitness, personality, social attitudes, and various non-intellectual characteristics. Psychological tests have also been used for studying a variety of psychological studies on groups besides making an assessment of a particular individual. Psychologists study these differences based on factors such as occupation, age, gender, education, culture, etc. While using psychological tests **an attitude of objectivity**, **scientific orientation**, and **standardised interpretation** must be kept in mind.

For example, in organisational and personnel work, in business and industry, where specialised tests are used to select individuals for specific jobs, it is essential to use actual performance records or ratings as a criterion for establishing validity of a test. Suppose, the personnel department wants to know whether a certain psychological test can help it to identify potentially best stenographers, it must be established that the test differentiates among employees of several performance levels. In addition, it should be found that the performance on the job

Box 9.4

Essentials of Psychological Assessment Skills

Psychological assessment is a basic competency required by psychologists. It includes knowledge of comprehensive and integrated assessment of persons based on interviewing, psychological testing, and evaluation of the outcomes of psychological services. The skills needed for psychological assessment are :

- Ability to select and implement multiple methods and means of evaluation in ways that are responsive to, and respectful of diverse individuals, couples, families, and groups.
- Ability to utilise systematic approaches to gather data required for taking decisions.
- Knowledge of psychometric issues and bases of assessment methods.
- Knowledge of issues related to integration of different data sources.
- Ability to integrate assessment data from different sources for diagnostic purposes.
- Ability to formulate and apply diagnoses; to understand strengths and limitations of current diagnostic approaches.
- Capacity for effective use of supervision to implement and enhance skills.

Anyone who uses a psychological test has to be a professionally qualified psychologist trained in psychological testing. Psychological tests are administered strictly based on information given in the test manual. The facts required for this purpose are as follows:

- Purpose of the test, i.e. what it has to be used for?
- Target population for which it can be used.
- Type of validation done on the test, i.e. on what basis it can be said that it measures what it claims to measure?
- The external criteria of validation, i.e. the areas in which it has been found working.
- The reliability indices, i.e. how much error is possible in scores?
- The standardisation sample. That is, when the test was constructed, who were tested, e.g. Indians or Americans, rural/urban, literate/semi-literate, etc.?
- Time taken in the administration of test.
- Scoring patterns, i.e. what is to be scored and what method is to be used?
- Norms. That is, what kinds are available? What is the appropriate group which is to be used for interpretation of scores, e.g. male/female, age groups, etc.?
- Influence of any special factors, e.g. presence of others, stress situations, etc.
- Limitations of the test, i.e. who, and what it cannot assess? Conditions in which it may not give good assessment.

of a newly employed worker selected on the basis of a test indeed matches with her/his test scores. Box 9.4 presents the essentials of psychological assessment skills.

Interviewing Skills

An interview is a purposeful conversation between two or more people that follows a basic question and answer format. Interviewing is more formal than most other conversations because it has a pre-set purpose and uses a focused structure. There are many kinds of interviews. The employment interview is one which most of you are likely to face. Some other formats are information gathering interview, counselling interview, interrogatory interview, radio-television interview, and research interview.

Interview Format

Once the objectives of the interview are established, the interviewer prepares an

interview format. The basic format, regardless of the interview's purpose, is divided into three stages, namely, *opening, the body,* and *the closing*. We would now discuss these three stages briefly.

Opening of the Interview

The opening of interview involves establishing rapport between two communicators. The purpose is to make the interviewee comfortable. Generally, the interviewer starts the conversation and does most of the talking at the outset. This serves two functions, i.e. it establishes the goal of interview, and gives the interviewee time to become comfortable with the situation and the interviewer.

Body of the Interview

The body of the interview is the heart of the process. In this stage, the interviewer asks questions in an attempt to generate information and data that are required for the purpose.

Sequence of Questions

To accomplish the purpose of an interview, the interviewer prepares a set of questions, also called a *schedule*, for different domains, or categories s/he wants to cover. To do this, the interviewer must first decide on the domains/categories under which information is to be generated. For example, in the questions used in job interview given in Box 9.5, the interviewer selected several categories such as nature of the organisation last worked for, satisfaction with the past job, views on product, etc. These categories and the questions within them are framed ranging from easy-to-answer to difficult-to-answer. Questions are also formulated to assess facts as well as subjective assessment.

Box 9.5

Types of Interview Questions

Direct Question: They are explicit and require specific information. For example, "Where did you last work?"

Open-ended Question: They are less direct and specify only the topic. For example, "How happy were you with your job on the whole?"

Close-ended Question: They provide response alternatives, narrowing the response variations. For example, "Do you think knowledge of a product or communication skill is more important for a salesperson?"

Bipolar Question: It is a form of close-ended question. It requires a yes or no response. For example, "Would you like to work for the company?"

Leading Question: It encourages a response in favour of a specific answer. For example, "Wouldn't you say you are in favour of having officer's union in the company?"

Mirror Question: They are intended to get a person to reflect on what she or he had said and expand on it. For example, you said "I work so hard but I am unable to get success." Please explain as to why this happens.

Answering Interview Questions

- If you do not understand the question, ask for clarification.
- Restate the question in your answer.
- Answer one question at a time.
- Try to turn negative questions into positive ones.

Closing the Interview

While closing the interview, the interviewer should summarise what s/he has been able to gather. One should end with a discussion of the next step to be taken. When the interview is ending, the interviewer should give a chance to the interviewee to ask questions or offer comments.

Counselling Skills

Another prerequisite for developing as a psychologist is the competence in the domain of counselling and guidance. In order to develop these competencies, psychologists must undergo proper training and education under guided supervision. The consequences of getting into a wrong vocation are pretty serious. If a person enters a job for which s/he does not have requisite aptitude, s/he can develop serious problems of adjustments, develop negative emotions, suffer from inferiority complex, etc. These difficulties may then come to be projected onto someone else. Contrary to this, if anyone who takes a vocation for which s/he is well adapted, there will be considerable satisfaction in doing the job well. The positive feeling thus generated would have tremendous impact on overall life adjustment. Counselling is also one such domain where a person entering the field is required to engage in self-introspection in order to assess her/his inclination and basic skill set for being effective in her/his vocation.

Meaning and Nature of Counselling

Counselling provides a system for planning the interview, analysing the counsellor's and client's behaviour, and determining the developmental impact on the client. In this section, we will discuss skills, concepts, and methods that are designed to help develop concrete competencies. A counsellor is most often interested in building an understanding of the clients problem by focusing on what understanding the client has of her/his problem and how s/he feels about it. The actual or objective facts of the problems are considered less important, and it is considered more important to work on the feelings and their acknowledgement by the clients. The focus is more on the person and how s/he defines the problem.

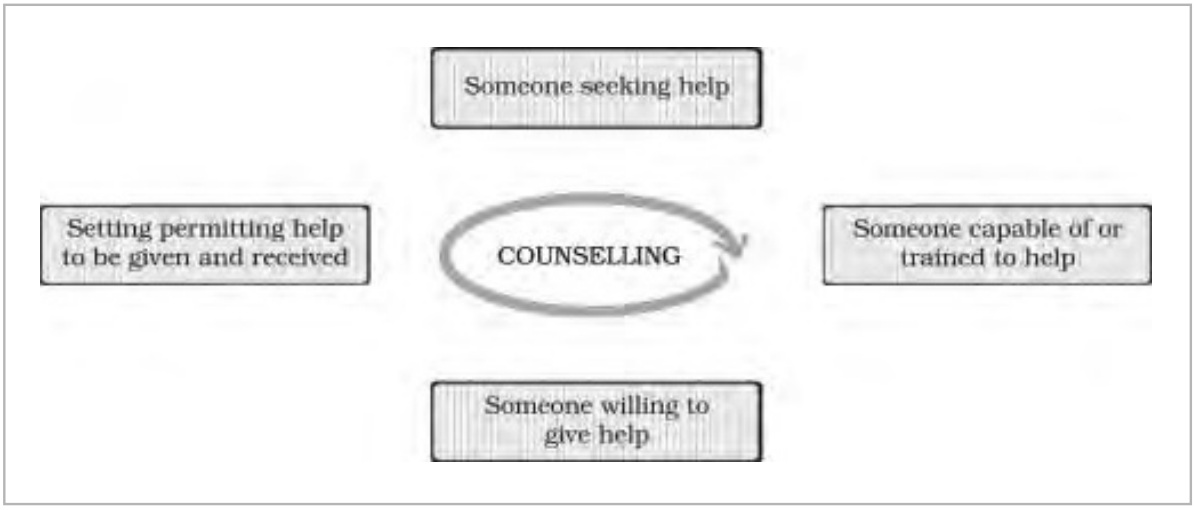


Fig.9.2 : Pre-requisites of Counselling Process

Counselling involves helping relationship, that includes someone seeking help, and someone willing to give help, who is capable of or trained to help in a setting that permits help to be given and received (see Fig.9.2).

The following elements about counselling are common to the major theoretical approaches to counselling :

1. Counselling involves responding to the feelings, thoughts, and actions of the clients.
2. Counselling involves a basic acceptance of the client's perceptions and feelings, without using any evaluative standards.
3. Confidentiality and privacy constitute essential ingredients in the counselling setting. Physical facilities that preserve this quality are important.
4. Counselling is voluntary. It takes place when a client approaches a counsellor. A counsellor never uses any kind of coercion for obtaining information.
5. Counsellors and clients both transmit and receive verbal and non-verbal messages during the process. Therefore, awareness and sensitivity to the nature of the message is an important prerequisite for a counsellor's effectiveness.

Breaking the Myths of Counselling

- Counselling is not merely giving information.
- Counselling is not giving advice.
- Counselling is not selection and placement of individuals onto jobs or for courses.
- Counselling is not the same as interviewing though interviewing may be involved.
- Counselling is not influencing attitudes, beliefs and behaviour by persuading, admonishing, threatening, or compelling.

Developing Effective Relationships

For most people who seek help from a counsellor, effective or satisfying relationships are almost non-existent or infrequent. Since change in behaviour is often created and supported by a network of social support, it is essential for clients to start developing more positive relationships with other persons. The counselling relationship is the initial vehicle through which this begins. Like all of us, counsellors too are not perfect, but they are trained in developing a more healthy and helpful relationship than others.

In brief, counselling usually has an all-inclusive outcome for the clients. Effective behavioural change that takes place in the client is multifaceted. It may show up in the form of a client taking greater responsibility, developing new insight, learning to engage in different behaviours,

Activity 9.3

Listening and Paraphrasing

For this activity, three students are needed, A, B, and C.

A will act as a counsellor, who will practice listening. Her/his role will be to repeat to the client in different words what s/he listened. A will listen not only to what was said but also how it was said (body language) and the feelings behind it.

B will share with A some problems that s/he has been facing in life lately.

C will act as an observer and take notes on how good a listener A is.

A and B will interact for about 10 minutes. After the interaction is over, C will share her/his observations. B may also share her/his observations with A and C about A's communication.

The feedback session may be of 10 minutes. After it is over, switch roles so that all three may get a chance to play the three roles. At the end of the activity, summarise what you have learned.

and making an effort to develop more effective relationships.

Characteristics of Effective Helper

Being a trained helper, the counsellor has the responsibility for ensuring that her/his client is benefited from counselling and its therapeutic effects are achieved. To a large extent, however, the success of a counselling process depends on the skill, knowledge, attitude, personal qualities and behaviour of a counsellor, any or all of which can enhance or diminish the helping process. In this section, we will discuss four qualities that are associated with effective counsellors. These include: (i) *Authenticity*, (ii) *Positive regard for others*, (iii) *Ability to empathise*, and (iv) *Paraphrasing.*

Let us understand these qualities briefly.

(i) **Authenticity** : Your image or perception of yourself makes up your "I". The *self-perceived "I"* is revealed through ideas, words, actions, clothing, and your life-style. All of these communicate your "I" to others. Those who come into close contact with you also build their own image of you for themselves, and they also sometimes communicate this image to you. For example, friends tell you what they like and dislike about you. Your teachers and parents praise and/or criticise you. You are also evaluated by persons you respect. These collective judgments by people you respect, also called 'significant others', develop into a 'me'. This other perceived 'me' is the person that others perceive you to be. This perception may be the same as or different from your own self-perception of 'I'. The degree to which you are aware of these perceptions of others as well as of your own perception of your self indicates that you are self-aware. Authenticity means that your behavioural expressions are consistent with what you value and the way you feel and relate to your inner self-image.

(ii) **Positive Regard for Others**: In a counselling-counsellor relationship, a good relationship allows freedom of expression. It reflects acceptance of the idea that the feelings of both are important. We should remember that when we form a new relationship, we experience feelings of uncertainty and anxiety. Such feelings get minimised when a counsellor extends a positive regard to the client by accepting that it is all right to feel the way the client is feeling. In order to show positive regard to others, the following guidelines may be kept in mind:

(1) When you are speaking, get into the habit of using "I" messages rather than "you" messages. An example of this would be, "I understand" rather than "you should not".

(2) Respond to what the other person has said, after checking with her/him.

(3) Give the other person the freedom to share feelings or anything s/he wants to say. Do not interrupt or cut in.

(4) Do not assume that the other person knows what you are thinking. Express yourself according to the frame of reference, i.e. in the context of the verbal exchange taking place.

(5) Do not label either yourself or the other person (e.g., "you are an introvert", etc.).

(iii) **Empathy**: This is one of the most critical competencies that a counsellor needs to have. You have already read in Chapter 5 that empathy is the ability of a counsellor to understand the feelings of another person from her/his perspective. It is like stepping into someone else's shoes and trying to understand the pain and troubled feelings of the other person. There is a difference between sympathy and

Activity 9.4

Confronting One's Fear

This activity can be carried out in a group situation. Everyone in the group writes her/his worst fears/doubts/anxieties on a piece of paper without disclosing her/his name. After everyone has finished writing their fears, all the slips are collected and thrown in a big basket. Now, everyone in the group picks up one slip from the basket and reads out aloud the fears mentioned on that list. Then the group engages in a discussion about the nature of the fear, the possible reasons for a particular fear to exist, the relevant agencies who are in some form related to instilling that fear, the potential ways to overcome it, etc. The same process is repeated until all the slips in that basket have been read. At the end of this activity, you should check:

- *If this activity helped you in understanding something more about your self.*
- *What elements other than fear would have also contributed in the process of self-awareness?*
- *How did you feel when someone was reading out your fears?*

empathy. In sympathy, you play the saviour. You may think that someone deserves your kindness.

(iv) **Paraphrasing**: This skill has already been discussed in the section on communication earlier. You will recall that this involves the ability of a counsellor to reflect on what the client says and feels using different words.

Ethics of Counselling

In recent years, counsellors have taken important steps to develop their professional identity. A critical criterion for any professional group is the development and implementation of appropriate ethical standards. Social workers, marriage counsellors, family therapists, and psychologists — all have their ethical codes. Awareness of the ethical standards and codes is extremely important, because counselling is a part of the service sector. Not following the ethical standards may have legal implications.

While learning about the competencies of a counsellor, it is important for you to know that the client-counsellor relationship is built on ethical practice. The American Psychological Association (APA) has developed a code of ethical conduct for behaviour and decision-making in actual clinical settings. The practical knowledge of these ethical domains can guide the practice of counselling in achieving its desired purpose. Some of the APA practice guidelines are:

- Knowledge of ethical/professional codes, standards, and guidelines; knowledge of statutes, rules, regulations, and case law relevant to the practice of psychology.
- Recognise and analyse ethical and legal issues across the range of professional activities in the clinical setting.
- Recognise and understand the ethical dimensions/features of her/his own attitudes and practice in the clinical setting.
- Seek appropriate information and consultation when faced with ethical issues.
- Practice appropriate professional assertiveness related to ethical issues.

Key Terms

Applied psychology, Assessment skills, Cognitive skills, Competence, Counselling, Ethical observation, Intrapersonal awareness, Intervention and consultation skills, Objectivity, Open mindedness, Problem solving skills, Psychological assessment, Psychological test, Reflective skills, Self-awareness, Sensitivity, Trustworthiness.

Summary

- *The general and specific skills form the core competencies essential for a psychologist to act in a more responsive and ethical manner. Before entering any professional arena, it, therefore, becomes pertinent for a psychologist to equip herself/himself with these indispensable competencies.*
- *General skills include personal as well as intellectual skills. These skills are essential for all professional psychologists, whether they are working in the field of clinical and health psychology, industrial/organisational, social, educational, or in environmental settings or are acting as consultants.*
- *Specific skills are core/basic to the field of psychological service. For example, psychologists working in clinical settings need to be trained in various techniques of therapeutic interventions, psychological assessment, and counselling.*
- *In order to become an effective psychologist, one needs to have certain characteristics such as competence, integrity, professional and scientific responsibility, respect for people's rights and dignity, etc.*
- *Observational skills are basic skills and are used by psychologists as a starting point for providing insights into behaviour. The two major approaches to observation are naturalistic observation and participant observation.*
- *Communication is a process that helps in transmitting meaning from one person to another. Speaking and listening are central to interpersonal communication.*
- *Language is important for communication. Its use should be done according to the characteristics of audience. Non-verbal cues such as gestures, postures, hand movements, etc. are also used to communicate ideas.*
- *Creating a proper message, tackling environmental noise, and providing feedback are ways of reducing distortions and making effective communication.*
- *Interviewing is a process of face-to-face communication. It proceeds through three stages which include the warm up (opening stage), the question and answer (the body), and the closing stage.*
- *Developing the skills of psychological testing is important since tests are important tools used for the assessment of individuals for various purposes. Proper training is required for administration, scoring and interpretation of tests.*
- *Counselling involves helping relationship, that includes someone seeking help, and someone willing to give help. The qualities that are associated with effective counsellors are (i) Authenticity, (ii) Positive regard for others, (iii) Ability to empathise, and (iv) Paraphrasing.*

Review Questions

1. What competencies are required for becoming an effective psychologist?
2. What are the generic skills needed by all psychologists?
3. Define communication. Which component of the communication process is most important? Justify your answer with relevant examples.
4. Describe the set of competencies that must be kept in mind while administering a psychological test.
5. What is the typical format of a counselling interview?
6. What do you understand by the term counselling? Explain the characteristics of an effective counsellor.
7. To be an effective counsellor, it is mandatory that s/he undergoes professional training. Do you agree with this statement? Give reasons in support of your arguments.
8. What are the ethical considerations in client-counsellor relationships?
9. Identify an aspect of your friend's personal life that s/he wants to change. As a student of psychology, think of specific ways in which you can devise a programme to help your friend modify or solve her/his problem.

Project Ideas

1. Identify 3–4 separate fields of psychology. For instance, you can choose a clinical psychologist, a counsellor, and an educational psychologist. Obtain information about the type of work they do and the skills that are used by these psychologists in their unique setting. You can either develop a questionnaire or conduct personal interviews with all of them to identify the competencies related to the kind of work that these psychologists undertake. Prepare a report and discuss in the class.
2. Choose any one skill from the list of competencies for a psychologist. Gather information about the theoretical and practical aspects of that particular skill. On the basis of the obtained information suggest some steps to enhance that skill. Make a presentation in the class.

Weblinks

www.allpsych.com
www.library.unisa.edu.au/resources/subject/counsel.asp

Pedagogical Hints

1. Students could be asked to share their views on the increasing applications of psychology in different areas of life.
2. Students can also be asked to brainstorm on the possible skills and competencies needed by psychologists working in different areas.
3. Use of innovative methods such as narration of case vignette and role-play to demonstrate communication skills, effective listening, paraphrasing, etc. would be particularly helpful.

GLOSSARY

Actor-observer effect: The tendency to make different attributions for one's own experience or behaviour (actor), and for the same experience or behaviour in the case of another person (observer).

Adaptation: Structural or functional change that enhances the organism's survival value.

Aggression: An overt behaviour intended to hurt someone, either physically or verbally.

Air pollution: Degraded quality of air is air pollution.

Alarm reaction: The first stage of the general adaptation syndrome characterised by an emergency reaction involving the mobilisation of energy through adrenal and sympathetic activity.

Alienation: The feeling of not being part of society or a group.

Anal stage: The second of Freud's psychosexual stages, which occurs during the child's second year. Pleasure is focused on the anus and on retention and expulsion of faeces.

Anorexia nervosa: Disorder involving severe loss of body weight, accompanied by an intense fear of gaining weight or becoming "fat".

Antisocial personality: A behavioural disorder characterised by truancy, delinquency, promiscuity, theft, vandalism, fighting, violation of common social rules, poor work record, impulsiveness, irrationality, aggressiveness, reckless behaviour, and inability to plan ahead. The particular pattern of behaviour varies from individual to individual.

Anxiety: A state of psychic distress characterised by fear, apprehension, and physiological arousal.

Anxiety disorders: Disorders in which anxiety is a central symptom. The disorder is characterised by feelings of vulnerability, apprehension, or fear.

Applied psychology : The practical application of what is known about the mind, brain, and behaviour as a result of theoretical and experimental psychology.

Aptitude: A combination of characteristics indicative of individual's potential to acquire some specific skills with training.

Aptitude tests: Tests meant to measure individual's potential to predict future performance.

Archetypes: Jung's term for the contents of the collective unconscious; images or symbols expressing the inherited patterns for the organisation of experience.

Arousal: The tension experienced at the thought of others being present, and/or performance being evaluated.

Attitudes: States of the mind, thoughts or ideas regarding a topic, containing a cognitive, affective and behavioural component.

Attitude object: The target of an attitude.

Attribution: Explaining our own or others' behaviour by pointing out the cause(s).

Authority: The rights inherent in a position (e.g., managerial) to give orders and to expect the orders to be obeyed,

Autism: Pervasive developmental disorder beginning in infancy and involving a wide range of abnormalities, including deficits in language, perceptual, and motor development, defective reality testing, and social withdrawal.

Balance: The state of an attitude system in which the attitudes between a person (P) and another individual (O), the person (P) and the attitude object (X), and between the other individual (O) and the attitude object (X) are in the same direction, or logically consistent with each other.

Behaviour therapy: Therapy based on the principles of behaviouristic learning theories in order to change the maladaptive behaviour.

Beliefs: The cognitive component of the thoughts or ideas regarding a topic.

Cardinal trait: According to Allport, a single trait that dominates an individual's entire personality.

Case study: An intensive study of an individual or a situation to develop general principles about behaviour.

Central traits: The major trait considered in forming an impression of others.

Centrality of attitude: The extent to which a specific attitude affects the entire attitude system.

Client-centred (Rogerian) therapy: The therapeutic approach developed by Carl Rogers in which therapist helps clients to clarify their true feelings and come to value who they are.

Coaction: A situation in which many people are performing the same task individually in the presence of others.

Cognition: The process of knowing. The mental activities associated with thought, decision-making, language, and other higher mental processes.

Cognitive assessment system: A battery of tests designed to measure the four basic PASS (Planning-Attention-Simultaneous-Successive) processes.

Cognitive consistency: A state in which thoughts or ideas are logically in line with each other.

Cognitive dissonance: The state of an attitude system in which two cognitive elements are logically contradictory, or inconsistent.

Cognitive therapies: Forms of therapy focused on changing distorted and maladaptive patterns of thought.

Cohesiveness: All forces (factors) that cause group members to remain in the group.

Collective unconscious: Inherited portion of the unconscious, as postulated by Carl Jung. The unconscious shared by all human beings.

Communicable disease: An illness due to specific infectious agent capable of being directly or indirectly transmitted from man to man, animal to animal, or from the environment to man or animal.

Competition: Mutual striving between two individuals or groups for the same objective.

Competition tolerance: The ability to put up with a situation in which individuals would have to compete with many others for even basic resources, including physical space.

Compliance: A form of social influence in which one or more persons, not holding authority, accepts direct requests from one or more others.

Componential intelligence: In Sternberg's triarchic theory, it refers to ability to think critically and analytically.

Conflict: A state of disturbance or tension resulting from opposing motives, drives, needs or goals.

Conformity: A type of social influence in which individuals change their attitudes or behaviour in order to adhere to existing social norms.

Congruent attitude change: Attitude change in the same direction as that of the existing attitude.

Contextual intelligence: In Sternberg's triarchic theory, it is the practical intelligence used in solving everyday problems.

Coping: The process of trying to manage demands that are appraised as taxing or exceeding one's resources.

Counselling: A broad name for a wide variety of procedures for helping individuals achieve adjustment, such as the giving of advice, therapeutic discussion, the administration and interpretation of tests, and vocational assistance.

Counselling interview: An interview whose purpose is counselling or providing guidance in the area of personality, vocational choice, etc.

Creativity: The ability to produce ideas, objects, and problem solutions that are novel and appropriate.

Crowding: A psychological feeling of too little space; perception of crampedness.

Crowding tolerance: The ability to mentally deal with a high density or crowded environment, such as a crowded residence.

Culture-fair test: A test that does not discriminate examinees on the basis of their cultural experiences.

Defence mechanisms: According to Freud, ways in which the ego unconsciously tries to cope with unacceptable id impulses, as in repression, projection, reaction formation, sublimation, rationalisation, etc.

Deinstitutionalisation: The transfer of former mental patients from institutions into the community.

Delusions: Irrational beliefs that are held despite overwhelming evidence to the contrary.

Depersonalisation disorder: Dissociative disorder in which there is a loss of the sense of self.

Diathesis-stress model: A view that the interaction of factors such as biological predisposition combined with life stress may cause a specific disorder.

Diffusion of responsibility: The thought that when others are present, one person alone will not be held responsible for doing, or not doing, something; other members are also responsible and will therefore do the task.

Disaster: A disaster is an unforeseen and often sudden event that disrupts the normal conditions within a society and causes widespread damage, destruction, and human suffering.

Discrimination: Behaviour that shows a distinction being made between two or more persons, often on the basis of the person's (or persons') membership of a particular group.

Displacement: Redirecting an impulse towards a less threatening or safer target; a key concept in psychoanalytic theory; a defence mechanism.

Dissociation: A split in consciousness whereby certain thoughts, feelings, and behaviour operate independently from others.

Ecology: That branch of biology which deals with the relations of organisms to their environment.

Ego: The part of the personality that provides a buffer between the id and the outside world.

Electroconvulsive therapy (ECT): Commonly called "shock treatment". A biological treatment for unipolar depression in which electrodes attached to a patient's head send an electric current through the brain, causing a convulsion. It is effective in the treatment of cases of several depression that fail to respond to drug therapy.

Emotional intelligence: A cluster of traits or abilities relating to the emotional side of life — abilities such as recognising and managing one's own emotions, being able to motivate oneself and restrain one's impulses, recognising and managing others' emotions, and handling interpersonal relationships in an effective manner. It is expressed in the form of an emotional quotient (EQ) score.

Empathy: Reacting to another's feelings with an emotional response that is similar to the other's feelings.

Environment: Totality, or any aspect of physical and social set-up that surround and affect an individual organism.

Environmental psychology: The branch of psychology that concentrates on the interaction between the physical world and human behaviour.

Evaluation apprehension: The fear of being evaluated negatively by others who are present (an audience).

Exhaustion: State in which energy resources have been used up and responsiveness is reduced to a minimum.

Exorcism: Religiously inspired treatment procedure designed to drive out evil spirits or forces from a "possessed" person.

Experiential intelligence: In Sternberg's triarchic theory, it is the ability to use past experiences creatively to solve novel problems.

Extraversion: One of the dimensions of personality in which interests are directed outwards to nature and other people rather than inwards to the thoughts and feelings of self (introvert).

Extremeness of attitude: Refers to how far an attitude is from the neutral point.

Factor analysis: Mathematical procedure, involving correlations, for sorting trait terms or test responses into clusters or factors; used in the development of tests designed to discover basic personality traits. It identifies items that are homogeneous or internally consistent and independent of others.

Fluid intelligence: Ability to perceive complex relationships, reason abstractly, and solve problems.

Free association: A psychodynamic technique in which the patient describes verbally any thought, feeling, or image that comes to mind, even if it seems unimportant.

Fundamental attribution error: The tendency to attribute internal causes more than external causes for behaviour.

General adaptation syndrome (GAS): It consists of three phases : an alarm phase which promotes sympathetic nervous system activity, a resistance phase during which the organism makes efforts to cope with the threat, and an exhaustion phase which occurs if the organism fails to overcome the threat and depletes its physiological resources.

Genetics: The study of how the qualities of living things are passed on in their genes.

Gestalt therapy: An approach to therapy that attempts to integrate a client's thoughts, feelings, and behaviour into a unified whole.

g-factor: General intelligence factor referring to a basic intellectual capacity underlying all manifestations of intelligence.

Group: Two or more persons who interact with one another, have shared goals, are interdependent, and consider themselves as members of group.

Group test: A test designed to be administered to more than one individual at the same time, in contrast to individual test.

Groupthink: A mode of thinking in which the desire to reach unanimous agreement overrides the wish to adopt proper, rational, decision-making procedures; an example of group polarisation.

Hallucination: A false perception which has a compulsive sense of the reality of objects although relevant and adequate stimuli for such perception is lacking. It is an abnormal phenomenon.

Halo effect: The tendency to link positive qualities with other positive qualities about which information is not available.

Hardiness: It is a set of beliefs about oneself, the world, and how they interact. It has three characteristics, i.e. commitment, control, and challenge.

Homeostasis: A state of physiological balance within the body.

Humanistic approach: The theory that people are basically good and tend to grow to higher levels of functioning.

Humanistic therapy: A therapy in which the underlying assumption is that people have control over their behaviour, can make choices about their lives, and are essentially responsible for solving their own problems.

Hypochondriasis: A psychological disorder in which the individual is dominated by preoccupation with bodily processes and fear of presumed diseases despite reassurance from doctors that no physical illness exists.

Id: According to Freud, the impulsive and unconscious part of the psyche that operates through the pleasure principle toward the gratification of instinctual drives. The id is conceived as the true unconscious, or the deepest part of the psyche.

Ideal self: The kind of person we would like to be. Also called ego-ideal/idealised self-image.

Identification: The process of feeling one with another person, usually resulting from liking or extreme regard for the other person.

Identity: The distinguishing character of the individual: who each of us is, what our roles are, and what we are capable of.

Incongruent attitude change: Attitude change in a direction opposite to that of the existing attitude.

Individual differences: Distinctiveness and unique variations among people's characteristics and behaviour patterns.

Individual test: A test that must be given to a single individual at a time, typically by a specially trained person. The Binet and Wechsler intelligence tests are examples of individual tests.

Industrial/organisational psychology: A subfield of psychology that focuses on relationship between people and work. In the contemporary context, the emphasis has

shifted from industrial psychology to organisational psychology, which includes industrial and all other organisations.

Inferiority complex: According to Adler, a complex developed by adults who have not been able to overcome the feelings of inferiority they developed as children, when they were small and limited in their knowledge about the world.

Ingroup: The social group to which an individual perceives herself or himself as belonging ("us"). The group with which one identifies. The other groups are outgroups.

Instrumental perspective: The approach that suggests that the physical environment exists mainly for use by human beings for their comfort and well-being.

Intellectual giftedness: Exceptional general intellectual efficiency shown in superior performance in a wide range of tasks.

Intelligence: The capacity to understand the world, to think rationally, and to use resources effectively when faced with challenges.

Intelligence quotient (IQ): An index derived from standardised intelligence tests indicating a ratio of mental age to chronological age.

Intelligence tests: Tests designed to measure person's level of intelligence.

Interest: An individual's preference for one or more specific activities.

Interview: Verbal interaction between a respondent and a researcher to gather information about the respondent.

Introversion: One of the dimensions of personality in which interests are directed inwards rather than outwards (extravert).

Kernel of truth: The small element of truth that may be perceived in overgeneralised clusters of beliefs about groups (stereotypes).

Latency period: In Freud's theory of psychosexual stages, the period between the phallic stage and the mature genital stage (period from age 4 or 5 to about 12) during which interest in sex is sublimated.

Libido: Freud introduced this term. In Freud's treatment, libido was quite simply a direct or indirect sexual expression.

Life skills: Abilities for adaptive and positive behaviour that enable individuals to deal effectively with the environment.

Lifestyle: In the context of health psychology, the overall pattern of decisions and behaviours that determine health and quality of life.

Meditation: A technique of turning one's concentration inward and achieving an altered state of consciousness.

Mental age (MA): A measure of intellectual functioning expressed in terms of age.

Mental retardation: Sub-average intellectual functioning combined with varying degrees of deficits in adaptive behaviour.

Metaneeds: In the hierarchy of needs, those at the top, such as self-actualisation, self-esteem, aesthetic needs, and the like, which can only be satisfied when lower order needs are satisfied.

Modelling: A process of learning in which an individual acquires responses by observing and imitating others.

Mood disorder: Disorder affecting one's emotional state, including depression and bipolar disorder.

Neurotransmitter: Chemicals that carry messages across the synapse to the dendrite (and sometimes the cell body) of a receiver neuron.

Noise: An unwanted sound, one that brings about a negative affective response.

Normal probability curve: A symmetrical, bell-shaped frequency distribution. Most scores are found near the middle, and fewer and fewer occur towards the extremes. Many psychological characteristics are distributed in this manner.

Norms: Standards of test performance that permit the comparison of one person's score on the test to the scores of others who have taken the same test.

Obedience: Confirming behaviour in reaction to the commands of others.

Observational method: A method in which researcher observes a phenomenon that occurs naturally without being able to manipulate any of the factors.

Obsessive-compulsive disorder: A disorder characterised by obsessions or compulsions.

Oedipus complex: The Freudian concept in which the young child develops an intense desire to replace the parent of the same sex and enjoy that affection of the opposite sex parent.

Optimism: The tendency to seek out, remember, and expect pleasurable experiences.

Outgroup: Any group of which an individual is not a member.

Peace: It is the absence of hostility and an expression of harmony with fellow human beings and the environment.

Performance test: A test in which the role of language is minimised, the task requiring overt motor responses other than verbal.

Personal identity: Awareness of oneself as a separate, distinct being.

Personal space: The small area around an individual considered belonging to her/him whose invasion is experienced as threatening or unpleasant.

Persuasibility: The degree to which people can be made to change their attitudes.

Phallic stage: Third of Freud's psychosexual stages (at about age five) when pleasure is focused on the genitals and both males and females experience the "Oedipus complex".

Phobia: A strong, persistent, and irrational fear of some specific object or situation that presents little or no actual danger to a person.

Physical environment: It is the nature that includes climate, air, water, temperature, flora and fauna.

Planning: In Das's PASS model of intelligence, it involves goal setting, strategy selection, and monitoring of goal-orientation.

Positive health: It includes a healthy body, good interpersonal relationships, a sense of purpose in life, and resilience to stress, trauma and change.

Post-traumatic stress disorder: Patterns of symptoms involving anxiety reactions, tensions, nightmares, and depression following a disaster such as an earthquake or a flood.

Poverty: Poverty is the economic deprivation. It is associated with low income, hunger, low caste and class status, illiteracy, poor housing, overcrowding, lack of public amenities, mal- and under-nutrition, and increased susceptibility to diseases.

Poverty alleviation: Measures/programmes taken up to reduce poverty.

Prejudice: A prejudgment, usually a negative attitude that is unverified, and is often towards a group.

Primacy effect: The stronger role of information that comes first.

Primary group: Group in which each member is personally known to each of the other member, and in which the members, at least on occasion, meet face-to-face.

Problem solving behaviour: The activity and mental processes involved in overcoming the obstacles, physical or conceptual, which lie between an animal and its goal.

Pro-environmental behaviour: Willingness and activities of human beings to protect the environment are pro-environmental behaviour.

Projection: A defence mechanism; the process of unwittingly attributing one's own traits, attitudes, or subjective processes to others.

Projective techniques: The utilisation of vague, ambiguous, unstructured stimulus objects or situations in order to elicit the individual's characteristic modes of perceiving her/his world or of behaving in it.

Pro-social behaviour: Behaviour that does good to another person, is done without any pressure from outside, and without any expectation of a reward or return.

Prototype: A schema in the form of a category representing all the possible qualities of an object or a person.

Proximity: The principle of Gestalt psychology that stimuli close together tend to be perceived as a group.

Psychodynamic approach: Approach that strives for explanation of behaviour in terms of motives, or drives.

Psychodynamic therapy: First suggested by Freud; therapy based on the premise that the primary sources of abnormal behaviour are unresolved past conflicts and the possibility

that unacceptable unconscious impulses will enter consciousness.

Psychological test: An objective and standardised instrument for measuring an individual's mental and behavioural traits; used by psychologists to help people make decisions about their lives and understand more about themselves.

Psychoneuroimmunology: Interactions among behavioural, neuroendocrine, and immunological processes of adaptation.

Psychotherapy: The use of any psychological technique in the treatment of mental/psychological disorder or maladjustment.

Rational emotive therapy (RET): A therapeutic system developed by Albert Ellis. It seeks to replace irrational, problem-provoking outlooks with more realistic ones.

Rationalisation: A defence mechanism that occurs when one attempts to explain failure or shortcomings by attributing them to more acceptable causes.

Reaction formation: A defence mechanism in which a person denies a disapproved motive through giving strong expression to its opposite.

Recency effect: The stronger role of information that comes last.

Regression: A defence mechanism that involves a return to behaviours characteristic of an earlier stage in life. The term is also used in statistics, in which with the help of correlation prediction is made.

Rehabilitation: Restoring an individual to normal, or as satisfactory a state as possible, following an illness, criminal episode, etc.

Relaxation training: A procedure in which clients are taught to release all the tension in their bodies.

Repression: A defence mechanism by which people push unacceptable, anxiety-provoking thoughts and impulses into the unconscious to avoid confronting them directly.

Resilience: The maintenance of positive adjustment under challenging life conditions.

Resistance: In psychoanalysis, attempts by the patient to block treatment.

Roles: An important concept in social psychology which refers to the behaviour expected of an individual in accordance with the position s/he holds in a particular society.

Scapegoating: Placing the blame on a group for something that has gone wrong, because the blamed group cannot defend itself.

Schema: A mental structure that guides social (and other) cognition.

Schizophrenia: A group of psychotic reactions characterised by the breakdown of integrated personality functioning, withdrawal from reality, emotional blunting and distortion, and disturbances in thought and behaviour.

Self-actualisation: A state of self-fulfilment in which people realise their highest potential in their own unique way.

Self-awareness: Insight into one's own motives, potential and limitations.

Self-efficacy: Bandura's term for the individual's beliefs about her or his own effectiveness; the expectation that one can master a situation and produce positive outcomes.

Self-esteem: The individual's personal judgment of her or his own worth; one's attitude toward oneself along a positive-negative dimension.

Self-fulfilling prophecy: Behaving in a way that confirms the prediction others make.

Self-regulation: Refers to our ability to organise and monitor our own behaviour.

Sensitivity: Tendency to respond to very low levels of physical stimulation.

Simplicity or complexity (multiplexity) of attitude: Whether the whole attitude consists of a single or very few sub-attitudes (simple), or contains many sub-attitudes (multiplex).

Simultaneous processing: Cognitive processing in the PASS model that involves integrating elements of the stimulus situation into composite and meaningful patterns.

Situationism: A principle which states that situations and circumstances outside oneself have the power to influence behaviour.

Social cognition: The processes through which we notice, interpret, remember, and later use social information. It helps in making sense of other people and ourselves.

Social facilitation: The tendency for people's performance to improve in the presence of others, or an audience.

Social identity: A person's definition of who she or he is; includes personal attributes (self-concept) along with membership in various groups.

Social influence: The process by which the actions of an individual or group affect the behaviour of others.

Social inhibition: Social restraint on conduct.

Social loafing: In a group, each additional individual puts in less effort, thinking that others will be putting in their effort.

Social support: Information from other people that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligation.

Somatoform disorders: Conditions involving physical complaints or disabilities occurring in the absence of any identifiable organic cause.

Spiritual perspective: The perspective that specifies to do activities what are desirable in accordance with the scriptures. It pleads for a harmony between man and nature.

Status: Social rank within a group.

Stereotype: An overgeneralised and unverified prototype about a particular group.

Stress: Our response to events that disrupt or threaten to disrupt our physical and psychological functioning.

Stressors: Events or situations in our environment that cause stress.

Structure: The enduring form and composition of a complex system or phenomenon. Contrast with function, which is a process of a relatively brief duration, arising out of structure.

Substance abuse: The use of any drug or chemical to modify mood or behaviour that results in impairment.

Successive processing: Cognitive processing in the PASS model where elements of the stimulus situation are responded to sequentially.

Superego: According to Freud, the final personality structure to develop; it represents society's standards of right and wrong as handed down by person's parents, teachers, and other important figures.

Surface traits: R.B. Cattell's term for clusters of observable trait elements (responses) that seem to go together. Factor analysis of the correlations reveals source traits.

Syndrome: Group or pattern of symptoms that occur together in a disorder and represent the typical picture of the disorder.

Systematic desensitisation: A form of behavioural therapy in which phobic client learns to induce a relaxed state and then exposed to stimuli that elicit fear or phobia.

Therapeutic alliance: The special relationship between the client and the therapist; contractual nature of the relationship and limited duration of the therapy are its two major components.

Token economy: Forms of behaviour therapy based on operant conditioning in which hospitalised patients earn tokens they can exchange for valued rewards, when they behave in ways the hospital staff consider to be desirable.

Trait: A relatively persistent and consistent behaviour pattern manifested in a wide range of circumstances.

Trait approach: An approach to personality that seeks to identify the basic traits necessary to describe personality.

Transactional approach: It includes interactions between people and environment. Human beings affect the environment and in turn are affected by the environment.

Transference: Strong positive or negative feelings toward the therapist on the part of individual undergoing psychoanalysis.

Typology: Ways of categorising individuals into discrete categories or types, e.g. Type-A personality.

Unconditional positive regard: An attitude of acceptance and respect on the part of an observer, no matter what the other person says or does.

Unconscious: In psychoanalytic theory, characterising any activity or mental structure which a person is not aware of.

Valence of attitude: Whether an attitude is positive or negative.

Values: Enduring beliefs about ideal modes of behaviour or end-state of existence; attitudes that have a strong evaluative and 'ought' aspect.

Verbal test: Test in which a subject's ability to understand and use words and concepts is important in making the required responses.

SUGGESTED READINGS

For developing further understanding on the topics, you may like to read the following books

- **Baron, R.A.** 2001/Indian reprint 2002. *Psychology* (5th ed.). Allyn & Bacon.
- **Bellack, A.S., & Hersen, M.** 1998. *Comprehensive Clinical Psychology.* Elsevier. London.
- **Carson, R.C., Butcher, J.N., & Mineka, S.** 2004. *Abnormal Psychology and Modern Life.* Pearson Education. Delhi.
- **Davis, S.F., & Palladino, J.H.** 1997. *Psychology.* Prentice-Hall, Inc.
- **Davison, G.C.** 1998. *Abnormal Psychology.* John Wiley & Sons, Inc.
- **Gerow, J.R.** 1997. *Psychology : An Introduction.* Addison Wesley Longman, Inc.
- **Gleitman, H.** 1996. *Basic Psychology.* W.W. Norton & Company.
- **Sadock, B.J., & Sadock, V.A.** (Eds.) 2004. *Kaplan & Sadock's Comprehensive Textbook of Psychiatry* (8th ed., Vol. II). Lippincott Williams & Wilkins.
- **Lahey, B.B.** 1998. *Psychology : An Introduction.* Tata McGraw-Hill.
- **Malim, T., & Birch, A.** 1998. *Introductory Psychology.* Macmillan Press Ltd.
- **McMahon, J.W., McMahon, F.B., & Romano, T.** 1995. *Psychology and You.* West Publishing Company.
- **Weiten, W.** 2001. *Psychology : Themes and Variations.* Thomson Learning, Inc. Wadsworth.
- **Zimbardo, P.G., & Weber, A.L.** 1997. *Psychology.* Longman. New York.

NOTES

GUIDELINES FOR PRACTICALS IN PSYCHOLOGY

Psychological tools and techniques help to uncover the latent aspects of an individual's behaviour. Thus they aid in understanding, predicting, and controlling the human behaviour, which is the fundamental aim of psychology. Practicals in psychology are intended to provide students with requisite knowledge and skills in psychological tools and techniques to gain an understanding of human behaviour. They attempt to provide hands-on experience to the students with both quantitative tools of measurement, such as standardised psychological tests and qualitative tools, such as interview and observation. Practicals are based on the principle of learning by doing and thus they provide an opportunity to the students to put into practice whatever psychological principles and theories they have learnt in the classroom.

Before undertaking practical work, it is important to ensure that the students have knowledge about various methods of research in psychology and their merits and demerits, the behavioural characteristics being assessed, the nature and uses of psychological tests, and the ethical guidelines so as to avoid their misuse. Keeping in view the syllabus of psychology for Class XII, the students would undertake practicals in psychological testing which would involve using standardised psychological tests in different domains, i.e. intelligence, personality, aptitude, adjustment, attitude, self-concept, and anxiety. They would also prepare one case profile which will include developmental history of the individual *(case)*, using both qualitative and quantitative approaches.

I. PSYCHOLOGICAL TESTING

Practical work in use of psychological tests must be carried out under the guidance and supervision of the teacher. As you have already studied in Class XI, a psychological test is essentially an objective and standardised measure of a sample of behaviour. In Class XII, you will be learning about the concepts of intelligence and aptitude (Chapter 1), personality and self-concept (Chapter 2), adjustment and anxiety (Chapter 3), and attitude (Chapter 6). You are also required to undertake practical training in order to develop the ability to conduct, score and interpret data generated by the administration of the psychological tests in these areas. In other words, practical training would help you in assessing various dimensions of human behaviour, such as intellectual ability, overall personality profile, specific aptitudes, potential for adjustment, attitudinal profile, self-concept, and level of anxiety.

Test Administration

The accuracy of psychological testing comes from standardisation of testing conditions, materials, procedures, and norms which form an integral part of test development, its administration and interpretation. In this process, it is expected that students will develop skills to establish rapport with the test takers to make them comfortable in a relatively new and different context. **Establishing Rapport** involves the test administrator's efforts to arouse the test takers' interest in the test, elicit their cooperation, and encourage them to respond in a manner appropriate to the objectives of the test. The main objective of establishing rapport is to *motivate* the respondents to follow the instructions as fully and meticulously as they can. It may be noted that the nature of the test (e.g., individual or group, verbal or non-verbal, etc.), and the age and other characteristics of the test takers determine the use of specific techniques for the establishment of rapport. For example, while testing children from educationally disadvantaged backgrounds, the test

administrator cannot assume that they will be motivated to do well on academic tasks, therefore, in such conditions, the test administrator makes special efforts to establish rapport to motivate them.

When establishing rapport, the test administrator also informs the test takers about the confidentiality of test data. The test taker is informed about the purpose of the test, and how the test results will be used. The test taker is assured that such results would be kept strictly confidential and be made available to a third person (the other two being test administrator and test taker) only after knowledge and consent of the test taker.

The test administration, therefore, is the task of a professionally trained and skilful person under controlled conditions. The following points may be kept in mind while using a test :

- *Uniform testing conditions* : Basically, the function of psychological tests is to measure differences between individuals or between the responses of the same individual on different occasions. If the scores obtained by different individuals are to be compared, testing conditions must obviously be the same for all. Attention should be given to the selection of a suitable testing room, which should be free from undue noise and distraction. This room should provide adequate lighting, ventilation, seating facilities, etc. for test takers.
- *Standardised instructions* : In order to secure uniformity of testing conditions, the test constructor provides detailed directions for administering the test. Standardised instructions include the exact materials used, time limit (if any), oral instructions to subjects, preliminary demonstrations, ways of handling queries from subjects, and other possible details of the testing situation.
- *Training of test administrator* : The test administrator is the person who administers and scores the test. The importance of a trained test administrator is evident. For instance, if the test administrator is not adequately qualified, incorrect or inaccurate scoring may render the test scores worthless.

Any standardised test is accompanied by a **manual** which includes the psychometric properties of the test, norms, and references. This gives a clear indication regarding the procedures of the test administration, the scoring methods, and time limits, if any, of the test. The manual also includes instructions to be given to the test takers.

A thorough understanding of the test, the test taker, and the testing conditions is essential for the proper interpretation of test scores. Some information about the test given in the manual like its reliability, validity, norms, etc. are relevant in interpreting any test score. Similarly, some background data about the individual being tested (test taker) are also essential. For example, the same score may be obtained by different individuals for different reasons. Therefore, the conclusions to be drawn from such scores may not be similar. Finally, some consideration must also be given to special factors that may have influenced a particular score, such as unusual testing conditions, temporary emotional or physical state of the subject, the extent of the test taker's previous experience with tests, etc.

The test administrator also provides test takers with appropriate and understandable explanations of test results and of any recommendations stemming from them. It may be noted here that even when a test has been accurately administered, scored, and interpreted, providing merely specific numerical scores (e.g., IQ score, aptitude score, etc.) without the opportunity to discuss it further may be harmful to the test taker.

Procedure for Test Administration

A psychological test can be administered only by a professionally qualified person. A student of psychology at +2 level would not have reached the stage of a professionally qualified person. Therefore, s/he is not fully equipped to interpret the scores of a psychological test

for any conclusive purpose, e.g. selection, prediction, diagnosis, etc. For this purpose, the test administration may be broken into small components/activities. The emphasis should be on learning skills for understanding the concepts on which the test is based, developing rapport with the participant, administration of the test including giving instructions, maintaining optimum testing conditions, taking precautions, and doing scoring of the test.

The following steps and guidelines are suggested to carry out practical work in psychological testing :

1. The teacher would introduce the test to the students along with the manual and the scoring key. The teacher would demonstrate the test to her/his class laying stress upon rapport building, imparting instructions, and the precautions that need to be taken care of. The test may then be taken by the entire class.
2. The students may be instructed not to write their names or to use fictitious names on the response/scoring sheets. The response sheets of the students may be collected by the teacher. In order to maintain confidentiality, it is desirable that the response sheets are reshuffled and/or fictitious numbers are given to each response sheet.
3. One response sheet each may then be given back by the teacher to students in the class for scoring. As per the instructions given in the manual, the students would be guided to do the scoring.
4. The response/scoring sheets should be kept with the teacher to be used later as hypothetical data for providing hands-on experience in interpretation of test scores.
5. The students will then be required to conduct the same test on the selected participants with the teacher examining their rapport building skills, instruction imparting skills, etc.
6. The teacher may use the scores of the hypothetical data and demonstrate how to use the manual to interpret the raw scores with the help of norms.
7. The students are also told how to draw conclusions based on the analysis of data.
8. Based on the above guidelines, the students will be required to prepare a report of the testing undertaken.

Suggested Format for Writing a Psychological Testing Report

1. *Problem/Title of the Study* (e.g., to study the level of adjustment/personality/ aptitude of Class X students).
2. *Introduction*
   - Basic Concepts
   - Variables
3. *Method*
   - Subject
   - Name
   - Age
   - Gender
   - Class

   (Note : As the data is to be kept confidential, the details of the subject may be given under a fictitious number.)

   - Material
   - Brief description of the test (name of the test, author, year, psychometric properties, etc.).
   - Other materials (e.g., stop watch, screen, etc.).
   - Procedure
   - Process of test administration, such as rapport formation, instructions, precautions, actual conduct of test, etc.
   - Scoring of the test
   - Preparation of graph, psychogram, etc. (if required).
4. *Results and Conclusions*
   - Describing subject's scores in terms of norms and drawing conclusions.
5. *References*
   - List the books, manuals and materials consulted on the topic.

II. CASE PROFILE

Developing a case profile would primarily involve the use of qualitative techniques, such as observation, interview, survey, etc. During the course of preparing a case profile, the students would gain a first-hand experience in the use of these qualitative techniques. The main objective of preparing a case profile is to understand the individual in totality. This would further help in establishing the cause and effect relationship more accurately. The students may prepare a case profile of an individual who has excelled in areas like sports, academics, music, etc. or having special needs like learning disability, autism, Down's syndrome, etc. or those with interpersonal social problems, i.e. poor body image, obesity, temper tantrums, substance abuse, not getting along with peers, withdrawn, etc. They may be encouraged to find out the background information and developmental history of the individual. The students are required to identify the method of inquiry, i.e. interview or observation that they would like to undertake to get complete information of the case. A case profile may be prepared based on the suggested format. The students may be encouraged to reflect on the causes to draw some preliminary conclusions.

Suggested Format for Preparing a Case Profile

A format for case presentation covering broad aspects is given below. It is suggested that the case be developed in a narrative format along the following points:

1. *Introduction*
   - A brief introduction of about one or two pages presenting the nature of the problem, its incidence, likely causes, and possible counselling outcomes.
   - A half page (brief) summary of the case.
2. *Identification of Data*
   - Name (may be fictitious)
   - Diagnosed Problem
   - Voluntary or Referral (i.e., by whom referred — such as teacher, parent, sibling, etc.)
3. *Case History*
   - A paragraph giving age, gender, school attended, class (grade) presently enrolled in, etc.
   - Information about socio-economic status (SES) consisting of information about mother's/father's education and occupation, family income, house type, number of members in the family— brothers, sisters and their birth order, adjustment in the family, etc.
   - Information about physical health, physical characteristics (e.g., height and weight), any disability/illness (in the past and present), etc.
   - Any professional help taken (past and present), giving a brief history of the problem, attitude towards counselling (indicating the motivation to seek help, etc.).
   - Recording signs (i.e., what is observed in terms of facial expressions, mannerisms, etc.) and symptoms (i.e., what the subject reports, for example, fears, worry, tension, sleeplessness, etc.).
4. *Concluding Comments*