Government of Telangana

INTERMEDIATE
PSYCHOLOGY

What we reveal — Conscious Mind

Subconscious Preconscious Mind

What we conceal — Unconscious Mind
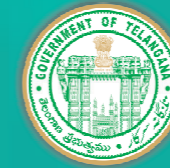
Government of Telangana

TELANGANA OPEN SCHOOL SOCIETY, HYDERABAD

328

Government of Telangana

INTERMEDIATE
PSYCHOLOGY

Ψ

TELANGANA OPEN SCHOOL SOCIETY, HYDERABAD

328

ΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨ
PSYCHOLOGY
ΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨΨ

Chief Advisor

Smt. Vakati Karuna, IAS,
Secretary to Government, Education Department,
Govt. of Telangana, Hyderabad.

Editors

Dr. B.V. Pattabhi Ram
Counselling Psychologist,
HRD Trainer, Hyderabad.

Dr. K. Ravikanth Rao
Professor & Officer Incharge,
SIET, Hyderabad.

Sri M. Papaiah, Lecturer,
Govt. College of Teacher Education,
Nalgonda.

Textbook Printing Council

Smt. A. Sridevasena, IAS,
Director, School Education,Telangana, Hyderabad.

Sri P.V. Srihari, Director,
TOSS, Telangana, Hyderabad.

Sri S. Srinivasa Chary
Director, Textbook Press, Telangana, Hyderabad.

Chief Coordinator

Sri M. Somi Reddy
Joint Director, TOSS, Telangana, Hyderabad.

Printed by

Telangana Open School Society (TOSS), Hyderabad.

First Published : 2023

FOREWORD

The Telangana Open School Society (TOSS) aims to provide education opportunities to a diverse range of learners through open and distance learning. Its objectives include promoting inclusive education, catering to the needs of out-of-school learners, enhancing accessibility to education, and offering flexibility in learning. TOSS seeks to make education more accessible and adaptable to individual learning styles, enabling a broader spectrum of students to pursue their academic goals.

Welcome to the Intermediate Psychology course, where we delve deeper into the intricacies of the human mind. Building upon the foundational knowledge acquired in introductory courses, this book aims to expand your understanding of psychology by introducing advanced concepts and exploring the diverse dimensions of the human psyche.

Throughout these pages, you will embark on a journey that transcends the basics, delving into the complexities of cognitive processes, emotional landscapes, and the fascinating interplay between nature and nurture. Our goal is to not only enhance your theoretical knowledge but also to cultivate critical thinking skills essential for a nuanced comprehension of psychological phenomena.

Prepare to explore the realms of memory, perception, and consciousness, as well as to engage with the latest research shaping our understanding of behavior and mental processes. From the intricacies of psychological disorders to the dynamic field of social psychology, this course is designed to equip you with a comprehensive grasp of the multifaceted nature of the human experience.

As you navigate the chapters ahead, consider this book not only as a guide but as a companion in your intellectual journey. May it inspire curiosity, provoke thought, and foster a deeper appreciation for the profound intricacies of the mind.

We are indeed very grateful to the Government of Telangana and the Telangana State Board of Intermediate Education. Special thanks go to the editors, authors, co-coordinator, teachers, lecturers, and DTP operator who tirelessly contributed their services to create this textbook.

Let the exploration begin.

Director,
TOSS, Hyderabad.

Date : 20-11-2023
Place : Hyderabad.

Textbook Development Committee

Dr. K. Ravikanth Rao
Professor & Officer Incharge,
SIET, Hyderabad.

Sri M. Papaiah, Lecturer,
Govt. College of Teacher Education,
Nalgonda.

Dr. G. Raijitha Devi
Senior Lecturer in English,
Govt. Polytechnic, Warangal.

Sri K. Ramaiah, SA,
ZPHS Abbapur, Counselling Psychologist,
PhD-Research Scholar, Dept. of Psychology, OU, Hyd.

Dr. K. Ravi, SA,
ZPHS Panthini,
Hanumakonda.

Sri K. Devaraju
Health Psychologist, PhD-Research Scholar
Dept. of Psychology, Osmania University, Hyd.

Dr. M. Naga Raju
Assistant Professor (C), Dept.of Education,
Dr.BRAOU, Hyderabad.

Smt. K. Harshitha
Counselling Psychologist, PhD-Research Scholar,
Dept. of Psychology, Osmania University, Hyd.

Sri B. Ravi, SA,
Counselling Psychologist, Govt. High School,
Basith Nagar, Hanumakonda.

Sri K. Bhaskar Guptha
Psychologist, Director,
BC Study Circle, Hyderabad.

Smt. M. Laxmi Prasanna Tulasi
Psychologist, SA,
ZPHS-Dharmasagar(G), Hanumakonda.

Sri Ch. Harish
Clinical Psychologist, PhD-Research Scholar,
Centre for Health Psychology, University of Hyd.

Smt. G. Sujatha
State Resource Centre for Early Childhood Education,
DDMS (Andhra Mahila Sabha), Hyderabad.

Smt. V. Ratnamala
State Resource Centre for Early Childhood Education,
DDMS (Andhra Mahila Sabha), Hyderabad.

Smt. G. Kamala
State Resource Centre for Early Childhood Education,
DDMS (Andhra Mahila Sabha), Hyderabad.

Smt. V. Madhavi, SGT,
Counselling Psychologist,
M.P.P.S-Bavajithanda, Kesamudram, MHBD.

Technical Support

Sri B. Venkateswara Rao
State Coordinator, TOSS, Telangana, Hyderabad.

Sri P.B.S.P.S. Kumar
Subject Coordinator, TOSS,
Telangana, Hyderabad.

Sri V. Venkatswamy
Technical Coordinator, TOSS,
Telangana, Hyderabad.

Cover Design : **Sri K. Sudhakar Chary**, S.G.T.,
UPPS Mylaram, Rayaparthi (M), Warangal Rural.

DTP, Page Layout & Design by : **Smt. K. Pavani,** Hyderabad.

PREFACE

Welcome to the world of intermediate psychology. This book is designed to be your companion on a journey of exploration into the fascinating realm of the human mind and behavior. Whether you are a student seeking to deepen your understanding of psychology or an inquisitive reader with a passion for the subject, this book aims to provide you with a comprehensive and engaging resource.

Psychology is a multifaceted discipline that delves into the complexities of human cognition, emotion, and behavior. In this intermediate level book, we build upon the foundational knowledge of introductory psychology and venture into more intricate and nuanced aspects of the field. You will explore topics such as 1. Psychology - Understanding Self and Others, 2. Studying Human Behavior - Methods, 3. Biological And Cultural Bases of Human Behaviour, 4. Knowing the World Around Us, 5. Attention and Perception, 6. Learning, 7. Remembring and Forgetting, 8. Going Beyond the Reality Thinking and Reasoning, 9. Motivation, 10. Emotions, 11. Development: It's Nature, 12. Domains of Development, 13. Adolescence Transition Age, 14. Adulthood and Aging, 15. Understanding Individual Differencies: The Case of Intelligence, 16. What is Self ?, 17. Self and Psychological Process, 18. Personality Theories, 19. Personality Assessment, 20. Psychological Disorders, 21. Group Processes, 22. Person Perseption and Interpersonal Attraction, 23. Man - Environment Interaction, 24. Psychotherapy, 25. Health Psychology. Under **Group-A** five chapters (26-30) are : 26. Education and Occupation, 27. Career Development and Life Skills, 28. Work Psychology, 29. Stress and Your Health, 30. Stress Management and Wellbeing and in **Group-B** five chapters (26-30) are : 26. Facilitating Early Childhood Education, 27. Need Importance of Play in Learning Centre, 28. Organisation of a Learning Centre, 29. Planning and Conducting Preschool Programme, 30. Involvement of Parents and Community in a Play Centre. Hence the learner has to choose first 25 chapters and 5 chapters of either group A or group B.

Our aim is not only to inform but to inspire curiosity and critical thinking. We encourage you to think deeply, question assumptions, and apply psychological concepts to real-world situations. Throughout this book, you will find a blend of theory and practical applications to help you gain a deeper understanding of the human psyche and its many intricacies.

The field of psychology is constantly evolving, and this book reflects the latest insights and developments up to our knowledge. It is our hope that this book serves as a valuable resource for your academic pursuits, professional aspirations, or personal enlightenment.

As you embark on this intellectual journey, remember that psychology is not just a subject to study; it's a lens through which we can better comprehend ourselves and the world around us. We encourage you to engage with the material, ask questions, and participate actively in your own learning. For formative assessment and self-assessment **Intext Questions** were given after every concept in all chapters. And **Terminal Exercise Questions** were given at the end of every chapter along with hints to mak

We are excited to be your guides on this exploration of intermediate psychology, and we hope that this book both informs and inspires you in your ongoing pursuit of knowledge.

Sincerely,

Editors

CONTENTS

]]]]]

<div align="center">]   ]   ]   ]   ]</div>

PSYCHOLOGY:UNDERSTANDING SELF AND OTHERS

1

INTRODUCTION

We frequently go through phases of rage and joy. We can remember and memorise poems, stories, and events with as ease. We frequently observe how strongly leaders influence followers' actions. We frequently face conflict and cooperation when interacting in groups. Some of us occasionally experience depression, excessive anxiety, etc. We all continue to be interested in the reasons for these events and make our own individual attempts to make sense of them. This kind of knowledge cannot be used to create hypotheses or address issues that individuals confront in their daily lives. We require a trustworthy and largely correct comprehension of the theories underpinning how the human mind and behaviour function. The study of psychology offers understanding into many facets of human activity. You will study about the history of psychology, its various branches, and the actions of psychologists in this lesson.

OBJECTIVES

After reading this lesson, you will be able to

● *explain the need for the study of psychology and nature of psychology;*

● *understand the nature and role of psychology in understanding mind and behaviour;*

● *describe what psychologists do;*

● *state briefly the development of psychology as a discipline;*

● *know the different fields of psychology, its relationship with other disciplines and professions;*

● *describe the changing face of psychology and different fields of psychology;*

● *appreciate the value of psychology in daily life to help you understand yourself and others better;*

1.1 Need for the Study of Psychology

There are many different things that people anticipate from studying psychology. While many of them stem from ignorance, some of them are actually accurate. Psychology promises to shed light on how various mental processes work as well as how people respond under various circumstances. Its theories and guiding concepts are applied in numerous contexts. Psychology can be used to address issues with education and learning in the classroom, child socialisation issues at home, employee motivation in the workplace, and assisting

individuals with their emotional issues in their personal lives. There are also many human phenomena that call for psychological theories and methods. Some of the prominent uses of psychology include choosing people for various jobs, evaluating people's aptitudes and abilities, offering training to increase skills, setting objectives and inspiring people to attain them, and enhancing lifestyles for better health. In short, essential areas of psychological application include comprehending a person's growth and development or a group's operation. In order to better understand ourselves in terms of the potentialities we possess and mould them in the right directions, it is evident that studying psychology is necessary. In other words, a thorough study and comprehension of psychology can improve our ability to comprehend both ourselves and others, as well as our overall quality of life.

1.2 Definitions and Nature of Psychology

It is challenging to define any knowledge discipline. First of all, because it is constantly changing. This is even more true in psychology because of the variety of phenomena it analyses, which cannot all be summed up by a single definition. Psychology is the *scientific study of mind and behavior*. The word **"psychology"** comes from the Greek words **"psyche,"** meaning *life*, and **"logos,"** meaning *explanation*. Psychology was therefore the study of the mind or the soul. It examines a variety of phenomena at the individual, duadic (two-person), group, and organisational levels, some of which we have already addressed. They have both biological and societal roots. Naturally, then, depending on the phenomenon one wants to examine, the methods required to study them also differ substantially. Considering this, psychology is properly defined as a study that investigates mental processes, experiences, and conduct in a variety of settings. In order to do this, it methodically collects data using techniques from the social and biological sciences. These facts are made sense of in order for them to be arranged as knowledge. Let's attempt to comprehend the three concepts— mental processes, experience, and behavior—used in the definition. Psychology is a popular major for students, a popular topic in the public media, and a part of our everyday lives.

However, we cannot say that brain activities and mental processes are the same, although they are interdependent. Mental activities and neural activities are mutually overlapping processes but, they are not identical. Unlike the brain, the mind does not have a physical structure or has a location. Mind emerges and evolves as our interactions and experiences in this world get dynamically organised in the form of a system which is responsible for the occurrence of various mental processes. Brain activities provide important clues to how our mind functions. But the consciousness of our own experiences and mental processes are much more than the neural or brain activities. Even when we are asleep some mental activities go on. We dream, and receive some information such as a knock on the door while we are asleep. Some psychologists have shown that we also learn and remember in our sleep. Mental processes, such as remembering, learning, knowing, perceiving, feeling are of interest to psychologists. They study these processes trying to understand how the mind works and to help us improve the uses and applications of these mental capacities.

Psychologists also study **experiences** of people. Experiences are subjective in nature. One cannot directly observe or know someone else's experience. Only the experiencing person can be aware or be conscious of her or his experiences. Thus, experiences are embedded

in our awareness or consciousness. Psychologists have focused on experiences of pain being undergone by terminally ill patients or of psychological pain felt in bereavement, besides experiences which lead to positive feelings, such as in romantic encounters. There are some esoteric experiences also which attract attention of psychologists, such as when a Yogi meditates to enter a different level of consciousness and creates a new kind of experience or when a drug addict takes a particular kind of drug to get a high, even though such drugs are extremely harmful. Experiences are influenced by internal and the external conditions of the experiencer. For example if you are travelling in a crowded bus during a hot summer day, you may not experience the usual discomfort if you are going for a picnic with some close friends. Thus, the nature of experience can only be understood by analysing a complex set of internal and external conditions.

Behaviours are responses or reactions we make or activities we engage in. When something is hurled at you, your eyes blink in a simple reflex action. You are taking an examination and can feel your heart pounding. Behaviours may be simple or complex, short or enduring. Some behaviours are overt. They can be outwardly seen or sensed by an observer. Some are internal or covert. When you are in a difficult situation while playing a game of chess you almost feel your hand muscles twitching, trying to experiment with a move. All behaviours, covert or overt, are associated with or triggered by some stimulus in the environment or changes that happen internally. Some psychologists study behaviour as an association between stimulus (S) and response (R). Both stimulus and response can be internal or external.

1.2.1 The Goals of Psychology

As a science, psychology has five central goals :

1.   To *describe* how people and other species behave.

2.   To *understand* the causes of these behaviors.

3.   To *predict* how people and animals will behave under certain conditions.

4.   To *influence* behavior through the control of its causes.

5.   To *apply* psychological knowledge in ways that enhances human welfare.

1.2.2 Psychology's Broad Scope: A Levels-of-Analysis Framework

The scope of modern psychology stretches from the borders of medicine and the biological sciences to those of the social sciences. Because we are biological creatures living in a complex social world, psychologists study an amazing array of factors to understand why people behave, think, and feel as they do. We call it *levels of analysis:* behavior and its causes can be examined at the *biological level* (e.g., brain processes, genetic influences), the *psychological level* (e.g., our thoughts, feelings, and motives), and the *environmental level* (e.g., past and current physical and social environments to which we are exposed). Here is a brief example of how the levels-of analysis framework can be applied. Consider a behavior that you engage in every day: eating. At the biological level of analysis, various chemicals, neural ircuits, and structures in your brain respond to bodily signals and help regulate whether you feel hungry or full. At the psychological level of analysis, your moods, food preferences, and motives affect eating. Do you ever eat when you're not hungry, perhaps

because you feel stressed or bored? The environmental level of analysis calls attention to specific stimuli (such as the appearance or aroma of different foods) that may trigger eating and to cultural customs that confluence our food preferences. Does the aroma of freshly baked treats ever make your stomach growl? How about the sight of duck feet or a mound of fish gills on a plate? To most Westerners, duck feet and fish gills may not be appetizing, but during a stay in China we discovered that our hosts considered them delicious.

1.2.3 Mind-Body and Nature-Nurture Interactions

Form a mental picture of a favorite food, and you may trigger a hunger pang. Focus on positive thoughts when facing a challenging situation and you may keep your bodily arousal in check. Dwell instead on negative thoughts, and you can rapidly stimulate the release of stress hormones (Borod, 2000). These examples illustrate what traditionally have been called *mind-body interactions*—the relations between mental processes in the brain and the functioning of other bodily systems. Mind-body interactions focus our attention on the fascinating interplay between the psychological and biological levels of analysis. This topic has a long history within psychology; it remains one of psychology's most exciting frontiers.

The levels-of-analysis framework also addresses an issue that has been debated since antiquity: Is our behavior primarily shaped by nature (our biological endowment) or by nurture (our environment and learning history)? The pendulum has swung toward one end or the other at different times in history, but today growing interest in cultural confluences and advances in genetics and brain research keep the nature-nurture pendulum in a more balanced position.

Perhaps most important, modern research increasingly reveals that nature and nurture interact (Moffifitt et al., 2006). Just as our biological capacities affect how we behave and experience the world, our experiences influence our biological capacities. For humans and rats alike, continually depriving a newborn of physical contact, or providing a newborn with an enriched environment in which to grow, can influence its brain functioning and biological development (Rosenzweig, 1984). Thus, while it may be tempting to take sides, "nature *or* nurture?" usually is the wrong question. As the levels-of-analysis framework implies, nature, nurture, and psychological factors must all be taken into account to gain the fullest understanding of behavior. Later in the chapter, we'll provide a more detailed example of how looking at behavior from multiple levels enhances our understanding.

1.3 Development of Psychology as a Discipline

1.3.1 The Historical Origins of Psychology

The roots of psychology can be traced to the great philosophers of ancient Greece. The most famous of them, Socrates, Plato, and Aristotle, posed fundamental questions about mental life: What is consciousness? Are people inherently rational or irrational? Is there really such a thing as free choice? These questions, and many similar ones, are as important today as they were thousands of years ago. They deal with the nature of the mind and mental processes, which are the key elements of the cognitive perspective in psychology.

Other psychological questions deal with the nature of the body and human behavior, and they have an equally long history. Hippocrates, often called the 'father of medicine', lived around the same time as Socrates. He was deeply interested in physiology, the study of the functions of the living organism and its parts. He made many important observations about how the brain controls various organs of the body. These observations set the stage for what became the biological perspective in psychology.

Other psychological questions deal with the nature of the body and human behavior, and they have an equally long history. Hippocrates, often called the 'father of medicine', lived around the same time as Socrates. He was deeply interested in physiology, the study of the functions of the living organism and its parts. He made many important observations about how the brain controls various organs of the body. These observations set the stage for what became the biological perspective in psychology.

Nature–nurture debate

One of the earliest debates about human psychology is still raging today. This *nature–nurture debate* centers on the question of whether human capabilities are inborn or acquired through experience. The *nature view* holds that human beings enter the world with an inborn store of knowledge and understanding of reality. Early philosophers believed that this knowledge and understanding could be accessed through careful reasoning and introspection.

In the seventeenth century, Descartes supported the nature view by arguing that some ideas (such as God, the self, geometric axioms, perfection, and infinity) are innate. Descartes is also notable for his conception of the body as a machine that can be studied much as other machines are studied. The *nurture view* holds that knowledge is acquired through experiences and interactions with the world. Although some of the early Greek philosophers had this opinion, it is most strongly associated with the seventeenth-century English philosopher John Locke.

According to Locke, at birth the human mind is a *tabularasa*, a blank slate on which experience 'writes' knowledge and understanding as the individual matures. This perspective gave birth to *associationist psycholog*y. Associationists denied that there were inborn ideas or capabilities. Instead, they argued that the mind is filled with ideas that enter by way of the senses and then become associated through principles such as similarity and contrast. Current research on memory and learning is related to early association theory. The classic nature–nurture debate has become much more nuanced in recent decades. Although some psychologists still argue that human thought and behavior result primarily from biology or primarily from experience, most psychologists take a more integrated approach. They acknowledge that biological processes (such as heredity or processes in the brain) affect thoughts, feelings, and behavior, but say that experience leaves its mark, too. So the current question is not whether nature or nurture shapes human psychology but rather how nature and nurture combine to do so (Plomin & Asbury, 2005).

1.3.2 Psychology as a Discipline

As we have discussed above, psychology studies behaviour, experience and mental processes. It seeks to understand and explain how the mind works and how different mental

processes result in different behaviours. When we observe others as lay or common persons, our own points of view or our ways of understanding the world influence our interpretations of their behaviours and experiences. Psychologists try to minimise such biases in their explanations of behaviour and experience in various ways. Some do so by seeking to make their analysis scientific and objective. Others seek to explain behaviour from the point of view of the experiencing persons because they think that subjectivity is a necessary aspect of human experience. In the Indian tradition, self-reflection and analysis of our conscious experiences, is held to be a major source of psychological understanding. Many Western Psychologists have also begun to emphasise the role of self-reflection and self-knowledge in understanding human behaviour and experience. Regardless of the differences in the way psychologists go about the study of behaviour, mental processes and experiences, they seek to understand and explain them in a systematic and verifiable manner. Psychology, though it is a very old knowledge discipline, is a young science, if one were to take the year of the founding of the first laboratory of psychology in 1879 in Leipzig. However, what kind of science is psychology still remains a matter of debate, particularly because of the new interfaces of it that have emerged in recent times. Psychology is generally categorised as a social science. But it should not come to you as a surprise that, not only in other countries, but also in India, it is also a subject of study offered in the faculty of science, both at the undergraduate and post-graduate levels.

Psychology as a discipline today has two parallel streams. One which makes use of the method in physical and biological sciences and the other which makes use of the method of social and cultural sciences in studying various psychological and social phenomena. These streams sometimes converge only to drift apart and go their separate ways. In the first case, psychology considers itself as a discipline, which focuses largely on biological principles to explain human behaviour. It assumes that all behavioural phenomena have causes which can be discovered if we can collect data systematically under controlled conditions. Here the aim of the researcher is to know cause and effect relationship so that a prediction of the behavioural phenomenon can be made and behaviour can be controlled if need be. On the other hand, psychology as a social science focuses on how behavioural phenomena can be explained in terms of the interaction that takes place between the person and the socio-cultural context of which s/he is a part. Each behavioural phenomenon is assumed to have multiple causes. Let us now discuss these two streams separately.

1.3.3 Psychology as a Natural Science

Modern psychology has developed because of the application of the scientific method to study psychological phenomenon. Science places a great deal of emphasis on objectivity which can be obtained if there is consensus on the definition of a concept and how it can be measured. Psychology influenced by Descartes and later on by the developments in physics has grown by following what is called a hypothetical deductive model. The model suggests that scientific advancement can take place if you have a theory to explain a phenomenon. Theory is nothing else but a set of statements about how a certain complex phenomenon can be explained with the help of propositions which are interrelated.

Based on a theory, scientists deduce or propose a hypothesis that offers a tentative explanation of how a certain phenomenon takes place. The hypothesis then is tested and

proved true or false based on empirical data that one has gathered. The theory is revised if data gathered point in a different direction than the one suggested by the hypothesis. Using the above approach psychologists have developed theories of learning, memory, attention, perception, motivation and emotion, etc. and have made significant progress. Till date, most of the research in psychology follows this approach.

Apart from this, psychologists have also been considerably influenced by the evolutionary approach which is dominant in biological sciences. This approach has also been used to explain diverse kinds of psychological phenomenon such as attachment and aggression to mention just a few.

1.3.4 Psychology as a Social Science

We mentioned above that psychology is recognised more as a social science because it studies the behaviour of human beings in their socio-cultural contexts. Humans are not only influenced by their socio-cultural contexts, they also create them. Psychology as a social science discipline focuses on humans as social beings.

1.3.5 Understanding Mind and Behaviour

You will recall that psychology was once defined as a science of the mind. For many decades, the mind remained a taboo in psychology because it could not be defined in concrete behavioural terms or its location could not be indicated. If the term "mind" has returned to psychology, we should thank neuroscientists like Sperry and physicists like Penrose, who have given it the respect which it deserved and now has. There are scientists in various disciplines including psychology, who think that a unified theory of the mind is a possibility, although it still is far away. What is mind? Is it the same as brain? It is true that mind cannot exist without brain, but mind is a separate entity. This can be appreciated on account of several interesting cases that have been documented. Some patients whose occipital lobes, which are responsible for vision, were surgically removed have been found to be responding correctly to location and configuration of visual cues.

There are other cases documented by neuroscientists. A young man, who suffered brain injury in an accident, after he returned home from the hospital, claimed that his parents had been replaced by their "duplicates". They were imposters. In each of these cases, the person had suffered from damage of some part of the brain but his "mind" had remained intact. It was earlier believed by scientists that there is no relationship between the mind and the body and that they were parallel to each other. Recent studies in affective neuroscience have clearly shown that there is a relationship between mind and behaviour. It has been shown that using positive visualisation techniques and feeling positive emotions, one can bring about significant changes in bodily processes. Ornish has shown this in a number of studies with his patients. In these studies a person with blocked arteries was made to visualise that blood was flowing through her/ his blocked arteries. After practicing this over a period of time, significant relief was obtained by these patients as the degree of blockage became significantly less. Uses of mental imagery, i.e. images generated by a person in her/his mind, have been used to cure various kinds of phobias (irrational fears of objects and situations). A new discipline called Psychoneuroimmunology has emerged which emphasises the role played by the mind in strengthening the immune system.

Understanding human nature has proved to be a major concern of human beings since time immemorial. The Indian thinkers had developed elaborate theories about consciousness, self, mind, mental activities since Vedic and Upnishadic period. The Indian thought systems like Vedant, Samkhya, Yoga, Buddhism, Jainism, Sufism, etc. have generated voluminous literature relevant to psychological processes. Let us know that the scholars and teachers in Ancient India like Charaka the famous physician of first century AD, Vatsayan and Kautilya all provided the theoretical foundations to apply the Psychological principles. But there is a need to understand the concept in Indian context because social and cultural setting has its own influence on the development of Psychology.

1.4 The Main Schools of Psychology

In the western world psychology took the shape of a scientific discipline towards the end of 19th century. It is generally held that Wilhelm Wundt established the first psychological laboratory at Leipzig University in Germany in 1879. He was a pioneer and attracted a large number of students from different parts of the world who started expanding the discipline. Gradually the study of psychology was organized around certain schools of thought. The main schools of psychology are as follows:

i. **Structuralism:** Developed by Edward Tichener, it focused on the study of consciousness and its components, i.e., sensations, images and affects.

ii. **Functionalism:** Developed by William James it focused on consciousness, memory, learning and emotions as related to survival, growth and adaptation of living beings.

iii. **Behaviorism:** Developed by J.B. Watson it focused on the objective study of observable behaviour.

iv. **Gestalt:** Developed by Wolfgang Kohler, Kurt Koffka and their mentor Max Wertheimer this school focused on a holistic view and consciousness. Perception was the main area of study.

v. **Psychoanalysis:** Developed by Sigmund Freud it gave importance to unconscious processes, conflicts, anxiety and disorders.

The era of schools provided great opportunity for the diversification of psychology. However, it was felt that none of them could explain psychological processes in totality. As a result, there grew use of concepts from different schools of thought and use of scientific method.

Recent movements include emphasis on information theory and computational models which characterized cognitive revolution. The neural processes and role of cultural processes in shaping psychological functions are now being studied vigorously.

Some Interesting Landmarks in the Evolution of Modern Psychology

∗ *1879 Wilhelm Wundt establishes the first psychology laboratory in Leipzig, Germany.*

∗ *1890 William James publishes Principles of Psychology.*

∗ *1895 Functionalism is formulated as a system of psychology.*

* *1900 Sigmund Freud develops Psychoanalysis.*

* *1904 Ivan Pavlov wins the Nobel Prize for his work on digestive system that led to understanding of principles of development of responses.*

* *1905 Intelligence test developed by Binet and Simon.*

* *1916 First Psychology Department at Calcutta University is established.*

* *1920 Gestalt psychology is born in Germany.*

* *1922 Psychology is included in Indian Science Congress Association.*

* *1924 Indian Psychological Association isfounded.*

* *1924 John B. Watson publishes 'Behaviourism', a book that led to the foundation of behaviourism.*

* *1928 N.N. Sengupta and Radhakamal Mukerjee publish the first textbook on Social Psychology (London : Allen & Unwin).*

* *1949 Psychological Research Wing of the Defence Science Organisation of India isestablished.*

* *1951 Humanistic psychologist Carl Rogerspublishes Client-Centred Therapy.*

* *1953 B.F. Skinner publishes 'Science and Human Behaviour', strengtheningAs major approach to psychology*

* *1954 Humanistic psychologist Abraham Maslow publishes 'Motivation and Personality'.1954Bureau of Psychology is established at Allahabad.*

* *1955 National Institute of Mental Health and Neurosciences (NIMHANS) is established at Bangalore.*

* *1962 Hospital for Mental Diseases in Ranchi is established.*

* *1973 Konrad Lorenz and Niko Tinbergen win the Nobel Prize for their work on built-in species specific animal behaviour patterns that emerge without any prior experience/ learning.*

* *1978 Herbert Simon wins the Nobel Prize for work on decision-making.*

* *1981 David Hubel and Torsten Wiesel win the Nobel Prize for their research on vision cells in the brain.*

* *1981 Roger Sperry wins the Nobel Prize for splitbrain research.*

* *1989 National Academy of Psychology (NAOP) India was founded.*

* *1997 National Brain Research Centre (NBRC) is established at Gurgaon, Haryana.*

* *2002 Daniel Kahneman wins the Nobel Prize for research on human judgment and decisionmaking under uncertainty.*

* *2005 Thomas Schelling wins the Nobel Prize for his work in applying Game Theory to understanding of conf*

1.5 Major Psychological Perspectives

What is a *psychological perspective?* Basically, it is an approach, a way of looking at topics within psychology. Any topic in psychology can be approached from different perspectives. Indeed, this is true of any action a person takes. Suppose that, following an insult, you punch someone in the face. From a biological perspective, we can describe this act as involving certain brain areas and as the firing of nerves that activate the muscles that move your arm. From a behavioral perspective, we can describe the act without reference to anything within your body; rather, the insult is a stimulus to which you respond by punching, a learned response that has been rewarded in the past. A cognitive perspective on this action would focus on the mental processes involved in producing the behavior, and we might explain your punch in terms of your goals and plans: Your goal is to defend your honor, and aggressive behavior is part of your plan for achieving that goal. From a psychoanalytic perspective, your action could be described as an expression of an unconscious aggressive instinct. And finally, from a subjectivist perspective, your aggressive act can be understood as a reaction to interpreting the person's utterance as a personal insult. Despite the many possible ways to describe any psychological act, these five perspectives represent the major approaches to the contemporary study of psychology (see Figure 1.1). Because these five perspectives are discussed throughout the book, here we provide only a brief description of some main points for each of them. Keep in mind that these approaches need not be mutually exclusive; rather, they may focus on different aspects of the same complex phenomenon. In fact, understanding many psychological topics requires an eclectic approach that spans multiple perspectives.
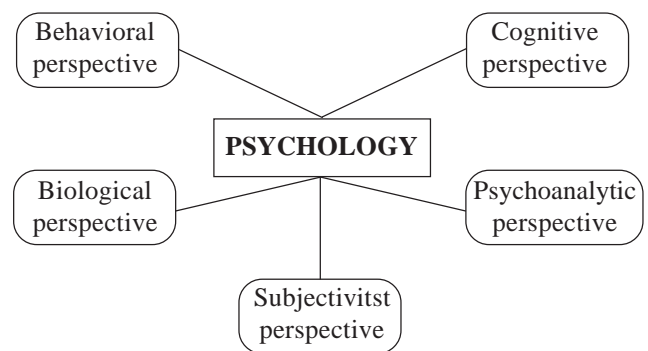
Figure 1.1 : *Perspectives of Psychology*

1.5.1 The Biological Perspective

The human brain contains well over 10 billion nerve cells and an almost infinite number of interconnections between them. It may be the most complex structure in the universe. In principle, all psychological events can be related to the activity of the brain and nervous system. The biological approach to the study of human beings and other species attempts to relate overt behavior to electrical and chemical events taking place inside the body. Research from the ***biological perspective*** seeks to specify the neurobiological processes that underlie
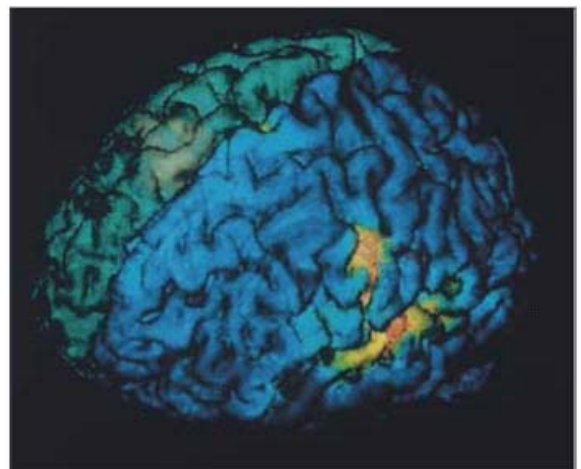
Figure 1.2 : *The Human Brain*

behavior and mental processes. The biological approach to depression, for example, tries to understand this disorder in terms of abnormal changes in levels of neurotransmitters, which are chemicals produced in the brain that make communication between nerve cells possible.

By imaging the human brain during psychological tasks, researchers learn which brain structures underlie the targeted phenomena. Here we see a 3-dimensional representation of the human brain while listening to speech obtained through functional MRI (magnetic resonance imaging). Red indicates the greatest areas of activation, whereas yellow indicates areas of moderate activation. The neural activity is located in Wernicke's area of the brain. This approach illustrates a biological perspective on psychology

We can use one of the problems described earlier to illustrate this perspective. The study of face recognition in patients with brain damage indicates that particular regions of the brain are specialized for face recognition. The human brain is divided into right and left hemispheres, and the regions devoted to face recognition seem to be located mainly in the right hemisphere. There is considerable hemispheric specialization in humans. In most right-handed people, for example, the left hemisphere is specialized for understanding language, and the right hemisphere is specialized for interpreting spatial relations.

The biological perspective has also assisted in the study of memory. It emphasizes the importance of certain brain structures, including the hippocampus, which is involved in consolidating memories. Childhood amnesia may be partly due to an immature hippocampus, a structure that is not fully developed until a year or two after birth.

1.5.2 The Behavioral Perspective

The *behavioral perspective* focuses on observable stimuli and responses and regards nearly all behavior as a result of conditioning and reinforcement. For example, a behavioral analysis of your social life might focus on which people you interact with (the social stimuli), the kinds of responses you make to them (rewarding, punishing, or neutral), the kinds of responses they in turn make to you (rewarding, punishing, or neutral), and how the responses sustain or disrupt the interaction.

Historically, the strict behavioral approach did not consider the individual's mental processes at all, and even contemporary behaviorists usually do not conjecture about the mental processes that intervene between the stimulus and the response. Nevertheless, psychologists other than strict behaviorists often record what people say about their conscious experiences (a verbal self report) and draw inferences about their mental activity from these subjective data. Although few psychologists today would define themselves as strict behaviorists, many modern developments in psychology have evolved from the work of the earlier behaviorists (Malone, 2003; Skinner, 1981).

1.5.3 The Cognitive Perspective

The contemporary cognitive perspective is in part a return to the cognitive roots of psychology and in part a reaction to the narrowness of behaviorism, which tended to neglect complex human activities like reasoning, planning, decision making, and communication. Like the nineteenth-century version, the contemporary **cognitive perspective** is concerned

with mental processes such as perceiving, remembering, reasoning, deciding, and problem solving. Unlike the nineteenth-century version, however, the contemporary cognitive approach is not based on introspection. Instead, it assumes that (1) only by studying mental processes can we fully understand what organisms do, and (2) we can study mental processes in an objective fashion by focusing on specific behaviors (just as behaviorists do) but interpreting them in terms of underlying mental processes. In making these interpretations, cognitive psychologists have often relied on an analogy between the mind and a computer. Incoming information is processed in various ways: It is selected, compared, and combined with other information already in memory, transformed, rearranged, and so on.

1.5.4 The Psychoanalytic Perspective

Sigmund Freud developed the psychoanalytic conception of human behavior in Europe at about the same time that behaviorism was evolving in the United States. In some respects, psychoanalysis was a blend of the nineteenth century versions of cognition and physiology. In particular, Freud combined cognitive notions of consciousness, perception, and memory with ideas about biologically based instincts to forge a bold new theory of human behavior.

The basic assumption of the *psychoanalytic perspective* is that behavior stems from unconscious processes, meaning beliefs, fears, and desires that a person is unaware of but that nonetheless influence behavior. Freud believed that many of the impulses that are forbidden or punished by parents and society during childhood are derived from innate instincts. Because each of us is born with these impulses, they exert a pervasive influence that must be dealt with in some manner. Forbidding them merely forces them out of awareness into the unconscious. They do not disappear, however. They may manifest themselves as emotional problems and symptoms of mental illness or as socially approved behavior such as artistic and literary activity. For example, if you feel a lot of anger toward your father but you cannot afford to alienate him, your anger may become unconscious, perhaps expressed in a dream about him being hurt in an atrocious accident.

Freud believed that we are driven by the same basic instincts as animals (primarily sex and aggression) and that we are continually struggling against a society that stresses the control of these impulses. The psychoanalytic perspective suggests new ways of looking at some of the problems described at the beginning of the chapter. For example, Freud claimed that aggressive behavior stems from an innate instinct. Although this proposal is not widely accepted in human psychology, it is in agreement with the views of some biologists and psychologists who study aggression in animals.

1.5.5 The Subjectivist Perspective

The subjectivist perspective contends that human behavior is a function of the perceived world, not the objective world. Like the cognitive approach, the subjectivist perspective drew from the Gestalt tradition and reacted against the narrowness of behaviorism. Although allied with cognitive psychology, subjectivism has been most pervasive within social and personality psychology. To understand human social behavior, this view holds, we must grasp the person's own 'definition of the situation', and current motivational state. This perspective, then, is the most open to cultural and individual differences and to the effects of motivation and emotion.

In one sense, the idea that people actively construct their own subjective realities calls for introspective methods. Even so, subjectivists do not rely exclusively on subjective self-reports because they also assume that people fail to see their subjective realities as personal constructions. This **naïve realism** refers to people's tendency to take their constructed, subjective realities to be faithful renderings of an objective world. Therefore, a subjectivist approach also involves systematic observation of judgments and behaviors. A subjectivist perspective is illustrated by a classic early study that found that people reliably overestimate the physical size of valuable coins, more so than for coins of lower value. The subjective perspective is as follows;

Consider again the problem of trait attribution. The study of how people make sense of other people's actions – in the example mentioned earlier, donating money to charity – emerged from a subjectivist emphasis on how situations are defined by the people in them (Heider, 1958). One contemporary explanation for the pervasive tendency to attribute other people's actions to their personality traits suggests that, because Western cultures have long emphasized personal agency, Westerners often fail to see the influence of situations (Nisbett, Peng, Choi, & Norenzayan, 2001; see Chapter 18). Likewise, a subjectivist view of the link between media violence and aggression suggests that habitual consumption of violent media instills and strengthens aggressive schemas and scripts, which are later used to define subsequent interpersonal encounters (Anderson & Bushman, 2001).

Cognitive perspective	An orientation toward understanding mental processes such as perceiving, remembering, reasoning, deciding and problem solving and their relationship to behaviour
Psychoanalytic perspective	An orientation toward understanding behaviour in terms of unconscious motives stemming from sexual and aggressive impulses.
Subjectivist perspective	An orientation toward understanding behaviiour and mental processes in terms of the subjective realities people actively construct.

1.6 Relationship of Psychology with other Disciplines Psychology and other Disciplines

As a behavioural science, psychology is situated at the intersection of many subjects. The psychological investigations share interest with different branches of biological sciences, social sciences and humanities. All these knowledge areas are collectively known as behavioural sciences. In recent years linkage of psychology with different subjects has been recognized. Now multi-disciplinary and cross-disciplinary studies are increasingly receiving greater attention. Let us see how psychology is related to other disciplines.

Any discipline, which deals with people, would definitely recognise the relevance of the knowledge of psychology. Similarly psychologists also acknowledge the relevance of other disciplines in understanding human behaviour. This trend has led to the emergence of interdisciplinary approach in the field of psychology. Researchers and scholars in science,

social science and humanities have felt the significance of psychology as a discipline. In studying brain and behaviour, psychology shares its knowledge with neurology, physiology, biology, medicine and computer science. In studying human behaviour (its meaning, growth and development) in a socio-cultural context, psychology shares its knowledge with anthropology, sociology, social work, political science and economics. In studying mental activities involved in creation of literary texts, music and drama, psychology shares its knowledge with literature, art and music. Some of the major disciplines linked to the field of psychology are discussed below:

i. **Philosophy:** Until the end of the 19th century, certain concerns that are now part of contemporary psychology like, what is the nature of the mind or how do humans come to know their motivations and emotions were the concerns of philosophers. In the later part of the 19th century, Wundt and other psychologists adopted an experimental approach to these questions and contemporary psychology emerged. Despite the emergence of psychology as a science, it greatly draws from philosophy, particularly with respect to methods of knowing, and various domains of human nature.

ii. **Medicine:** Doctors have realised that the maxim, healthy body requires a healthy mind, is actually true. A large number of hospitals now employ psychologists. The role of psychologists in preventing people from engaging in health hazardous behaviours and in adhering to the prescribed doctors' regimen are some of the important areas where the two disciplines have come together. While treating patients suffering from cancer, AIDS, and the physically challenged, or handling patients in the Intensive Care Unit, and patients during post operative care doctors have also felt the need for psychological counselling. A successful doctor looks at the psychological as well as physical well-being of the patients.

iii. **Economics, Political Science and Sociology:** As sister social science disciplines, these three have drawn considerably from psychology and have enriched it as well. Psychology has contributed a great deal to the study of micro-level economic behaviour, particularly in understanding consumer behaviour, savings behaviour and in decision-making. American economists have used data on consumer sentiments to predict economic growth. Three scholars who have worked on such problems have received the Nobel Prize in Economics, namely H. Simon, D. Kahneman and T. Schelling. Like economics, political science too draws considerably from psychology, particularly, in understanding issues related to exercise of power and authority, nature of political conflicts and their resolutions, and voting behaviour.

Sociology and psychology come together to explain and understand the behaviour of individuals within different socio-cultural contexts. Issues related to socialisation, group and collective behaviour, and intergroup conflicts gain from both these disciplines.

iv. **Computer Science:** From the very beginning, the effort of computer science has been in mimicking the human mind. One can see it in terms of how a 'computer' is structured, its memory organised, sequential and simultaneous (read parallel) processing of information. Computer scientists and engineers are seeking to make computers not only more and more intelligent but also machines which can sense

and feel. Developments in both these disciplines have brought about significant advancement in the field of cognitive sciences.

v. **Anthropology:** Anthropology tries to understand the evolution of mankind and development of civilization. It also focuses on the characteristics and processes of culture by detailed observation and recording the lives of people through participant observation in different cultural groups. In contrast, psychology tries to establish generalizations about human behaviour. These generalizations are often limited by the culture in which research is conducted. In recent years the relationship between culture and psychology has become closer. The psychological studies which respond to the needs of culture have shown that there are important differences and similarities in the nature and expression of emotions, self concept, motives, personality, norms, morality and child-rearing across different cultures.

vi. **Education:** Education and psychology have a history of very long association. The theory and practice of education is based on the principles and findings about various psychological processes like learning, memory, motivation, personality and intelligence. Also, effective class-room teaching and learning is possible only when teachers are trained in the principles of human development. Children are active learners who process information and act accordingly. A teacher, therefore, is required to be skillful in the techniques of motivation and communication. Teachers are often required to provide guidance and counseling to students and parents. Similarly evaluation of students requires basic understanding of the principles and procedures of psychological assessment.

vii. **Biology and Neuroscience:** One of the main concerns of psychologists is to understand the biological foundations of behaviour. Many breakthroughs in understanding, controlling and modifying behaviour have come from the knowledge of the functioning of brain and nervous system. Localization of brain functions, nature and properties of nerve impulse, biological factors in arousal and motivation, role of various parts of brain in determining psychological functioning constitute an exciting area of enquiry.

viii. **Law and Criminology:** A skilled lawyer and a criminologist require knowledge of psychology in answering such questions as: How well a witness remembers an accident, a street fight, or a murder? How well can s/he report such facts when taking the witness stand in the court? What factors influence the decision which is taken by the jury? What are the dependable signs of guilt and falsehood? What factors are held important in holding a culprit responsible for her/his action? What degree of punishment is considered just for a criminal act? Psychologists seek to answer these questions. Currently, a number of psychologists are involved in research on such issues, the answers to which would help the legal system of the country in the future.

ix. **Mass Communication:** The print and the electronic media have entered in our lives in a very big way. They have a major influence on our thinking, attitudes and our emotions. If they have brought us closer together, they have also reduced cultural diversities. The impact of the media on the formation of attitudes of children and

their behaviour is a domain where both these disciplines come together. Psychology also helps in developing strategies for better and effective communication. A journalist in reporting news must know the reader's interests in the story. Since most stories deal with human events, knowledge of their motives and emotions is very important. A story will be more penetrating if based upon a background of psychological Knowledge and insight. Music and Fine Arts: Music and psychology have converged in many areas. Scientists have made use of music in raising work performance. Music and emotions is another area in which a number of studies have been carried out. Musicians in India have recently started experimenting with what they call 'Music Therapy'. In this they use different *'Ragas'* for curing certain physical ailments. The efficacy of music therapy still remains to be proven.

x.   **Architecture and Engineering:** At first glance the relationship between psychology and architecture and engineering would appear improbable. But such is actually not the case. Ask any architect, s/he must satisfy her/his clients by providing mental and physical space through her design and satisfy aesthetically. Engineers must also take into account human habits in their plans for safety, for example, on streets and highways. Psychological knowledge helps in a big way in designing of all mechanical devices and displays. To sum up, psychology is located at the intersection of many fields of knowledge pertaining to human functioning.
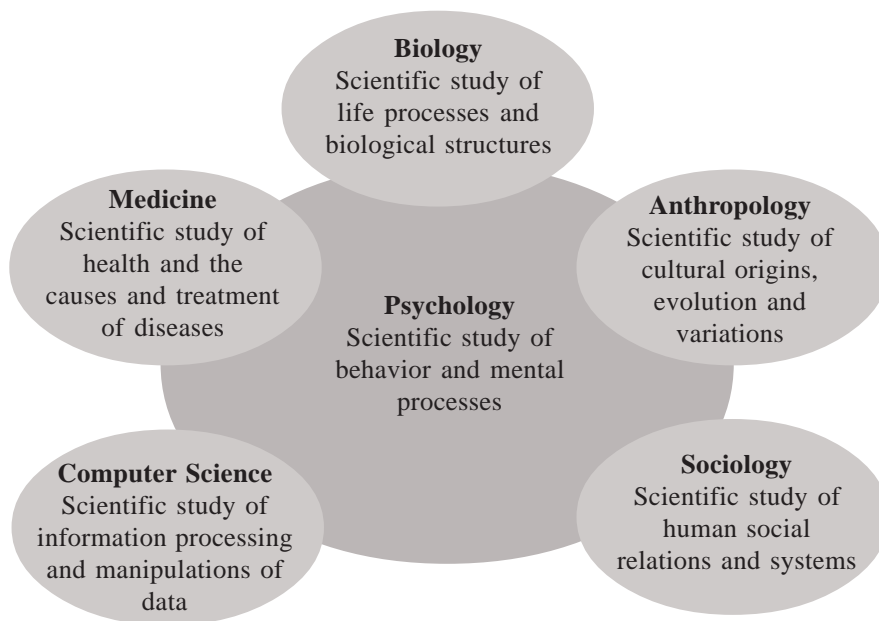
Figure 1.3 : *Psychology as a scientific hub*

1.7 Branches of Psychology

Various fields of specialisation in psychology have emerged over the years. Some of these are discussed in this section.

1.7.1 Cognitive Psychology

Investigates mental processes involved in acquisition, storage, manipulation, and transformation of information received from the environment along with its use and communication. The major cognitive processes are attention, perception, memory, reasoning, problem solving, decision-making and language. You will be studying these topics later in this textbook. In order to study these cognitive processes, psychologists conduct experiments in laboratory settings. Some of them also follow an ecological approach, i.e. an approach which focuses on the environmental factors, to study cognitive processes in a natural setting. Cognitive psychologists often collaborate with neuroscientists and computer scientists.

1.7.2 Biological Psychology

Focuses on the relationship between behaviour and the physical system, including the brain and the rest of the nervous system, the immune system, and genetics. Biological psychologists often collaborate with neuroscientists, zoologists, and anthropologists.

1.7.3 Neuro Psychology

has emerged as a field of research where psychologists and neuroscientists are working together. Researchers are studying the role of neurotransmitters or chemical substances which are responsible for neural communication in different areas of the brain and therefore in associated mental functions. They do their research on people with normal functioning brain as well as on people with damaged brain by following advanced technologies like EEG, PET and fMRI, etc. about which you will study later.

1.7.4 Developmental Psychology

studies the physical, social and psychological changes that occur at different ages and stages over a life-span, from conception to old age. The primary concern of developmental psychologists is how we become what we are. For many years the major emphasis was on child and adolescent development. However today an increasing number of developmental psychologists show strong interest in adult development and ageing. They focus on the biological, socio-cultural and environmental factors that influence psychological characteristics such as intelligence, cognition, emotion, temperament, morality, and social relationship. Developmental psychologists collaborate with anthropologists, educationists, neurologists, social workers, counsellors and almost every branch of knowledge where there is a concern for growth and development of a human being.

1.7.5 Social Psychology

explores how people are affected by their social environments, how people think about and influence others. Social psychologists are interested in such topics as attitudes, conformity and obedience to authority, interpersonal attraction, helpful behaviour, prejudice, aggression, social motivation, inter-group relations and so on.

1.7.6 Cross-cultural and Cultural Psychology

examines the role of culture in understanding behaviour, thought, and emotion. It assumes that human behaviour is not only a reflection of human-biological potential but also a product of culture. Therefore behaviour should be studied in its socio-cultural context. As you will be studying in different chapters of this book, culture influences human behaviour inmany ways and in varying degrees.

1.7.7 Environmental Psychology

studies the interaction of physical factors such as temperature, humidity, pollution, and natural disasters on human behaviour. The influence of physical arrangement of the workplace on health, the emotional state, and interpersonal relations are also investigated. Current topics of research in this field are the extent to which, disposal of waste, population explosion, conservation of energy, efficient use of community resources are associated with and are functions of human behaviour.

1.7.8 Health Psychology

focuses on the role of psychological factors (for example, stress, anxiety) in the development, prevention and treatment of illness. Areas of interest for a health psychologist are stress and coping, the relationship between psychological factors and health, patient-doctor relationship and ways of promoting health enhancing factors.

1.7.9 Clinical and Counselling Psychology

deals with causes, treatment and prevention of different types of psychological disorders such as anxiety, depression, eating disorders and chronic substance abuse. A related area is counselling, which aims to improve everyday functioning by helping people solve problems in daily living and cope more effectively with challenging situations. The work of clinical psychologists does not differ from that of counselling psychologists although a counselling psychologist sometimes deals with people who have less serious problems. In many instances, counselling psychologists work with students, advising them about personal problems and career planning. Like clinical psychologists, psychiatrists also study the causes, treatment, and prevention of psychological disorders. How are clinical psychologists and psychiatrists different? A clinical psychologist has a degree in psychology, which includes intensive training in treating people with psychological disorders. In contrast, a psychiatrist has a medical degree with years of specialised training in the treatment of psychological disorders. One important distinction is that psychiatrists can prescribe medications and give electroshock treatments whereas clinical psychologist cannot.

1.7.10 Industrial / Organisational Psychology

deals with work place behaviour, focusing on both the workers and the organisations that employ them. Industrial/organisational psychologists are concerned with training employees, improving work conditions, and developing criteria for selecting employees. For example, an organisational psychologist might recommend that a company may adopt a new management structure that would increase communication between managers and staff. The background

of industrial and organisational psychologists often includes training in cognitive and social psychology.

1.7.11 Educational Psychology

studies how people of all ages learn. Educational psychologists primarily help develop instructional methods and materials used to train people in both educational and work settings. They are also concerned with research on issues of relevance for education, counselling and learning problems. A related field, school psychology, focuses on designing programmes that promote intellectual, social, and emotional development of children, including those with special needs. They try to apply knowledge of psychology in a school setting.

1.7.12 Sports Psychology

applies psychological principles to improve sports performance by enhancing their motivation. Sports psychology is a relatively new field but is gaining acceptance worldwide.

1.7.13 Other Emerging Branches of Psychology

The interdisciplinary focus on research and application of psychology has led to the emergence of varied areas like aviation psychology, space psychology, military psychology, forensic psychology, rural psychology, engineering psychology, managerial psychology, community psychology, psychology of women, and political psychology, to name a few.

1.8 Current Trends : The Changing Face of Psychology

Psychology is needed more than ever as modern life becomes more complex. It is evident from the descriptions of the different branches of psychology that their subject covers a wide range of problems that we face. The following are some current trends that are significant in influencing this field:

1. **Emphasis on Cultural Context :** Psychologists are realizing the fact that psychological phenomena can be understood in the specific cultural context in which they take place. The studies in cross-cultural psychology and cultural psychology show that many of the concepts (e.g., self, morality) and practices (e.g, socialization, life tasks) are culturally specific. It is therefore necessary to understand these issues and processes in their cultural context.

2. **Breakthrough in Neurosciences :** In recent years considerable knowledge has been gained about brain and other parts of nervous system and biological functioning. This has helped in not only understanding the nature of psychological processes but has provided ways and means (e.g., drugs) to cure various diseases.

3. **Multidisciplinary Concerns :** Psychologists as well as other scientists are now convinced that human reality is complex and one discipline cannot properly comprehend it. Hence multidisciplinary efforts have started to understand the various aspects of human life. In particular, the collaboration of linguists, anthropologists and cognitive scientists is taking place in the study of issues related to language, personality, emotion and values.

Many of us carry the impression that psychologists can read the face of a person and tell one's mental makeup, may cure people suffering from mental abnormalities, can guess what is one's future, and can change one's mind instantaneously, like a magician. As we will see later, there is no magic in the hands of psychologists. A psychologist uses certain procedures and tools to collect information and tries to draw inferences and conclusions about the probable causes of behaviour.

Psychologists share twin goals:

(1) Understanding and explaining the complexities of behaviour, and

(2) Contributing to the improvement of the quality of human life.

There are times when things get rough and tough for us and we look up to someone with whom we can discuss our problems and reach solutions. The first people we look to are our near and dear ones, however, when things become unmanageable, many seek professional help. When looking for such professionals, we may come across many different names with different job titles, Psychologist, Psychiatrist, Counsellor, Psychotherapist and so on.

Both **Psychiatrists** and **Psychologists** are key professions in the field of mental health and behaviour, but are *not the same*. So if you are someone looking to build a career in this arena, or just someone curious to learn more about the world around you, you should know who they really are and how they both differ.

Psychologists and Psychiatrists – Who are they?

To define precisely, **Psychology** is the scientific study of human mind and behaviour. Individuals who practice Psychology are known as Psychologists and study how human beings think, behave and feel in different social settings. They are experts in human behaviour.

On the other hand, **Psychiatry** is a branch of medicine that deals with the treatment of mental illness, emotional disturbances, and abnormal behaviour. Psychiatrists look at biological, neurological and biochemical abnormalities to diagnose mental illnesses and prescribe medications to treat them.

The fields of Psychology and Psychiatry are both essential in researching about and developing treatments for improving the mental and emotional well being of people. Both share a common goal: *helping people lead well-functional and healthy lives*.

Differences between Psychiatrists and Psychologists

The major differences between the two lie in many different areas, including their approaches, areas of work and educational path. Contrary to what most people believe, they are *not one and the same thing*. Psychiatrists, as I mentioned are medical doctors. Psychologists, while they treat mental disorders, are not restricted to it.

Here are the ways in which they differ:

Psychiatrists treat mental issues through medications; Psychologists treat them with therapies

The biggest difference between the two is in the approach they take towards treating mental disorders.

A Psychiatrist takes a medication-first approach in their treatment. Once the diagnosis is done, they build a treatment course plan for the patient, focusing on managing symptoms through the use of medications and psychotherapy. While they may also be trained in psychotherapies like psychoanalysis, cognitive behavioural therapy and more, in a typical mental health care setting, the work of therapies is generally taken care of by Psychologists.

Psychologists primarily utilise different types of therapies to manage symptoms and help their patients cope with their life problems. They may use different forms of therapies, such as Cognitive Behavioural Therapy, Psycho-dynamic Therapy, Rational Emotive Behaviour Therapy (REBT), Gestalt Therapy, Humanistic Therapy, etc. They are also qualified in conducting psychometric tests, which evaluate a person's mental state and personal attributes to determine the right course of action for the patient.

For example, if a person is suffering from depression and recently attempted suicide, a Psychiatrist will first prescribe anti-depressant medications to the person to manage the suicidal tendencies and make the person more open to talking and treatment. After stabilisation, the psychologist would start the therapy to get to the root cause of the person's difficulties and help them manage their negative thoughts and emotions.

Thus, psychologists and psychiatrists work together in many mental health-care settings to help patients.

1.10 Psychology as a Career and Profession

The profession of psychology preceded the science of psychology before the term "psychologist" came into use. People have been trying to understand and help others with mental and emotional problems since humans roamed the earth. However, the early applications of the psychological science were begun only in the latter half of the nineteenth century.

Psychologists today work in a variety of settings where they can apply psychological principles for teaching and training people to cope effectively with the problems of their lives. Psychologists specialize in a host of different areas within the field and identify themselves by many different labels. A sampling of those focal areas is presented here to give you an idea of the breadth of psychology's scholarship and applications.

Often referred to as *"human service areas"* they include Clinical psychologists, Community psychologists, Cognitive and perceptual psychologists, Counseling psychologists, Developmental psychologists, Educational psychologists, Engineering psychologists, Industrial/organizational (I/O) psychologists, Environmental psychologists, Evolutionary psychologists, Experimental psychologists, Forensic psychologists, Health psychologists, Neuropsychologists (and behavioral neuropsychologists),Quantitative and measurement psychologists, Rehabilitation psychologists, School psychologists, Social psychologists, Sport psychologists.

i. **Clinical Psychologists** assess and treat mental, emotional, and behavioral disorders. These range from short-term crises, such as difficulties resulting from adolescent conflicts, to more severe, chronic conditions, such as schizophrenia. Some clinical psychologists treat specific problems exclusively, such as phobias or clinical depression.

ii. **Cognitive and Perceptual Psychologists** study human perception, thinking, and memory. Cognitive psychologists are interested in questions such as how the mind represents reality, how people learn, and how people understand and produce language. Cognitive psychologists also study reasoning, judgment, and decision making. Cognitive and perceptual psychologists frequently collaborate with behavioral neuroscientists to understand the biological bases of perception or cognition or with researchers in other areas of psychology to better understand the cognitive biases in the thinking of people with depression, for example.

iii. **Community Psychologists** work to strengthen the abilities of communities, settings, organizations, and broader social systems to meet people's needs. They help people access resources and collaborate with others to improve their lives and communities. Instead of helping individuals cope with negative circumstances (e.g., trauma, poverty), community psychologists help empower people to change those circumstances, prevent problems, and develop stronger communities. Examples of community psychology interventions include improving support for hurricane victims, partnering with neighborhoods to prevent crime, collaborating with schools to prevent bullying, and helping change policies to improve health outcomes. Community psychologists blend research and practice, partnering with diverse citizens to plan and implement community changes, advance social justice, and use research to inform and evaluate this work.

iv. **Counseling Psychologists** help people recognize their strengths and resources to cope with everyday problems and serious adversity. They do counseling/psychotherapy, teaching, and scientific research with individuals of all ages, families, and organizations (e.g., schools, hospitals, businesses). Counseling psychologists help people understand and take action on career and work problems, they pay attention to how problems and people differ across the life span, and they have great respect for the influence of differences among people (such as race, gender, sexual orientation, religion, disability status) on psychological well-being. They believe that behavior is affected by many things, including qualities of the individual (e.g., psychological, physical, or spiritual factors) and factors in the person's environment (e.g., family, society, and cultural groups).

v. **Developmental Psychologists** study the psychological development of the human being that takes place throughout life. Until recently, the primary focus was on childhood and adolescence, the most formative years. But as life expectancy in this country approaches 80 years, developmental psychologists are becoming increasingly interested in aging, especially in researching and developing ways to help older people stay as independent as possible.

vi. **Educational Psychologists** concentrate on how effective teaching and learning take place. They consider a variety of factors, such as human abilities, student motivation,

and the effect on the classroom of the diverse races, ethnicities, and cultures that make up America.

vii.   **Engineering Psychologists** conduct research on how people work best with machines. For example, how can computers are designed to prevent fatigue and eye strain in people? What arrangement of an assembly line makes production most efficient? What is a reasonable workload? Most engineering psychologists work in industry, but some are employed by the government, particularly the Department of Defense. They are often known as human factors specialists.

viii. **Environmental psychologists** study the dynamics of person–environment interactions. They define the term *environment* very broadly, including all that is natural on the planet as well as built environments, social settings, cultural groups, and informational environments. They examine behavior evolving at various scales and from various processes (e.g., localization, globalization). They have a broad and inherently multidisciplinary focus. They recognize the need to be problem oriented, coordinating as needed with researchers and practitioners in the other fields of psychology, in related disciplines (e.g., sociology, anthropology, biology, ecology), as well as in the design fields (e.g., regional, urban, and community planning; landscape architecture; architecture; and engineering). Environmental psychologists explore such issues as common property resource management, the effect of environmental stress on human effectiveness and well-being, the characteristics of restorative environments, and human information processing. They also foster conservation behavior, helping people to craft durable behavioral responses to emerging biophysical limits.

ix.   **Evolutionary Psychologists** study how evolutionary principles such as mutation, adaptation, and selective fitness influence human thought, feeling, and behavior. Because of their focus on genetically shaped behaviors that influence an organism's chances of survival, evolutionary psychologists study mating, aggression, helping behavior, and communication. Evolutionary psychologists are particularly interested in paradoxes and problems of evolution. For example, some behaviors that were highly adaptive in our evolutionary past may no longer be adaptive in the modern world.

x.   **Experimental Psychologists** are interested in a wide range of psychological phenomena, including cognitive processes, comparative psychology (cross species comparisons), and learning and conditioning. They study both human and nonhuman animals with respect to their abilities to detect what is happening in a particular environment and to acquire and maintain responses to what is happening.

Experimental psychologists work with the empirical method (collecting data) and the manipulation of variables within the laboratory as a way of understanding certain phenomena and advancing scientific knowledge. In addition to working in academic settings, experimental psychologists work in places as diverse as manufacturing settings, zoos, and engineering firms.

xi.   **Forensic Psychologists** apply psychological principles to legal issues. Their expertise is often essential within the judicial system. They can, for example, help a judge decide which parent should have custody of a child or evaluate a defendant's mental

competence to stand trial. Forensic psychologists also conduct research on jury behavior or eyewitness testimony. Some forensic psychologists are trained in both psychology and the law.

xii. **Health Psychologists** specialize in how biological, psychological, and social factors affect health and illness. They study how patients handle illness, why some people don't follow medical advice, and the most effective ways to control pain or change poor health habits. They also develop health care strategies that foster emotional and physical well-being. Health psychologists team up with other health care professionals in independent practice and in hospitals to provide patients with complete health care. They educate health care professionals about psychological problems that arise from the pain and stress of illness and about symptoms that may seem to be physical in origin but actually have psychological causes. They also investigate issues that affect a large segment of society and develop and implement programs to deal with these problems. Examples include teenage pregnancy, substance abuse, risky sexual behaviors, smoking, lack of exercise, and poor diet.

xiii. **Industrial/Organizational (I/O) Psychologists** apply psychological principles and research methods to the workplace in the interest of improving productivity, health, and the quality of work life. Many serve as human resources specialists, helping organizations with staffing, training, and employee development. They may provide employers with testing and other valid selection procedures in their hiring and promotion processes. Others work as management consultants in such areas as strategic planning, quality management, and coping with organizational change.

xiv. **Neuro Psychologists (and behavioral neuro psychologists)** explore the relationships between brain systems and behavior. For example, behavioral neuropsychologists may study the way the brain creates and stores memories, or how various diseases and injuries of the brain affect emotion, perception, and behavior. They design tasks to study normal brain functions with imaging techniques such as positron emission tomography (PET), single photon emission computed tomography (SPECT), and functional magnetic resonance imaging (FMRI).

Clinical neuropsychologists also assess and treat people. And with the dramatic increase in the number of survivors of traumatic brain injury, neuropsychologists are working with health care teams to help brain-injured people resume productive lives.

xv. **Quantitative and Measurement Psychologists** focus on methods and techniques for designing experiments and analyzing psychological data. Some develop new methods for performing analyses; others create research strategies to assess the effect of social and educational programs and psychological treatment. They develop and evaluate mathematical models for psychological tests. They also propose methods for evaluating the quality and fairness of the tests.

xvi. **Rehabilitation Psychologists** work with stroke and accident victims, people with intellectual disabilities, and those with developmental disabilities caused by such conditions as cerebral palsy, epilepsy, and autism. They help clients adapt to their situation and improve their lives, and they frequently work with other health care

professionals. They deal with issues of personal adjustment, interpersonal relations, the work world, and pain management.

Rehabilitation psychologists are also involved in public health programs to prevent disabilities, including those caused by violence and substance abuse. And they testify in court as expert witnesses about the causes and effects of a disability and a person's rehabilitation needs.

xvii.   **School Psychologists** are engaged in the delivery of comprehensive psychological services to children, adolescents, and families in schools and other applied settings. They assess and counsel students, consult with parents and school staff, and conduct behavioral interventions when appropriate.

xviii.   **Social Psychologists** study how a person's mental life and behavior are shaped by interactions with other people. They are interested in all aspects of interpersonal relationships, including both individual and group influences, and seek ways to improve such interactions. For example, their research help harmful—as in the case of prejudice—provides insight into ways to change them.

Social psychologists are found in a variety of settings, from academic institutions (where they teach and conduct research), to advertising agencies (where they study consumer attitudes and preferences), to businesses and government agencies (where they help with a variety of problems in organization and management).

xix.   **Sport Psychologists** help athletes refine their focus on competition goals, become more motivated, and learn to deal with the anxiety and fear of failure that often accompany competition. The field is growing as sports of all kinds become more competitive and attract younger children.

WHAT YOU HAVE LEARNT

- ❑   Psychology is a science which studies mental and behavioural functioning in a systematic manner, using scientific methods.

- ❑   Psychologists describe, predict and control the processes like perception. motivation, cognition, memory, learning, personality, and intelligence.

- ❑   As professionals, they apply psychological knowledge towards the solution of problems in various settings including schools, industries, hospitals and organizations.

- ❑   It is closely related to allied disciplines such as education, anthropology. sociology and biology.

- ❑   The study of psychological issues and problems has been characterized by several perspectives including behavioural, cognitive, psychodynamic. humanistic, biological and Indian.

- ❑   The perspectives are rooted in varied philosophical assumptions, and describe human nature in different ways.

- ❑   As a growing discipline, psychology is expanding across various branches which specialize in providing psychological services in different walks of life.

TERMINAL EXERCISE

1. What is behaviour? Give examples of overt and covert behaviour.

2. Give a brief account of the evolution of psychology.

3. Describe the nature of psychology.

4. Explain the psychodynamic perspective in psychology.

5. How is psychology related to education?

6. Discuss the fields of clinical psychology and industrial psychology.

7. What are the problems for which collaboration of psychologists with other disciplines can be fruitful? Take any two problems to explain.

8. Differentiate between (a) a psychologist and a psychiatrist (b) a counsellor and a clinical psychologist.

9. Describe some of the areas of everyday life where understanding of psychology can be put to practice.

10. How can knowledge of the field of environmental psychology be used to promoteenvironment friendly behaviour?

11. In terms of helping solve an important social problem such as crime, which branch of psychology do you think is most suitable? Identify the field and discuss the concerns of the psychologists working in this field.

STUDYING HUMAN BEHAVIOUR - METHODS

2

INTRODUCTION

You have read in the first chapter that psychology is the study of experiences, behaviours, and mental processes. You may now be curious to know how psychologists study these phenomena. In other words, what methods are used to study behaviour and mental processes? Like all scientists, psychologists seek to describe, predict, explain and control what they study. For this, psychologists rely on formal, systematic observations to address their questions. It is the methodology that makes psychology a scientific endeavour. Psychologists use a variety of research methods because questions about human behaviour are numerous and all of them cannot be studied by a single method. Methods such as observation, experimental, co relational research, survey, psychological testing and case study are more frequently used to study the problems of psychology. This chapter will familiarise you with the goals of psychological enquiry, the nature of information or data that we collect in psychological studies, the diverse range of methodological devices available for the study of psychology, and some important issues related to psychological studies.

OBJECTIVES

After reading this chapter, you would be able to

- *explain the goals and nature of psychological enquiry,*
- *understand different types of data used by psychologists,*
- *describe some important methods of psychological enquiry,*
- *understand the methods of analysing data, and*
- *learn about the limitations of psychological enquiry and ethical considerations.*

2.1 Goals of Psychological Studies and Research

Like any scientific research, psychological enquiry has the following goals: description, prediction, explanation, and control of behaviour, and application of knowledge so generated, in an objective manner. Let us try to understand the meaning of these terms.

Description: In a psychological study, we attempt to describe a behaviour or a phenomenon as accurately as possible. This helps in distinguishing a particular behaviour from other behaviours. For example, the researcher may be interested in observing study habits among students. Study habits may consist of diverse range of behaviours, such as attending all your classes regularly, submitting assignments on time, planning your study schedule, studying

according to the set schedule, revising your work on a daily basis etc. Within a particular category there may be further minute descriptions. The researcher needs to describe her/his meaning of study habits. The description requires recording of a particular behaviour which helps in its proper understanding.

Prediction: The second goal of scientific enquiry is prediction of behaviour. If you are able to understand and describe the behaviour accurately, you come to know the relationship of a particular behaviour with other types of behaviours, events, or phenomena. You can then forecast that under certain conditions this particular behaviour may occur within a certain margin of error. For example, on the basis of study, a researcher is able to establish a positive relationship between the amount of study time and achievement in different subjects. Later, if you come to know that a particular child devotes more time for study, you can predict that the child is likely to get good marks in the examination. Prediction becomes more accurate with the increase in the number of persons observed.

Explanation: The third goal of psychological enquiry is to know the causal factors or determinants of behaviour. Psychologists are primarily interested in knowing the factors that make behaviour occur. Also, what are the conditions under which a particular behaviour does not occur? For example, what makes some children more attentive in the class? Why some children devote less time for study as compared to others? Thus, this goal is concerned with identifying the determinants or antecedent conditions (i.e. conditions that led to the particular behaviour) of the behaviour being studied so that cause-effect relationship between two variables (objects) or events could be established.

Control: If you are able to explain why a particular behaviour occurs, you can control that behaviour by making changes in its antecedent conditions. Control refers to three things: making a particular behaviour happen, reducing it, or enhancing it. For example, you can allow the number of hours devoted to study to be the same, or you can reduce them or there may be an increase in the study hours. The change brought about in behaviour by psychological treatment in terms of therapy in persons, is a good example of control.

Application: The final goal of the scientific enquiry is to bring out positive changes in the lives of people. Psychological research is conducted to solve problems in various settings. Because of these efforts the quality of life of people is a major concern of psychologists. For example, applications of yoga and meditation help to reduce stress and increase efficiency. Scientific enquiry is also conducted to develop new theories or constructs, which leads to further research.

INTEXT QUESTIONS ?

Fill in the blanks

1. Science is a method of _____ inquiry which is based on _____ observation.

2. Science is public or which can be _____ with other person and it can be _____.

3. Scientific study is _____.

Steps in Conducting Scientific Research

The scientific method attempts to study a particular event or phenomenon in an objective, systematic, and testable manner. The objectivity refers to the fact that if two or more persons independently study a particular event, both of them, to a great extent, should arrive at the same conclusion. For instance, if you and your friend measure the length of a table using the same measuring device, it is likely that both of you would arrive at the same conclusion about its length. The second characteristic of scientific research is that it follows systematic procedure or steps of investigation. It includes the following steps: *conceptualisation of a problem, collection of data, drawing conclusions, and revising research conclusions and theory* (see Fig.2.1). Let us discuss these steps in some detail.
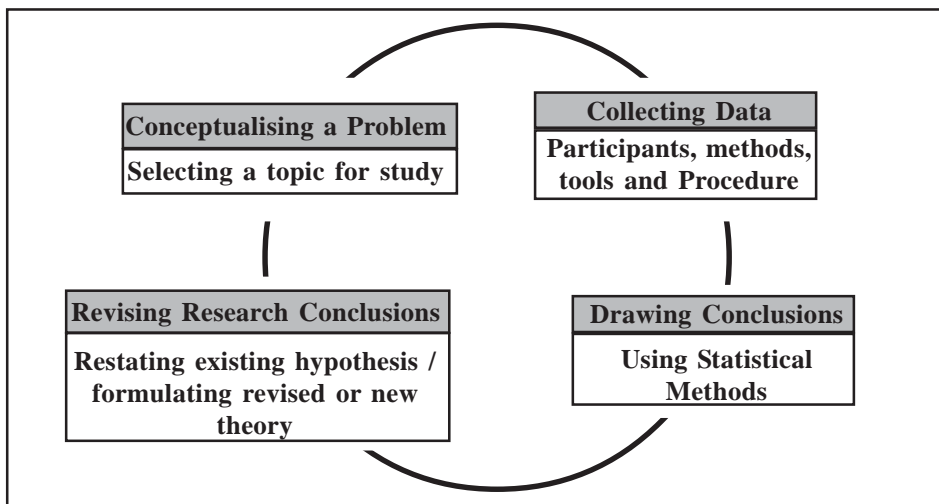
Fig. 2.1: *Steps in Conducting Scientific Enquiry*

1. **Conceptualising a Problem:** The process of scientific research begins when a researcher selects a theme or topic for study. Then s/he narrows down the focus and develops specific research questions or problems for the study. This is done on the basis of review of past research, observations, and personal experiences. For example, earlier you read that a researcher was interested in observing the study habits of students. For this purpose, s/he may identify different facets of study habits first, and then decide whether s/he is interested in study habits shown in the class or at home.

    In psychology we study a diverse range of problems related to behaviour and experiences. These problems may be related to (a) understanding our own behaviour (for example, how do I feel and behave when I am in a state of joy or grief? How do we reflect on our own experiences and behaviour? Why do we forget?); (b) understanding other individual's behaviour (for example, Is Abhinav more intelligent than Ankur? Why is someone always not able to complete her or his work on time? Can the habit of smoking be controlled? Why do some people suffering from chronic illness not take medicines?); (c) group influences on individual behaviour (for example, why does Rahim spend more time meeting with people than doing his work?, Why

does a cyclist perform better when cycling before a group of persons than when cycling alone?); (d) group behaviour (for example, why does risk-taking behaviour increase when people are in a group?), and (e) organisational level (for example, why are some organisations more successful than others? How can an employer increase the motivation of employees?). The list is long and you will learn about these various facets in subsequent chapters. If you are inquisitive, you can write down a number of problems which you may like to probe.

2. **Hypothesis:** After identification of the problem, the researcher proceeds by developing a tentative answer of the problem, which is called *hypothesis*. For example, based on the earlier evidence or your observation, you might develop a hypothesis 'greater is the amount of time spent by children in viewing violence on television, higher is the degree of aggression displayed by them'. In your research, you shall now try to prove whether the statement is true or false.

3. **Collecting Data :** The second step in scientific research is to collect data. Data collection requires developing a research design or a blueprint of the entire study. It requires taking decisions about the following four aspects:

   (a) Sample: participants in the study,

   (b) Methods of data collection,

   (c) Variables of the study

   (d) Tools to be used in research, and

   (e) *Procedure for data collection.*

   Depending upon the nature of the study, the researcher has to decide who would be the participants (or informants) in the study. The participants could be children, adolescents, college students, teachers, managers, clinical patients, industrial workers, or any group of individuals in whom/ where the phenomenon under investigation is prevalent. The second decision is related to the use of methods of data collection, such as observation method, experimental method, correlational method, case study, etc. The researcher needs to decide about appropriate tools (for example, interview schedule, observation schedule, questionnaire, etc.) for data collection. The researcher also decides about how the tools need to be administered to collect data (i.e. individual or group). This is followed by actual collection of data.

4. **Data analysis and Drawing Conclusions :** The next step is to analyse data so collected through the use of statistical procedures to understand what the data mean. This can be achieved through graphical representations (such as preparation of pie-chart, bar-diagram, cumulative frequencies, etc.) and by the use of different statistical methods. The purpose of analysis is to verify a hypothesis and draw conclusions accordingly.

5. **Revising Research Conclusions:** The researcher may have begun the study with a hypothesis that there exists a relationship between viewing violence on television and aggression among children. S/he has to see whether the conclusions support

this hypothesis. If they do, the existing hypothesis/ theory is confirmed. If not, s/he will revise or state an alternative hypothesis/theory and again test it based on new data and draw conclusions which may be verified by future researchers. Thus, research is a continuous process.

2.3 ⏵ Some Important Methods in Psychology

Psychologists use a variety of methods like Observation, Experimental, Correlational, Survey, Psychological Testing, and Case Study to collect data. The aim of this section is to guide you to select the methods which may be appropriate for different research purposes.

2.3.1 Observation Method

Observation is a very powerful tool of psychological enquiry. It is an effective method of describing behaviour. In our daily life, we remain busy with observing numerous things throughout the day. Many times, we do not take notice of what we are seeing or what we have seen. We see but we do not observe. We remain aware of only a few things that we see daily. Have you experienced such a thing? You may also have experienced that if you carefully observe a person or event for some time, you come to know many interesting things about the person or the event.

A scientific observation differs from day-to-day observation in many respects. These are:

(a) **Selection** : Psychologists do not observe all the behaviour that they encounter. Rather, they select a particular behaviour for observation. For example, you may be interested to know how children studying in Class XI spend their time in school. Two things are possible at this stage. As a researcher, you might think that you have a fairly good idea about what happens in school. You might prepare a list of activities and go to the school with a view to finding out their occurrences. Alternatively, you might think that you do not know what happens in the school and, by your observation you would like to discover it.

(b) **Recording:** While observing, a researcher records the selected behaviour using different means, such as marking tallies for the already identified behaviour whenever they occur, taking notes describing each activity in greater detail using short hand or symbols, photographs, video recording, etc.

(c) **Analysis of Data:** After the observations have been made, psychologists analyse whatever they have recorded with a view to derive some meaning out of it.

It is important to know that making good observations is a skill. A good observer knows what s/he is looking for, whom s/he wants to observe, when and where the observation needs to be made, in what form the observation will be recorded, and what methods will be used to analyse the observed behavior.

Types of Observation

Observation can be of the following types:

(a) **Naturalistic vs Controlled Observation :** When observations are done in a natural or real-life settings (in the above example, it was a school in which observation was made), it is called naturalistic observation. In this case the observer makes no effort to control or manipulate the situation for making an observation. This type of observation is conducted in hospitals, homes, schools, day care centers, etc. However, many a times you might need to control certain factors that determine behaviour as they are not the focus of your study.

(b) **Non-Participatory vs Participatory Observation:** Observation can be done in two ways. One, you may decide to observe the person or event from a distance. Two, the observer may become part of the group being observed. In the first case, the person being observed may not be aware that s/he is being observed. For example, you want to observe the pattern of interaction between teachers and students in a particular class. There are many ways of achieving this goal. You can install a video camera to record the classroom activities, which you can see later and analyse. Alternatively, you may decide to sit in a corner of the class without interfering or participating in their everyday activities. This type of observation is called non-participatory observation. The danger in this type of setup is that the very fact that someone (an outsider) is sitting and observing may bring a change in the behaviour of students and the teacher.

In participatory observation, the observer becomes a part of the school or the group of people being observed. In participant observation, the observer takes some time to establish a rapport with the group so that they start accepting her/him as one of the group members. However, the degree of involvement of the observer with the group being observed would vary depending upon the focus of the study.

The advantage of the observation method is that it enables the researcher to study people and their behaviour in a naturalistic situation, as it occurs. However, the observation method is labour intensive, time consuming, and is susceptible to the observer's bias. Our observation is influenced by our values and beliefs about the person or the event. You are familiar with the popular saying: "We see things as we are and not as things are". Because of our biases we may interpret things in a different way than what the participants may actually mean. Therefore, the observer should record the behaviour as it happens and should not interpret the behaviour at the time of observation itself

2.3.2 Experimental Method

Experiments are generally conducted to establish cause-effect relationship between two sets of events or variables in a controlled setting. It is a carefully regulated procedure in which changes are made in one factor and its effect is studied on another factor, while keeping other related factors constant. In the experiment, cause is the event being changed or manipulated. Effect is the behaviour that changes because of the manipulation.

The Concept of Variable

You read earlier that in the experimental method, a researcher attempts to establish causal relationship between two variables. What is a variable? Any stimulus or event which varies, that is, it takes on different values (or changes) and can be measured is a variable.

An object by itself is not a variable. But its attributes are. For example, the pen that you use for writing is NOT a variable. But there are varieties of pens available in different shapes, sizes, and colour. All of these are variables. The room in which you are sitting is NOT a variable but its size is as there are rooms of different sizes. The height of the individuals (5' to 6') is another variable. Similarly, people of different races have different colours. Young people have started dyeing their hair in different colours. Thus, colour of hair becomes a variable. Intelligence is a variable (there are people with varying levels of intelligence — high, moderate, low). The presence or absence of persons in the room is a variable as shown in the experiment in Box 2.1. Thus, the variation can be in the quality or quantity of objects/events.

Variables are of many types. We will however focus on independent and dependent variables. Independent variable is that variable which is manipulated or altered or its strength varied by the researcher in the experiment. It is the effect of this change in the variable which the researcher wants to observe or note in the study. In the experiment conducted by Latane and Darley, researchers wanted to examine the effect of the presence of other persons on reporting of the smoke. The independent variable was presence or absence of other persons in the room. The variable on which the effect of independent variable is observed is called dependent variable. Dependent variable represents the phenomenon the researcher desires to explain. It is expected that change in the dependent variable will ensue from changes in the independent variable. The frequency of reporting of smoke in the above case was the dependent variable. Thus, the independent variable is the cause, and dependent variable the effect in any experimental situation.

One must remember *that independent and dependent variables are interdependent*. Neither of them can be defined without the other. Also, independent variable chosen by the researcher is not the only variable that influences the dependent variable. Any behavioural event contains many variables. It also takes place within a context. Independent and dependent variables are chosen because of the researcher's theoretical interest. However, there are many other relevant or extraneous variables that influence the dependent variable, but the researcher may not be interested in examining their effects. These extraneous variables need to be controlled in an experiment so that a researcher is able to pin-point the cause and effect relationship between independent and dependent variables.

Experimental and Control Groups

Experiments generally involve one or more experimental groups and one or more control groups. An experimental group is a group in which members of the group are exposed to independent variable manipulation. The control group is a comparison group that is treated in every way like the experimental group except that the manipulated variable is absent in it. For example, in the study by Latane and Darley, there were two experimental groups and one control group. As you may have noted, the participants in the study were sent to three types of rooms. In one room no one was present (control group). In the other two rooms,

two persons were already seated (experimental groups). Of the two experimental groups, one group was instructed not to do anything when smoke filled in the room. The other group was not given any instructions.

After the experimental manipulation had occurred the performance of the control group measured in terms of reporting of smoke was compared with that of the experimental group. It was found that the control group participants reported in maximum numbers about the emergency, followed by the first experimental group members where the participants were not given any instructions, and the second experimental group (consisting of confederates) reported the emergency situation, the least.

It should be noted that in an experiment, except for the experimental manipulation, other conditions are kept constant for both experimental and control groups. One attempts to control all those relevant variables which can influence the dependent variable. For example, the speed with which smoke started entering the rooms, the total amount of smoke in the rooms, physical and other conditions of the rooms were similar in case of all the three groups. The distribution of participants to experimental and control groups was done randomly, a method that ensures that each person has an equal chance of being included in any of the groups. If in one group the experimenter had included only males and in the other group females, the results obtained in the study, could be due to the differences in gender rather than due to experimental manipulation. All relevant variables in experimental studies that might influence the dependent variable need to be controlled. These are of three major types: organismic variables (such as anxiety, intelligence, personality, etc.), situational or environmental variables operating at the time of conducting the experiment (such as noise, temperature, humidity), and sequential variables. The sequence related variables assume significance when the participants in experiments are required to be tested in several conditions. Exposure too many conditions may result in experimental fatigue, or practice effects, which may influence the results of the study and make the interpretation of the findings difficult.

In order to control relevant variables, experimenters use several control techniques. Some illustrations are given below:

- Since the goal of an experiment is to minimise extraneous variables, the best way to handle this problem is to eliminate them from the experimental setting. For example, the experiment may be conducted in a sound-proof and air conditioned room to eliminate the effect of noise and temperature.

- Elimination is not always possible. In such cases, effort should be made to hold them constant so that their effect remains the same throughout the experiment.

- For controlling organismic (e.g., fear, motivation) and background variables (such as rural/urban, caste, socioeconomic status) matching is also used. In this procedure the relevant variables in the two groups are equated or are held constant by taking matched pairs across conditions of the experiment.

- Counter-balancing technique is used to minimise the sequence effect. Suppose there are two tasks to be given in an experiment. Rather than giving the two tasks in the same sequence the experimenter may interchange the order of the tasks. Thus, half of the group may receive the tasks in the order of A and B while the other half in order of B and A or the same individual may be given the task in A, B, B, A order.

- Random assignment of participants to different groups eliminates any potential systematic differences between groups.

The strength of a well-designed experiment is that it can provide, relatively speaking, a convincing evidence of a cause-effect relationship between two or more variables. However, experiments are often conducted in a highly controlled laboratory situation. In this sense, they only simulate situations that exist in the outside world. They are frequently criticised for this reason. The experiments may produce results that do not generalise well, or apply to real situations. In other words, they have low external validity. Another limitation of the laboratory experiment is that it is not always feasible to study a particular problem experimentally. For example, an experiment to study the effect of nutritional deficiency on intelligence level of children cannot be conducted as it would be ethically wrong to starve anyone. The third problem is that it is difficult to know and control all the relevant variables.

Steps of Experimental Method

In simple language an experiment may be defined as observation under conditions which we can control and vary. Experimental method is generally preferred above other methods, because of its ability to understand the causal factors. An experiment is concerned about the study of relationship between changes in antecedent conditions and the corresponding changes in the consequents. The experimental method helps psychologists establish cause-and-effect relationship between these two sets of conditions which are usually considered as variables. To understand it let us take an example. Suppose a teacher wants to know if recitation method will aid retention (of a poem) than silent reading? She will proceed as follows:

i. **Formulation Hypothesis:** To answer a problem the teacher has a question or problem in which effect of one thing (recitation method) on the other (retention) has to be explored. On the basis of her previous knowledge and researches, the experimenter (E) forms a hypothesis. In present case the teacher states a possible answer to the problem. She may hypothesize that the recitation method is better for retention of a poem. To verify the hypothesis she will undertake an experiment.

ii. **Identifying Independent and Dependent Variables:** In order to understand the experimental method, one must be familiar with the concept of variables. "Variable is any measurable attribute of objects, things or beings". Quantitatively measured variables are age, intelligence, number of trials, sex, religion, caste etc. The E is concerned with two main kinds of variables:

1. Independent Variable (IV), and

2. Dependent Variable (DV).

An independent variable is manipulated by the E (e.g. method of learning is the IV in the present case) in order to understand its effect on some chosen aspect of behavior.

Effects of IV are observed on the DV e.g. retention in the present example. In other words, dependent variable is the consequent variable on which the effect is to be observed. While studying the effect of IV on DV the relationship is often influenced by a number of factors present in the environment. Such relevant variables need to

be controlled by the E. The E plans the experiment using two groups i.e., experimental and control. The experimental group receives the treatment of IV and control group performs in the absence of the IV. These two groups are supposed to be similar in all respects except the treatment of IV.

iii. **Sampling:** The next step is to decide the population to be selected for the study and deciding on the method of selecting a sample. For example, if one wants to take the students of 10th class for the experiment she cannot possibly go to all the schools. So she decides to take equal number of students of 10th class of one school. A sample represents the whole population. One has to decide which type of sampling method should be used. Random sampling is considered to be the best method because in this way of sampling all members of population have equal probability of selection

Control of Extraneous Variables: There is a possibility that some other variables, like age, gender, etc., may affect retention. All these variables have to be controlled. In order to do so the E selects participants of similar intelligence, age and gender. Experimenter may use a number of techniques to control the unwanted extraneous variables. Some of them are as follows:

1. Matching: The participants are matched on their characteristics.

2. Elimination: An unwanted variable may be controlled by elimination (e.g., noise).

3. Constancy of conditions: If elimination is not possible, the condition may be made constant for the entire duration of experiment.

iv. **Planning (designing) the Experiment:** The E will select group of students, divide them in half and give them same material (poem in this case) to memorize. One group is instructed to read the material silently. This group is called the "control group". The other group recites the poem loudly for the same amount of time. This group is the "experimental group". Retention of both the groups will be compared.

v. **Verifying the Hypothesis:** If the experimenter finds a significant difference in the amount retained by the two groups, she may infer that recitation method is better for retention of poems. These findings will prove the hypothesis.

vi. **Limitation of Experimental Method:** The experimental method is very powerful for gathering scientific data. But it also has limitations. The findings obtained from this may not apply to natural situations. Sometimes an experiment might prove unethical or dangerous. In some situations, experiment may interfere with behaviour that is measured.

INTEXT QUESTIONS ❓

State whether following statements are True or False

1. Experiment is observation under controlled condition.   True/False

2. Independent variable is not manipulated.   True/False

3. Experimental group receives the treatment of IV.   True/False

4. Control group may be different in its properties than experimental group. True/False

2.3.3 Non-Experimental Methods

Experimental method is the preferred method in psychology because it has greater precision but many a times we face problems that cannot be subjected to experimental manipulation. Behaviour of people in a crowd cannot be brought to the laboratory, neither can it be understood why a child breaks things in the class through experimental method. Such situations require different methods. Some of these non-experimental methods are described below:

i. **Observation:** Observation is the starting point for all sciences. It is a study of spontaneous occurrences, at the time they occur. But simply observing may not be enough. One should know what one wants to observe. Otherwise a lot of data may be missed. In psychological studies we use naturalistic as well as controlled observation. Also, there is another kind of observation which is called participant observation in which the observer observes by being a part of the group.

ii. **Introspection:** To introspect means to look within. This is the oldest method in psychology. It is a very important method to understand the feelings of pain, happiness, fatigue etc. If some persons go to see a movie they may have liked the movie which others may have disliked; but they can understand the emotional response of liking only by looking within. In introspection, attention is directed inwards to find out what is happening at the experiential level. For example, you meet a school mate after years, you greet him by shaking hands – an act of friendly behaviour but inside you may not feel happy to meet him because he had bullied you in the class.

iii. **Survey:** It is for the study of social problems such as incidence of alcoholism, popularity of certain careers, causes of unsuccessful marriages. People cannot be manipulated to observe these problems. Psychologists go into the field with prepared list of questions and interview schedules to a group of people. They may want to know how many people are buying a certain brand of tooth paste. The surveyor may sometimes face problems like refusal of people to answer, biased answers, misleading answers etc. A carefully conducted survey provides information about the trend in a particular area of concern.

iv. **Personal Interviews:** The interview method is one of the most frequently used methods for obtaining information from people. It is used in diverse kinds of situations. It is used by a doctor to obtain information from the patient, an employer when meeting a prospective employee, a sales person interviewing a housewife to know why she uses a certain brand of soap. On television, we often see media persons interviewing people on issues of national and international importance. What happens in an interview? We see that two or more persons sit face-to-face with each other, in which one person (generally called interviewer) asks the questions and the other person (called interviewee or respondent) answers the questions related to a problem. An interview is a purposeful activity conducted to derive factual information, opinions and attitudes, and reasons for particular behaviour, etc. from the respondents. It is generally conducted face-to-face but sometimes it can also take place over the phone.

There can be two broad types of interviews i.e., structured or standardised, and unstructured or non-standardised. This distinction is based upon the type of preparation we make before conducting the interview. As we have to ask questions during the

interview, it is required that we prepare a list of questions before-hand. The list is called an interview schedule

An interview may have the following combinations of participants in an interview situation:

(a) **Individual to Individual:** It is a situation where one interviewer interviews another person.

(b) **Individual to Group:** In this situation, one interviewer interviews a group of persons. One variant of it is called a Focus Group Discussion (FGD).

(c) **Group to Individuals:** It is a situation where one group of interviewers interview one person. You may experience this type of situation when you appear for a job interview.

(d) **Group to Group:** It is a situation where one group of interviewers interview another group of interviewees.

Interviewing is a skill which requires proper training. A good interviewer knows how to make the respondent at ease and get the optimal answer. S/he remains sensitive to the way a person responds and, if needed, probes for more information. If the respondent gives vague answers, the interviewer may try to get specific and concrete answers.

The interview method helps in obtaining in-depth information. It is flexible and adaptable to individual situations, and can often be used when no other method is possible or adequate. It can be used even with children, and non-literate persons. An interviewer can know whether the respondent understands the questions, and can repeat or paraphrase questions. However, interviews require time. Often getting information from one person may take an hour or more which may not be cost-effective.

v. **Questionnaire Survey:** The questionnaire is the most common, simple, versatile, and low-cost self-report method of collecting information. It consists of a predetermined set of questions. The respondent has to read the questions and mark the answers on paper rather than respond verbally to the interviewer. They are in some ways like highly structured interviews. Questionnaires can be distributed to a group of persons at a time who write down their answers to the questions and return to the researcher or can be sent through mail.

Generally, two types of questions are used in the questionnaire; open-ended and closed-ended. With open-ended questions, the respondent is free to write whatever answer s/he considers appropriate. In the closed-ended type, the questions and their probable answers are given and the respondent is required to select the correct answer. Examples of closed-ended questions require responses like: Yes/No, True/False, Multiple choice, or using a rating scale. In case of rating scale, a statement is given and the respondent is asked to give her/his views on a 3-point (Agree, Undecided, Disagree), or 5-point (Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree) or 7-point, 9-point, 11- point or 13-point scale. In some cases, the participants are asked to rank a number of things in a preferential order. The questionnaire is used for collecting background and demographic information, information

about past behaviour, attitudes and opinions, knowledge about a particular topic, and expectations and aspirations of the persons. Sometimes a survey is conducted by sending the questionnaire by mail. The main problem of a mailed questionnaire is poor response from the respondents.

The survey method has several advantages. First, information can be gathered quickly and efficiently from thousands of persons. Second, since surveys can be conducted quickly, public opinions on new issues can be obtained almost as soon as the issues arise. There are some limitations of a survey too. First, people may give inaccurate information because of memory lapses or they may not want to let the researcher know what they really believe about a particular issue. Second, people sometimes offer responses they think the researcher wants to hear.

vi. **Case History: '**Case history' is a detailed compilation of data about a single individual. A psychologist may gather complete history, from infancy to present period in order to understand a person's behaviour. This method is often used to study abnormal behaviour, behaviour of criminals, problem children or even to study the developmental changes in personality. The focus is on the assets as well as the weaknesses of the person concerned.

2.3.4 Correlational Research

Correlational Research In psychological research, we often wish to determine the relationship between two variables for prediction purposes. For example, you may be interested in knowing whether "the amount of study time" is related to the "student's academic achievement". This question is different from the one which experimental method seeks to answer in the sense that here you do not manipulate the amount of study time and examine its impact on achievement. Rather, you simply find out the relationship between the two variables to determine whether they are associated, or covary or not. The strength and direction of the relationship between the two variables is represented by a number, known as correlation coefficient. Its value can range from +1.0 through 0.0 to –1.0.

INTEXT QUESTIONS ❓

1. What is an independent variable?

   _____
   _____
   _____
   _____
   _____

2. List the goals of psychology as a science?

   _____
   _____
   _____
   _____
   _____

2.4 Psychological Tools

While undertaking studies psychologists use a variety of tools to collect relevant data. These tools or instruments are of various kinds and are used for various purposes. Memory Drum and Tachistoscope are frequently used in studies of memory and perception. Similarly EEG, ECG, PET, GSR, MRI, FMRI, etc. are used in the study of neuro-psychological functioning. These electronic and electrical gadgets help to make the presentation of stimuli and recording of responses. Tape recorders and video recording are also used. Apart from these, there are paper pencil tests used to measures to access various psychological attributes. Let us discuss basic various tools:

1. Questionnaires and Interview Schedules

In order to elicit information from people psychologists and other social scientists use questionnaires which are mailed or interview schedules which are presented by the researcher himself or herself in person. The questions may be open-ended or closed ended. The open ended questions provide freedom to the respondent to answer the way he/she likes but closed ended questions have fixed answers and the respondent is required to choose out of the given responses. Preparation and use of these tools is an art and demands proper training. Interviews are used in many settings (e.g., clinical, personnel selection, research) and present a situation of social interaction. A good interviewer encourages the respondent to open up and share his or her views in clear terms.

2. Psychometric Tests

As a learner of psychology it is essential to be familiar with intelligence tests, personality tests, aptitude tests, interest inventories and many other similar psychological tools. They provide measurement of individual differences. A test is a standardized measure of sample of behaviours and attributes. These tests are used to determine the status of the person being assessed on an attribute, relative to the community of people on which the test has been standardized. In order to be useful the tests must have several features.

Reliability: It refers to the consistency of a test. In order to be dependable a test must yield similar results on different occasions. Thus if a person is found to be above average in intelligence today he or she shall also show the same level of intelligence after 3 months. If the scores are similar then we may say that the test is reliable. This is called retest reliability. There is another kind of reliability which is called internal consistency which indicates the degree to which the different items of a test are related to each other

Validity: A test is valid if it measures the same property for which it has been prepared. Thus a test of intelligence is valid if it measures intelligence (and not interest or personality). For this purpose we relate the scores on the test with some external criteria.

Norms: Norms refer to the scores obtained by a group which works as a reference point. We do not know the zero value of psychological attributes. Therefore, absolute measurement is not possible. The score of a test is meaningful in the context of scores obtained by other persons. A psychological test score is a relative score. It is therefore necessary to develop norms for tests. They help to interpret test scores.

Standardization: Standardization is mainly concerned with establishing collectiveness of the tool in various conditions. This is carried out by finding validity, reliability and objectively of the tools. In other words standardization also includes establishing ways and conditions for administering the test (e.g., time, instruction, scoring, interpretation). It is systematically done and described in the test manual. It helps to obtain meaningful data.

3.   Projective Tests/Techniques

This includes a variety of tasks which are unstructured or ambiguous. The performance of a person on these tasks cannot be used in any direct manner. The performance is viewed as projection of the psychological attribute under consideration.

Characteristics of psychological tests

In other words these tests provide indirect assessment of the psychological property and the investigator interprets the obvious behavioural expression or performance. Thus what a person says or does is not accepted at its face value. The hidden meaning is more important than what is apparent. Some of the famous projective tests include Rorschach Ink Blot Test and Murray's Thematic Apperception Test (TAT). In the first test a person is shown a set of ink blots and is required to identify what the blot represents or what are various objects that are seen. The responses obtained from a person are used to discover his/her personality. This test is frequently used in clinical setting. The TAT consists of a set of pictures and the respondent is required to write about the pictures. These stories are then interpreted to understand the personality of the person.

2.5 ▶ Ethical Condideration in Psychological Studies

Psychological studies are done with human beings. It is therefore necessary to follow certain principles so that no harm is done to the participants. Some of the accepted principles are as follows

1. **Informed consent:** The investigator can conduct a study on other persons only after obtaining their prior permission to do so.

2. **Confidentiality:** The findings of research remain confidential and are not disclosed with anybody. 3. Debriefing: If some kind of manipulation or deception has been done in the study the researcher has the duty to clarify that to the participants after completing the study.

4. **Right to withdraw:** The participants have a right to withdraw from the study if they desire to do so.

5. **Responsibility:** The researcher has to bear the responsibility of any harm done to the participants during the course of study. Today it is a common practice to have Ethics Committees which examine ethical aspects of research before it is undertaken by the researcher. The use of tests in clinical setting is made for certifying people in terms of mental disorders. It should be done with proper care and by trained persons only. It should not be misused.

2.6 ▶ Need of Statistics In Psychology

Statistics is a branch of mathematics. It deals with collection, classification, description and interpretation of quantitative data. In psychology, statistics is used for:

*   describing behaviour, and

- predicting behaviour.

When the statistics is used for describing behaviour, descriptive statistics is used. When it is used for explaining behaviour, inferential statistics is used.

Descriptive statistics are the numbers which are often used to describe a variable. The major descriptive statistics are the measures of central tendency (mean, median mode), measures of variation, and correlation.

Inferential statistics are used in experiments or investigations which are designed to make generalization about population on the basis of a sample. There are many inferential statistics. 't' test is one of those.

Functions of Statistics serve many purposes. Important ones are as follows:

i.   Data and information can be presented briefly and precisely.

ii. Results obtained are more accurate and objective.

iii. Analysis of data is made more scientific.

iv. General conclusions can be arrived at.

iv. Comparative studies are made possible.

v.   Relationship between two or more variables can be investigated. (vii)Prediction about behaviours can be made.

2.7 Some Basic Statistical Concepts

When a large set of data is collected, it is usually presented in a condensed form in a frequency distribution table making it more meaningful and understandable. Frequency distribution table is the primary stage of statistical analysis.

Frequency Distribution

Suppose you have given a test to a class of 25 students and obtain the following scores:

10, 7, 6, 5, 5, 6, 8, 9, 3, 6, 8, 7, 4

8, 9, , 5, 7, 4, 9, 6, 6, 11, 10, 8, 9, 8, 3

In the above distribution of scores the highest score is 11 and lowest score is 3.

Thus the entire group has scored in between these two limits. The above data can be presented in the form of a Table where the scores and the frequency of their occurrences are shown. The able shows that maximum numbers of students are in the score range of 6 – 8.

A tally mark (I) is used for one score and tallies are done in a duster of 5 scores.The fifth tally mark cuts the first four tally with a slanting line (/). These clusters help us in counting large numbers.

Score	Tally	Total	Score	Tally	Total	Score	Tally	Total
3	II	2	6	~~IIII~~	5	9	III	4
4	II	2	7	III	3	10	II	2
5	III	3	8	~~IIII~~	5		II	I	1

Methods which are used to summarize the characteristics of the data are called measures of central tendency. These are the measures that depict the tendency of the distribution of scores. Let us study them.

(a) **Mean:** Mean is the most popular and important measure of central tendency.It is also known as 'arithmetic mean'. For psychological research, the mean is very useful because it provides the basis for calculating other statistics like standard deviation and correlation and describes the summary characteristics of the variables measured.

For instance, you must have noticed that whenever any Cricket Series is played people stick to their T.V. sets. Very often in the second part of the match a caption occurs on the TV screen as 'Run Rate' — Present and Run Rate — Expected.

The Run Rate is the average score per over.

The mean is the weighted average of all the raw scores. It is computed by totalling all the raw scores and then dividing by the number of scores together. For example if we have the 7 scores like: 10, 20, 20, 40, 50, 10, 10

The mean can be computed with this method:

N (Number of scores) = 7

10 + 20 + 20 + 40 + 50 + 10 + 10 =

160

7

= 22.86

The mean (M) represented by

(pronounced as "X bar")

Individual score is denoted by "X"

Total number is denoted by "N".

(b) **Median:** The median is the value that divides a group of scores into two equal parts, one part comprising of all values greater and the other comprising of values less than the median. Median is a positional average and is not affected by the magnitude of scores. It is easy to understand and calculate.

Example: The median for the following scores is 25 :

12, 20, 23, 23, **25**, 26, 28, 35, 40

There are four scores below 25 and four above scores above 25.

(c) **Mode: The mode is that score which occurs maximum number of times in a given series of scores.** The word mode has been taken from French language which means fashion, hence mode is the most frequent or 'popular' number. The mode in the following scores is 20:10, 15, **20, 20, 20**, 35 and 35

It is easiest to calculate. Mode is frequently used in business, weather prediction, fashion etc.

(d) **Correlation: Correlation is a method of numerically showing how closely related are any two sets of variables.** In a large number of instances two variables always tend to fluctuate in the same or in the opposite direction. When it is found that a relationship exists it is called "correlation". When scores in one

variable change in the same direction as those in the other or in the inverse direction— correlation (relationship) is said to exist.The score through which the psychologists express the relationship between two variables is called the **coefficient of correlation**. It is an index which indicates the quality as well as quantity of relationship. With the variables three possible relationships are possible — positive, negative and zero/ no relationship.Magnitude of correlation ranges between – 1.00 to +1.00. The range of correlation, coefficients can be interpreted in the following ways:

Co-efficient Relationship

.00 to + .20 negligible

+ .21 to + .40 low

+ .41 to + .60 moderate

+ .61 to + .80 high

+ .81 to + .99 very high

+ 1.00 perfect

This is a range of positive correlation. Similar range exists for negative correlation,which means scores in one variable change with the other in inverse direction.

INTEXT QUESTIONS ?

1. What are the measures of the central tendency?

   _____

   _____

2. What is correlation?

   _____

   _____

3. How are statistics helpful?

   _____

   _____

Inferential Statistics

When an experiment is specifically designed to measure the causal effects between two or more variables, inferential statistics are used. The main purpose of inferential statistics is to draw conclusion/results on the basis of treatment and interpretation of data. There are many types of inferential statistics like 't' test, F-test etc are used for this purpose.

WHAT YOU HAVE LEARNT 👍

❐ The goals of psychological studies are: description, explanation, prediction and control.

❐ Basic research is related to developing theories and applied research deals with problem solving.

❐ Experiment helps to find the cause and effect relationship. It is observation under controlled conditions.

❐ An experiment has various parts. It starts with a hypothesis which is the possible explanation. Variables are measurable attributes of objects and people which the experimenter observes, manipulates, and controls.

❐ There are various steps in the experimental method which have to be followed.They are stating the problem, forming of hypotheses, sampling, design of the study, material, controls, instructions, results and discussion, and generalization.

❐ Non-experimental techniques are used to obtain descriptions of behaviour.Some of the techniques are observation, surveys, case study, introspection, correlation etc.

❐ The psychological tools include questionnaire and interview, psychometric test, projective test/technique.

❐ Statistics is used by the psychologists to judge the significance of research results.It is of two types: descriptive and inferential. The descriptive statistics deal with summarizing the data and inferential deal with drawing conclusions about population on the basis of sample.

❐ Statistical methods which are used to summarize the characteristics of the data are called measures of central tendency. Mean, median, mode and correlation are frequently used descriptive statistics.

✎ TERMINAL EXERCISE ✎

1. What are the goals of doing psychological studies?

2. What are the different steps in planning an experiment?

3. What are the tools used by psychologists in understanding human behaviour?

ANSWERS TO INTEXT QUESTIONS

2.1

1. (a) systematic, unbiased (b) shared, replicated, (c) objective

2.2

1. True
2. False
3. True
4. False

2.3

1. A variable that has been manipulated by the experimenter to know its effecton dependent variable
2. Description, Explanation, Prediction, Control

2.4

1. Mean, median, mode
2. Correlation is a method of numerically showing the relations between two variables.
3. Refer to section 2.8 to frame your answer.

TERMINAL EXERCISE

1. Refer to section 2.3
2. Refer to section 2.4
3. Refer to section 2.6

BIOLOGICAL AND CULTURAL BASES OF HUMAN BEHAVIOUR

3

INTRODUCTION

The most advanced organisms among all living things on this planet are humans, or homo- sapiens. In contrast to other species, they are able to walk erect and have larger brains relative to body weight and more specialised brain tissues. Their ability to engage in a variety of sophisticated behaviour is due to the traits that have evolved over millions of years. Researchers have tried to understand how the functioning of the nervous system, especially the brain, interacts with complicated human activity. They have endeavoured to identify the brain substrates of ideas, emotions, and behaviour. You can better grasp how the brain, environment, and behaviour interact to produce specific types of behaviour by being aware of the biological components of human beings.

In this chapter, we provide a broad overview of the nervous system from an evolutionary standpoint. The anatomy and physiology of the nervous system will also be covered. You'll discover the endocrine system's impact on the behavior of the people. You will learn more about the concept of culture and how it relates to understand the behaviour in this chapter. The analysis of the enculturation, socialisation, and acculturation processes will come next.

OBJECTIVES

After studying this chapter, you would be able to

● *understand the evolutionary nature of human behaviour,*

● *describe the structure and functions of cell and neuron;*

● *describe the structure and functions of nervous system;*

● *describe specific areas of the brain and their related control of behaviour;*

● *relate the functions of nervous system and endocrine system to behaviour,*

● *explain the role of genetic factors in determining behaviour,*

● *understand the role of culture in shaping human behaviour,*

● *relate biological and socio-cultural factors in understanding human behaviour. and*

● *understand the nature of socialization and acculturation processes focus on behavior in terms of gender identity.*

3.1 Evolutionary Nature of Human Behaviour

You must have noticed that people vary in terms of their physical and psychological make-up. The interplay of a person's genetic potential and environmental requirements creates their individuality.

There are millions of species of organisms on this earth, and they differ in a wide range of ways. These species, according to biologists, did not, always, exist in this form; instead, they developed from earlier forms to become what they are now. According to estimates, modern humans began to take on their characteristics about 200,000 years ago as a result of their constant interaction with the environment.

Evolution happens when species change over time because of natural selection. Different members of a species have different traits that help them survive and reproduce. The traits that are the most helpful for survival and reproduction are passed on to the next generation. Over many generations, this process leads to the creation of new species that are better adapted to their environment. This is like how breeders select the strongest and fastest horses to breed, so they can create even stronger horses. "Fitness" means how well an organism can survive and pass on its genes to the next generation.

Modern humans are different from their ancestors in three important ways: they have a bigger and more developed brain that allows them to do things like think, remember, solve problems, and communicate using language, they can walk on two legs, and they have n a hand with an opposable thumb that lets them use tools. These changes happened thousands of years ago.

Our behaviors are more complex than other animals because our brain is larger and more developed. This is shown by the fact that our brain weights more compared to our body weight than any other species (even elephants). Also, the part of our brain responsible for thinking (the cerebrum) is more advanced than other parts of the brain.

These changes happened because of the demands of our environment. Some behaviors, like finding food, avoiding danger, and protecting our young, are important for survival and passing on genes to the next generation. Traits that help us meet these objectives become more common over time through evolution. Environmental demands lead to biological and behavioral changes that happen slowly over many generations.

3.1 Cell - The Basic Unit of Life

Have you ever watched a building being built from bricks? An architect designs the building, and a mason puts the bricks together one by one until the building is finished. Our bodies are similar, but they're made up of cells instead of bricks. Cells are the smallest unit in a human body, and every living thing, whether it is a plant, animal, or human, is made up of these small units. Cells are a little bit different between different living things and even different parts of the same living thing. All cells have a fluid called cytoplasm and a nucleus, and they are surrounded by a cell membrane. The cells work together and communicate with each other to make life possible for all living things.
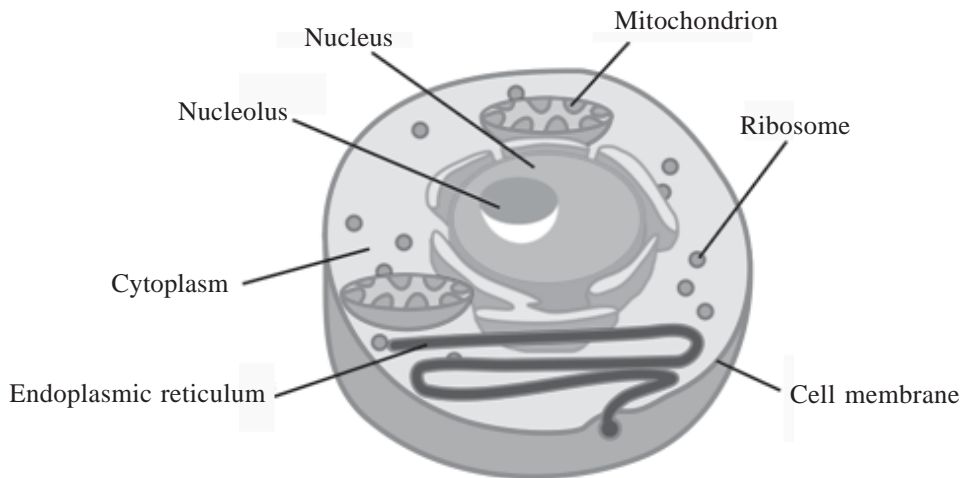
Fig. 3.1 : *Structure of a Cell*

3.3 The Neuron

The nervous system is made up of cells called neurons and glia. Only neurons send information from one place to another in the body, which is important for things like watching a sunset, enjoying music, or solving problems. Neurons collect information from the environment through receptors and use it to make things happen in the body. They can also store information and affect our behavior. Neurons make up half of the brain's size, while glia makes up the other half. Most neurons have three parts: the cell body, dendrites, and axons.
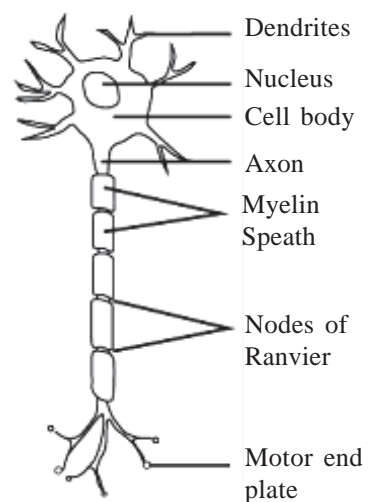
Fig. 3.2: *The Structure of Neuron*

(1)   The biggest part of a neuron is called the soma or cell body. It controls the cell's metabolism and upkeep, and also receives impulses from other neurons. Inside the cell body is the nucleus, which produces the chemicals needed to send signals.

(2)   Dendrites are the branches that come out of the cell body and spread in complicated ways. Neurons get a lot of their information through dendrites, which connect to other neurons through synapses. The cell sending information releases chemicals that affect the receiving cell's activity. Information travels from the synapses to the dendrites or cell body, but not the other way around.

(3)   The axon is a long fiber that extends away from the cell body. Axons carry signals to dendrites, other neurons, or muscles and glands. Axons create pathways in the central nervous system (CNS). The axons are covered by a protective coating called myelin sheath, which is made up of glial cells.

The Nerve Impulse

Information is transmitted by electrical signals called nerve impulses that travel between neurons. These impulses are directed to the particular regions of the brain responsible for processing sensations. The nerve fibers, or axons, do not, themselves, convey sensations such as pain or cold; rather, these sensations are only perceived once the information has arrived in the brain.
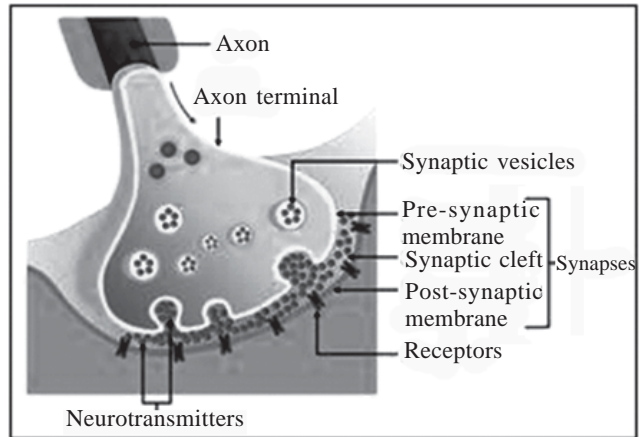
Fig. 3.3: *Transmission of Nerve Impulse through Synapse*

Synapse

Synapses refer to the areas where electrical signals move from one neuron to another. These junctions serve as connections between the neurons and the transmission of signals occurs through the synaptic cleft or gap. The axon terminal serves as the sending end of the synapse, while the tips of the dendrite branches function as the receiving end. Neurotransmitters are the chemical substances responsible for facilitating the transmission of signals at synapses.

Types of Neurm

There are two primary types of neurons, namely receptor neurons and motor neurons, which have different functions. Receptor neurons are responsible for carrying sensory information into the nervous system through our senses. On the other hand, motor neurons execute the brain's commands for voluntary muscle movements that we can consciously control, such as chewing, walking, and writing. Reflex actions are mediated by the spinal cord, while breathing and eye blinking are examples of involuntary actions that are controlled by motor neurons.

INTEXT QUESTIONS ?

1. How are human beings different from other animals?

2. What is the basic unit of life?Describe the human cell.

3. What are the different cells in nervous system and what are their functions?

4. What are called synpses?

5. Explain breifly about motor neurons and receptor neurons.

6. Fill in the blanks :

(i) An information is carried from one neuron to another in the form of _____

(ii) The idea of evolution was first given by _____.

(iii) The neuron has three parts. They are _____, _____and_____.

The nervous system is made up of numerous neurons that receive, process, and communicate information, and is essential in regulating all bodily functions. It consists of two primary divisions: the central nervous system and the peripheral nervous system.

Nervous System

```
                          Nervous System
                                |
        ┌───────────────────────┴───────────────────────────┐
Central Nervous System (CNS)              Peripheral Nervous System (CNS)
                                          (Carries impulses to and from CNS)
```

Central Nervous System (CNS)	**Peripheral Nervous System (CNS)** (Carries impulses to and from CNS)

Brain — **Spinal Cord** (Controls reflex actions, conveys impulses)

Somatic Nervous System — **AutonomicNervous System (ANS)** Pair of chains of ganglia, close to or embedded in the organs.

Craninal nerves (12 pairs) **Spinal nerves (13 pairs)**

Cerebrum Controls conscious and unconscious mind, intelligence, memory, reson, etc.

Cerebellum Maintains balance of the body

Medulla oblongata Controls involuntary actions - heart beat breathing, peristalsis

Sympathetic Accelerate heart beat, dilates pupil, constricts blood vessels, releases sugar from liver.

Parasympathetic Restores normal body condition

Fig 3.4: *Divisions of the Nervous System*

3.4.1 The Central Nervous System

The Central Nervous System comprises of the spinal cord and the brain, which is protected by the skull. The spinal cord is a narrow column starting from the base of the back and extending through the neck to the base of the skull. Its primary functions include sending nerve impulses and receiving sensory information. The spinal cord acts as a relay station that transmits information from sensory neurons in the body to the brain and sends motor commands back to the muscles. It has two major components: the Gray Matter, which processes information, and the White Matter, containing axons that transmit information to and from the brain. Severe spinal cord injury can result in loss of sensation and paralysis below the point of injury.

In a scenario where someone picks up a steel glass of tea and feels the heat, the heat receptors in their skin get stimulated and send nerve impulses through neurons to the spinal cords gray matter. The information then travels through the spinal cords white matter to the brain, where it is analyzed. The brain then initiates a voluntary response, such as dropping the glass.

Structure of the Brain

It is widely believed that the human brain has developed over millions of years from the brains of lower animals, and this evolutionary process is still ongoing. The brain's structure can be examined at different levels, from the earliest to the most recent forms in evolution. The oldest structures in the brain are the limbic system, brain stem, and cerebellum, while

the Cerebral Cortex is the latest development in evolution. The human brain contains about 100 billion neurons and weighs around 1.36 kg in adults. However, the most remarkable thing about the brain is its ability to guide human behavior and thinking, not just its neuron count. The brain is organized into specific structures and regions that perform unique functions.

Brain scanning studies have shown that although

Fig.3.5: *Structure of Human Brain*

some mental functions are spread out among various brain areas, many activities are localized in specific regions. For instance, the occipital lobe is a specialized brain area responsible for vision.

To facilitate study, the brain can be divided into three parts: the Hindbrain, Midbrain, and Forebrain.

Hindbrain

The hind brain consists of the following structures:

Medulla Oblongata: The medulla, located at the base of the brain and continuous with the spinal cord, contains neural centers that regulate essential life-sustaining functions such as breathing, heart rate, and blood pressure. Due to its crucial role in regulating these functions, the medulla is referred to as the vital center of the brain. In addition to these functions, it also contains centers for autonomic activities.

Pons: The pons, which is connected to the medulla on one side and the midbrain on the other, has a nucleus (neural center) that receives auditory signals transmitted by our ears. It is thought that the pons plays a role in the sleep mechanism, particularly in the type of sleep that involves dreaming. In addition to this, it contains nuclei that impact respiratory movements and facial expressions.

Cerebellum: The cerebellum, which has a distinct wrinkled surface and is a highly developed part of the hindbrain, is responsible for maintaining and controlling the body's posture and balance. Its primary function is to coordinate muscular movements. Although motor commands originate in the forebrain, the cerebellum receives and organizes them before relaying them to the muscles. The cerebellum also stores memories of movement patterns, allowing us to perform tasks like walking, dancing, or cycling without needing to consciously concentrate on them.
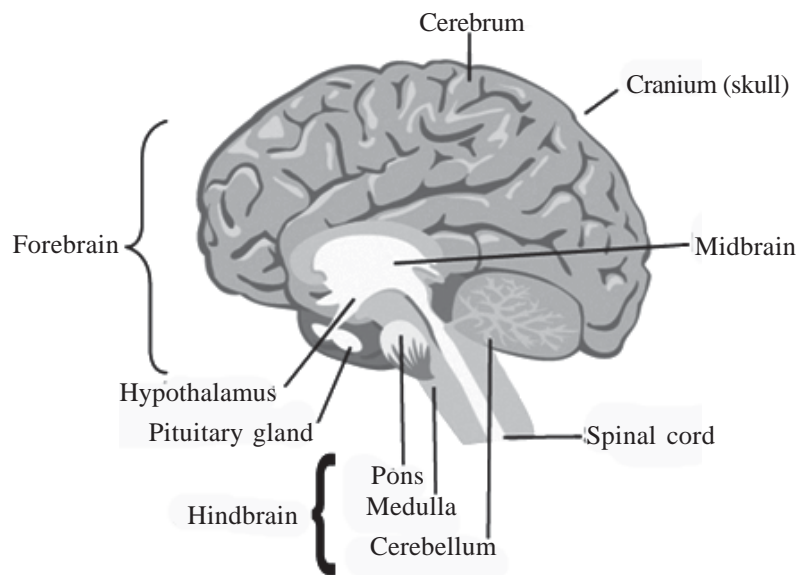
Midbrain

The midbrain, which is comparatively small, acts as a bridge connecting the hindbrain to the forebrain. It contains several neural centers that are associated with specific reflexes, as well as visual and auditory sensations. Within the midbrain, there is a crucial component called the Reticular Activating System (RAS) that is responsible for regulating our arousal levels. The RAS system makes us alert and active by managing sensory inputs and assists us in selecting relevant information from the environment.

Forebrain

The forebrain is regarded as the most crucial part of the brain since it is responsible for carrying out all cognitive, emotional, and motor activities. There are four significant components of the forebrain that we will explore: hypothalamus, thalamus, limbic system, and cerebrum.

Hypothalamus: Despite its small size, the hypothalamus is a crucial component of the brain that affects our behavior. It is responsible for controlling various physiological processes related to emotional and motivational behavior, such as eating, drinking, sleeping, temperature regulation, and sexual arousal. Additionally, it regulates and maintains the internal environment of the body by controlling heart rate, blood pressure, and temperature. Furthermore, it is responsible for regulating the secretion of hormones from various endocrine glands.

Thalamus: A group of neurons that are shaped like an egg and located on the upper part of the hypothalamus. This group works like a relay center that collects all the signals from our senses and sends them to the right part of our brain to understand. It also receives signals from our brain and sends them to the right part of our body to take action.

The Limbic System: The system is made up of various structures within the ancient mammalian brain. Its primary function is to regulate the body's internal balance by controlling key factors such as blood sugar level, blood pressure, and body temperature. It has a strong connection with the hypothalamus. Along with the hypothalamus, the limbic system includes the Hippocampus and Amygdala. The Hippocampus is significant for long-term memory, while the Amygdala is essential for emotional behaviour.

The Cerebrum: Also known as **Cerebral Cortex**, this part regulates all higher levels of cognitive functions, such as attention, perception, learning, memory, language behaviour, reasoning, and problem solving. The cerebrum makes two-third of the total mass of the human brain. Its thickness varies from 1.5 mm to 4 mm, which covers the entire surface of the brain and contains neurons, neural nets, and bundles of axons. All these make it possible for us to perform organized actions and create images, symbols, associations, and memories. The cerebrum is divided into two symmetrical halves, called the Cerebral Hemispheres. Although the two hemispheres appear identical, functionally one hemisphere usually dominates the other. For example, the left hemisphere usually controls language behaviour. The right hemisphere is usually specialised to deal with images, spatial relationships, and pattern recognition. These two hemispheres are connected by a white bundle of myelinated fibers, called Corpus Callosum that carries messages back and forth between the hemispheres.

Cerebral cortex has also been divided into four lobes - Frontal lobe, Parietal lobe, Temporal lobe, and Occipital lobe. The **Frontal lobe** is mainly concerned with cognitive

functions, such as attention, thinking, memory, learning, and reasoning, but it also exerts inhibitory effects on autonomic and emotional responses. The **Parietal lobe** is mainly concerned with cutaneous sensations and their coordination with visual and auditory sensations. The **Temporal lobe** is primarily concerned with the processing of auditory information. Memory for symbolic sounds and words resides here. Understanding of speech and written language depends on this lobe. The **Occipital lobe** is mainly concerned with visual information. It is believed that interpretation of visual impulses, memory for visual stimuli and colour visual orientation is performed by this lobe.

Researchers in physiology and psychology have made an effort to link particular functions to particular brain areas. They discovered that no brain function is carried out solely by one region of the cortex. Normally, other regions are involved, but it is also true that some functions are localised, meaning that for a given function, a specific part of the cortex has a greater significance than the other sections. For instance, when you are driving a car, your occipital lobe helps you see the road and other cars, your temporal lobe helps you hear the horns, your parietal lobe helps you with numerous motor functions, and your frontal cortex assists you in making judgments. The entire brain functions as well as coordinated unit in which different parts contribute their functions separately.

Spinal Cord

Inside the spine, the spinal cord is a long, rope-like collection. It has a free end at the tail and one end that is attached to the brain's medulla. Its construction is consistent over its entire length. Association neurons and other cells are found in the grey matter mass that resembles a butterfly and is located in the spinal cords core. The white matter of the spinal cord, which is made up of the ascending and descending neural tracts, surrounds the grey matter. The brain and the rest of the body are connected by these tracts (groups of nerve fibres). The spinal cord functions as a massive cable that transmits countless messages to the central nervous system. There are two main functions of the spinal cord. Firstly, it carries sensory impulses coming from the lower parts of the body to the brain and motor impulses originating from the brain to all over the body. Secondly, it performs some simple reflexes that do not involve the brain. Simple reflexes involve a sensory nerve, a motor nerve, and the association neurons of the grey matter of the spinal cord.

3.4.2 The Peripheral Nervous System

The Peripheral Nervous System (PNS) is a group of neurons that transmit information between the Central Nervous System (CNS) and the body. Its main function is to carry nerve impulses to and from the body. The PNS has two parts, the Somatic system and the Autonomic system.

The somatic system connects the brain and spinal cord to the voluntary muscles in the body, and it includes sensory and motor neurons. Sensory neurons send incoming signals to the CNS from receptor cells located in sense organs like the eyes and ears. Motor neurons transmit outgoing signals from the spinal cord and control skeletal muscles for body movement.

The autonomic system controls involuntary actions in the body, such as those of the heart, stomach, and liver, and it has two subdivisions:

The sympathetic system

The parasympathetic system

The sympathetic system dominates in emergency situations, and it controls our emotions by increasing blood sugar level, heart rate, and blood pressure while slowing digestion.

The parasympathetic system dominates in relaxed situations, and the two systems often work together to enable adaptation.

Reflex Action

A reflex is an involuntary response that happens quickly in response to a specific type of stimulus. It occurs automatically without conscious thought from the brain. These reflex actions are passed down through our nervous system by means of evolutionary processes, such as the eye-blink reflex, which causes our eyelids to close suddenly when an object approaches our eyes. Reflexes have evolved to protect organisms from potential threats and maintain life. Although the nervous system performs several reflex actions, some of the most well-known reflexes include the knee jerk, pupil constriction, withdrawal from extreme heat or cold, breathing, and stretching. Most reflex actions are controlled by the spinal cord and do not require input from the brain.

INTEXT QUESTIONS ?

(A) Answer the following questions:

1. What are the different divisions of human nervous system?
2. Explain briefly about the limbic system.
3. What is the crucial component of human brain? How does it affect our behavior?
4. What is a reflex action?

(B) Fill the blanks with correct words.

1. The significant components of forebrain are _____, _____, _____and _____.
2. The peripheral nervous system carries the _____ to and from the body.
3. The central nervous system consists of the _____ and _____.
4. The peripheral nervous system carries the _____ to and fromthe body.
5. The crucial component in the mid brain is _____.

3.5 The Endocrine System

Hormones are substances that are responsible for causing diseases when they are present in either high or low levels in the body. For instance, diabetes results from a low level of the hormone insulin, while the hormone thyroxin controls behavior. Hormones are chemicals that are released directly into the bloodstream by endocrine glands, which are a group of

ductless glands that control various body functions. The endocrine glands release chemicals that send signals through hormones directly into the bloodstream.

The endocrine system comprises several major glands, including **the pituitary gland**, which is located in the brain and is referred to as the "**master gland**" because it releases hormones that stimulate and regulate the hormonal action of other endocrine glands.

The thyroid gland, located in the neck, releases the hormone called **thyroxine** which controls metabolism and affects energy levels and mood.

The adrenal gland, which is located above the kidney, releases the hormone **adrenaline** during emergency situations.

The pancreas, which is located near the stomach, produces **insulin** that regulates blood sugar levels.

The gonads, such as the male testes and female ovaries, control sexual development and behavior by producing hormones such as **testosterone** and **estrogen**. Both of these hormones are present in both sexes, but androgens like testosterone are generally found in higher levels in males, while oestrogens like oestradiol are generally found at higher levels in females.

The Emdpcrome System in Humans

Endocrine glands are ductless glands that **secrete hormones** (chemical messengers) which carry **messages to particular organ or tissue** through the blood stream.
These glands control **growth, development, metabolism and reproduction.**
Endocrine glands secrete hormones in **response to external and internal stinuli**

Glands	Hormones	Functions
Pituitary	Growth hormone	* Regulates growth * Controls the functioning of endocrine glands
Thyroid	Thyroxine	* Controls the metabolism rare * It also brings about balanced growth
Parathyroid	Parathormone	* Controls calcium balance of the body
Adrenal	Adrenaline	* Prepares body for emergency
Pancreas	Insulin	* Controls glucose level of the blood
Testes	Testosterone	* Controls growth and development of male reproductive system
Ovaries	Oestrogen Progesterone	* Controls growth and development of female reproductive system

---

3.6 Genetic Influence on Behaviour

The concept of heredity refers to the inheritance of certain traits from parents to offspring, such as eye color or hair type. This process is studied in the field of genetics, which examines how heredity works. Behavioral genetics specifically looks at the inheritance of behavioral traits.

Each living organism is unique, with its own physical appearance and behaviors that vary from individual to individual. These differences can be attributed to an organism's genotype and phenotype, which are influenced by both genetics and the environment. Genetics plays a significant role in an individual's physical development, and it is believed that genetic factors set limits on an organism's capabilities.

Gregor Mendel's work on genetics laid the foundation for the present-day genetic theory, which shows that parents pass on their characteristics to their offspring through genes. These genes may produce visible traits in the offspring, or they may be passed on for future generations. siblings may inherit different characteristics from the same set of parents.

The union of two cells, the egg from the mother and the sperm from the father is the beginning of a new individual. These two cells like all others carry within them material that forms a definite number of rods like units called *chromosomes*. The chromosomes carry hereditary factors or genes. The cell nucleus that contains the *chromosomes* is made up of deoxyribonucleic acid (DNA) in combination with protein compounds. Chromosomes are pairs and each chromosome contains 1000 or so genes that also occur in pairs.
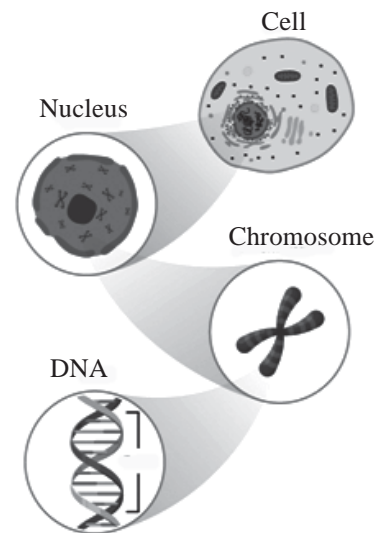
Fig.3.6: *Cell, Nucleus, Chromosome and DNA*

INTEXT QUESTIONS ❓

1. What are endocrine glands? Name some endocrine glands.

2. Which gland is called as master gland and Why?

3. What is the role of thyroxine in our body?

4. What are chromosomes and what are they made up of?

5. What is the hormone secreted by pancreas and what is its function?

1.1 Culture and Behaviour

The behavior of human beings is significant within the context of their culture. Different cultures provide shared meanings and practices that guide individuals in making choices and behaving in various situations. Patterns of behavior found in different cultures are a result of interactions among people and are encoded in different forms such as traditions, customs, and cultural artifacts. These codes help in interpreting and making sense of behavior within a particular culture. Cultures often have specific beliefs and values that become part of the social consciousness of the community.

Cultural change occurs when human efforts alter existing natural things. Culture represents what is contributed by human beings and includes subjective and material aspects. Culture is often transmitted from one generation to another and includes values, norms, roles, tools, sculptures, and other artifacts. People are born into different cultures that provide stimuli, languages, and practices that shape their behavior. The diversity in behavior observed across societies can be attributed to cultural diversity. Culture can selectively facilitate certain behavior patterns and requires members to inculcate them, providing opportunities, and constraints.

Human behavior is influenced by both biological potential and environmental factors. These two factors jointly determine behavior within a culture, which shapes the direction or shape of the behavior. For instance, families, schools, and toys differ across cultural settings and demand different behavior patterns and skills. Culture interacts with other cultures and is influenced by them, leading to both continuity and change.

3.8 The Processes of Socialization and Acculturation

Socialization refers to the deliberate efforts of agencies such as parents, media, schools, peer groups, and religious institutions to shape individuals and develop specific behavioral patterns that align with society's expectations. Parenting styles vary in degree of affection and control and can impact a child's healthy personality development. Children learn by imitation, modeling significant others, and identifying with important people around them.

The process of acculturation describes the influence of a new or different culture on an existing culture, which may result from colonization, invasion, trade, travel, or migration. Acculturation involves learning new things and socializing in different ways, and can be stressful. Responses to acculturative stress may include assimilation, maintaining a separate identity, or a new kind of integration that combines elements of old and new culture. In some cases, people may experience marginalization and separation. The British impact on language, dress, and education in Indian society is an example of acculturation.

INTEXT QUESTIONS ?

1. What is the role of culture in shaping human behavior?

2. What are the different agents of socialization?

3. Acculturation involves learning and _____ and _____ in different ways.

4. Children mainly learn by _____.

WHAT YOU HAVE LEARNT 👍

❑ Human behavior is a result of evolution, heredity, and environment. Evolution leads to changes in species, and human evolution is characterized by bipedalism, brain development, and language.

- The body and brain function are studied with the brain itself. Sensations are received through senses and controlled by the brain. All organisms are made up of cells, which are the basic unit of life.

- The nervous system is made up of neurons, which transmit information between the brain and the body. The nervous system includes the central nervous system (CNS) and the peripheral nervous system (PNS).

- The PNS includes the somatic and autonomic nervous systems. The somatic system controls actions and receives information from the senses. The autonomic system mobilizes the body in response to threats and helps it return to normal.

- The cerebral cortex has four lobes with different functions. The right and left hemispheres of the brain have specialized functions.

- The endocrine system controls bodily functions through hormones.

- Genetics studies how traits are passed on from parents to offspring. Psychological traits like intelligence and personality have a hereditary component.

- Human behavior can be understood in a cultural context. Culture includes meanings and practices transmitted across generations.

- Socialization and contact with other cultures lead to the process of acculturation, which can lead to assimilation, isolation, or integration.

❧ TERMINAL EXERCISE ❧

1. Explain briefly about the different divisions of nervous system.
2. Describe the main parts of human brain and its functions.
3. Name the various endocrine glands and the hormones secreted by them.
4. How are the behavioural characteristics transmitted from parent to their children?
5. Describe the role of culture in shaping human behavior.
6. What is meant by acculturation?

ANSWERS TO TERMINAL PROBLEMS

KNOWING THE WORLD AROUND US

4

INTRODUCTION

Both humans and animals are capable of understanding their surroundings, hearing sounds, tasting various food items, smelling various fragrances, feeling the cold and heat of the outside environment, and feeling pain when injured. The presence of various sensory organs is the organism's most notable feature, whether it be human or non-human. These sense organs, such as the eyes, ears, tongue, nose, and skin, serve as our windows to the outside world. These sense organs are each selectively responsive to certain stimuli. For instance, the ear is sensitive to sound, and the visual sense organ (the eye) is solely sensitive to light energy. Humans generally rely on their visual, aural, and tactile senses to gather the majority of their information.

OBJECTIVES

After studying this lesson, you will be able to

- *understand and describe the structure and function of various sense organs;*

- *explain how the organism gathers information about the external and internal world;*

- *describe the physical nature of stimuli and understand the nature of different sensory processes.*

- *analyse the relationship between physical stimuli and psychological responses to the different stimuli.*

4.1 Knowing The World

Our environment is diverse and filled with objects, people, and events that we encounter every day. If you look around the room you are in, you will see various items such as chairs, tables, books, bags, and pictures on the wall. These objects differ in size, shape, and color. If you explore other rooms in your house, you will discover even more objects, like pots and pans, cupboards, and televisions. Outside of your house, there are even more objects to discover, such as trees, animals, and buildings. Our senses allow us to experience and perceive these objects effortlessly. When someone asks us how we know that objects exist, we answer that we see or experience them with our senses. Our sense organs, such as our eyes and ears, collect information about the external environment and our body. Our knowledge of the world is based on the information gathered by our senses. However, the objects and their qualities must capture our attention to register as sensory information. The brain processes this information and constructs meaning out of it, using the three interrelated processes of sensation, attention, and perception. These processes are essential elements of cognition.

4.1.1 Nature and Varieties of Stimuli

The world around us is filled with various stimuli, some of which can be seen, heard, smelled, tasted, or touched. Each of these stimuli provides us with different types of information, and to process them, we have specialized sense organs. As humans, we possess seven sense organs, also known as sensory receptors, which gather information from the environment. Five of these sense organs collect information from the external world: eyes for vision, ears for hearing, nose for smell, tongue for taste, and skin for touch, warmth, cold, and pain. Specialized receptors within our skin detect warmth, cold, and pain. In addition to these five external sense organs, we also have two deep senses: the kinesthetic and vestibular systems, which provide information about our body position and movement. Together, these seven sense organs register ten different varieties of stimuli. For instance, our eyes can register brightness, color, and other qualities of light, while our ears can register loudness, pitch, and other qualities of sound. All these qualities of stimuli are detected and registered by our sense organs.

4.2 Vision, Audition and Other Senses

The human body possesses a total of seven sense organs, which together make up the information gathering system. Of these, five are external and collect information from the surrounding environment, including vision, hearing, smell, taste, touch, warmth, cold, and pain. The other two sense organs are known as deep senses, which help us maintain body equilibrium and provide information about body position and movement. This section explores the structure and function of these sense organs and how they enable us to gather information from both the external and internal worlds.

When external stimuli, such as light, are detected by a specific sense organ, such as the eye, the specialized receptors within the organ convert the physical energy into neural signals via a process called transduction. These signals are then transmitted to a specific area of the brain where the pattern of neural activity is recognized. In other words, the sense organ encodes the physical information and sends it to the brain for decoding and further processing, ultimately leading to perception. This sequence of events is illustrated in Fg.4.1.
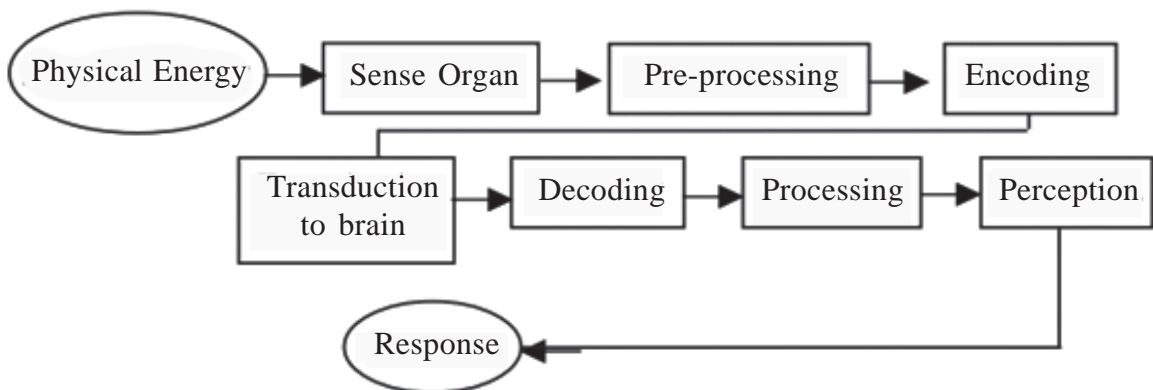

Fig. 4.1: *The sequence of processing of stimulus information*

1. Which of these sense organs provide information about our body position and movement?

   A. Eyes   B. Nose

   C. Kinesthetic &Vestibular systems   D. Tongue

2. The human body possesses _____ sense organs

   A. 10   B. 7   C. 5   D. 8

3. A physical stimulus is converted into a neural signal by a process called————

   A. Transmission   B. Transformation

   C. Transduction   D. Signaling

4.3 Vision

Among the different senses in human beings, vision is the most highly developed and commonly used sense. The brain has more resources allocated for vision than any other sense. It holds more importance over information gathered from other senses. For instance, what we see holds greater significance than what we hear. In our daily activities, within the external world, we rely on vision more than all other senses put together, accounting for about 90 percent of our interactions.

4.3.1 Physical Nature of Visual Stimuli

As previously explained, every sense organ is receptive to a particular physical stimulus, which is known as the adequate stimulus. For instance, the sense of touch and pressure can be stimulated by physical contact with the skin. Likewise, the eyes are only receptive to light waves, which are the adequate stimulus for them. The visual receptors, rods and cones, are activated by these light waves. Our eyes receive light that is reflected by objects in our surroundings, and this helps us perceive various visual characteristics such as shape, depth, texture, color, and so on.
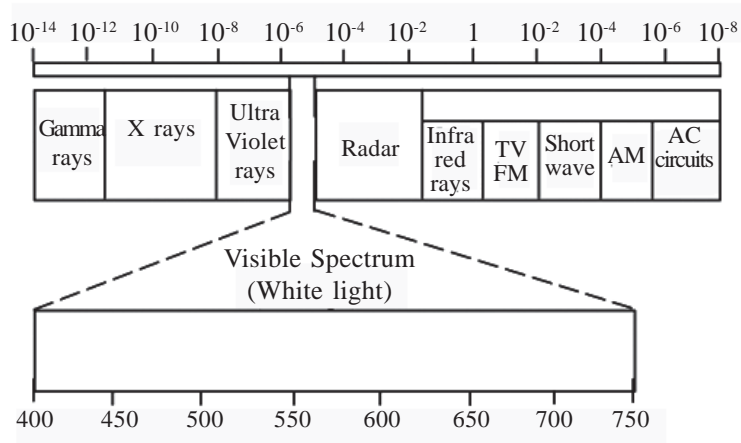
Fig. 4.2: *Visible Spectrum*

The range of light that can be seen by the human eye is between just less than 400 nanometers to approximately 750 nanometers. However, the eye's sensitivity to different wavelengths of light is not uniform across the visible spectrum. Figure 4.2 shows that the lower end of the spectrum includes Ultraviolet rays, while the upper end includes Infrared rays, which are both invisible to the human eye. Exposure to high amounts of Ultraviolet and Infrared rays can cause harm to the eyes.

4.3.2 Structure of the Eye

The human eye is about 25 mm. in diameter and weighs about 7 gms. And it consists of four major parts:

i.   **the cornea**

ii. **the iris**

iii. **the lens**

iv. **the retina**
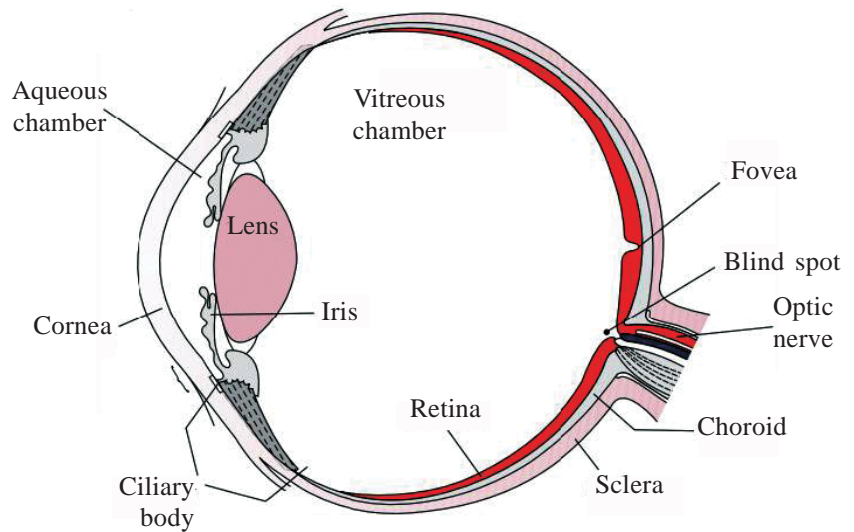
Fig. 4.3: *Structure of the human eye*

The eye allows light to enter through its sharply curved cornea, a transparent covering in front of the eye, and the light is focused on the retina. The pupil, which appears black, is located behind the cornea, and the amount of light entering the pupil is regulated by the iris, a ring of muscle with pigmentation that gives the eye its color.

The iris contracts and dilates reflexively to regulate the amount of light reaching the retina in response to external brightness conditions, allowing the eye to adapt to changes in light levels. This adjustment to the different intensities of light is called visual adaptation. The light rays then pass through the lens, which is modified by the ciliary muscles to accommodate for distance and focus on the retina. This process is similar to how a camera focuses.

The cornea and sclera protect the eye from injury and maintain its shape, while the choroid, a middle layer of dark material rich in blood vessels, and the delicate inner layer called the retina, containing the photo-receptors and nerve tissues, are crucial components of the eye.

4.3.3 The Eye

The light passes through two chambers, the anterior (aqueous chamber) and posterior (vitreous chamber), which hold watery fluids known as aqueous and vitreous humor respectively. As the light penetrates the various layers of the retina, it ultimately reaches the visual receptors-

the rods and the cones. The retina has about 120 million rods and 6 million cones, both of which are situated near the back of the retina. These specialized receptors convert light energy into electrical signals, also known as electrical potential.

Rods are capable of Scotopic vision (low light levels). They are rod shaped, facilitating vision during dim light/ night. Cones are capable of Photopic vision (higher light levels). They are cone shaped and help to distinguish colour and other fine details.

INTEXT QUESTIONS ❓

1. Which sense organ occupies the most important and dominant position?

   A. Ear   B. Eye   C. Semi circular canals   D. Tongue

2. The adequate stimulus for each of the four sense modalities is given below. Identify the stimulus that is not the adequate stimulus for the sense modality.

   A. Vision – light   B. Audition – sound

   C. Tactile – chemical   D. Temperature – heat and cold.

3. Light rays enter the eye through _____ to finally reach the retina.

   A. Ciliary body   B. Cornea

   C. Optic nerve   D. None of the above.

4. The adjustment of the eye to the different intensities of the light is called:

   A. Convergence   B. Saturation

   C. Visual adaptation   D. Centering

5. The Rods are responsible for ─────────────

   A. Daylight vision   B. Night vision

   C. Detailed vision   D. All the above.

6. The amount of light entering the pupil is regulated by _____

   A. the cornea   B. the retina   C. the sclera   D. the iris.

4.4 Sensory Processes Other Than Vision

Until now, we have extensively covered the topic of vision and its processes. Now, we will briefly touch upon the other senses. Among the senses, apart from vision, hearing is used most frequently. The senses other than vision and hearing can be classified into four groups:

1. Cutaneous senses-that include pressure, touch, temperature (cold and warmth) and pain

2. Taste

3. Smell

4. Deep senses that include kinesthesis and vestibular.

4.4.1 Audition

The receptors in the ear respond to sound waves and generate neural signals. These sound waves are produced by changes in pressure in the atmosphere and cause the eardrum to vibrate in a pattern that matches the sound. Sound waves have two important physical characteristics: frequency and amplitude. The pitch of a sound is determined by its frequency, with higher frequencies producing higher pitches (for example, women's voices are typically higher in pitch than men's). Frequency is measured in Hertz (Hz). Young people can typically hear sounds with frequencies ranging from 20 Hz to 20,000 Hz, with the most sensitivity in the middle range. However, as people age, their ability to hear high frequencies is reduced. The intensity of a sound depends on its amplitude and is usually measured in decibels (dB).

> Some dB values are given below for you to grasp the concept of dB.
>
> Whisper – 30dB
>
> Normal conversation – 60dB
>
> Loud thunder – 120dB
>
> Jet plane take off – 140dB

Sounds above 120 dB are likely to be painful to the human ear. If the sound is produced by the great number of unrelated sound waves, it is perceived as **noise**, which we cannot analyze. The sound you hear from a jet aircraft engine or your pressure cooker is called **white noise**.

4.4.2 The Structure of the Ear

The ear has three major divisions:

i.   the outer ear, consisting of **pinna** and **auditory canal**;

ii. **the middle ear**, consisting of **ear drum** (tympanic membrane); and

iii. **the inner ear** formed by three small bones called **ossicles** namely the **malleus** (hammer), **incus** (anvil), and the **stappes** (stirrup).
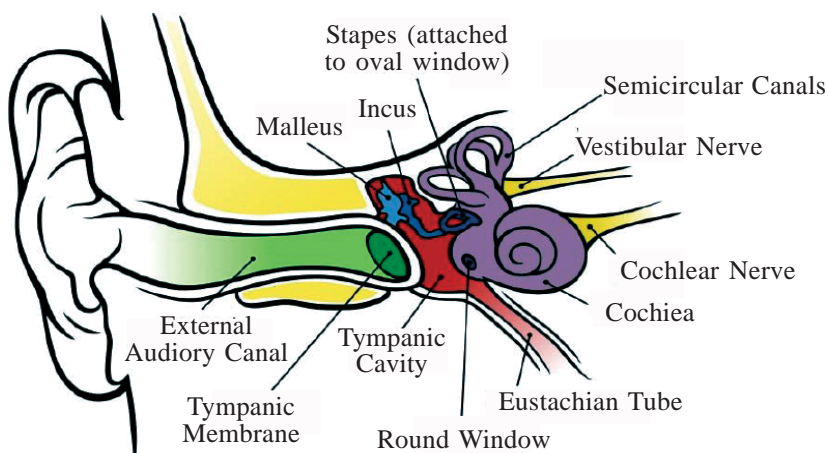
Fig. 4.4: *Structure of the human ear*

The vibration of the **oval window** creates waves in the fluid that fills the **cochlea**. As the waves travel through the cochlear fluid the **hair cells** bend to and fro. At this point the mechanical energy of the waves is **transduced** into **electro-chemical impulses** that are carried by the **auditory nerve** to the brain. The hair cells in the cochlea are the receptors for hearing, corresponding to rods and cones for vision. The auditory nerve fibers convey the auditory information through series of **relay stations** to the **auditory cortex**, located in the **temporal lobe** of the brain.

INTEXT QUESTIONS ?

(A) Match the following

1.	Frequency	A.	Decibels (dB)
2.	Ossicles	B.	Middle ear
3.	Intensity	C.	Hertz (Hz)
4.	Tympanic membrane	D.	Inner ear

(B) Choose the correct alternative.

1. The range of hearing frequency is————

    A. below 20Hz   B. 20Hz to 20000 Hz

    C. above 20000Hz   D. All the above

2. Auditory receptors for hearing are:

    A. Hair cells   B. Cochlea

    C. Tympanic membrane   D. Malleus

3. The three small bones of the inner ear are _____.

4.5 The Skin

The skin or cutaneous senses give us information about the surface of our body. Skin could be considered as a "**giant sense organ**" that covers the entire human body. Skin senses, also called **somesthetic system**, consist of:

i. Pressure and touch

ii. Temperature sensation: Cold and warmth

iii. Pain

It has been found that the skin is not uniformly sensitive throughout the body, but has differential sensitivity. That is, points of greatest sensitivity to touch, cold, warmth, and pain are differently located in the human body; some areas are more sensitive to touch, others to pain, and so on.

4.5.1 Pressure and Touch

Sensitivity to pressure varies among different body parts, with the tongue, fingertips, and hands being the most sensitive. Touch can be felt through gentle pressure on the skin or movement of body hair. Meissner Corpuscles are thought to play a role in sensing pressure in hairless areas, while nerve endings do the same for hair roots. Touch impulses are believed to be carried by free nerve endings.

4.5.2 Sensing the Temperature: Cold and Warmth

The sensation of cold and warmth is believed to be caused by the changes in the normal temperature gradient of the skin, which is the difference between the temperature of the skin surface and the temperature of the blood. It is thought that the signaling of temperature information is carried out by free nerve endings.

4.5.3 Pain

Let's discuss a different aspect of pain that we may not often consider. Although we usually don't want to experience pain, it actually plays an important role in our lives as it indicates that something is wrong with our body. Without pain, we may not even realize that we have a serious injury or illness, and it could lead to further complications. Therefore, pain can be seen as a helpful signal rather than an enemy.

Studies suggest that free nerve endings are the receptors that are activated by tissue damage, and the free nerve endings of pain receptors are specialized to respond to painful stimuli. These nerve endings are capable of detecting and conveying various bodily conditions.

INTEXT QUESTIONS ?

1. The gaint sense organ in the human body is_____.

   A. the eye   B. the skin

   C. the ear   D. the tongue

2. Which of the following receptors are not the part of pressure and touch sensation?

   A. Meissner corpuscles   B. Basket nerve endings

   C. Free nerve endings   D. Hair cell

3. Skin senses or somesthetic system consists of:

   A. Temperature sensation   B. Pain

   C. Pressure and touch   D. All the above

4.5 The Sense of State

The four primary tastes of the gustatory system, or sense of taste, are salty, sour, sweet, and bitter. Not every stimulus causes the tongue to be equally sensitive. The tongue's tip is sensitive to sweet stimuli, while the back of the tongue is sensitive to bitter stimuli. The

tongue's sides react mostly to sour stimuli, whereas the tip and some of the sides react to salty solutions.

The hair cells in taste buds serve as the receptors for taste. On average, humans have approximately 10,000 of these taste buds, which are located throughout the tongue and other areas of the mouth. Although they are spread out, they are mainly clustered together on the tongue and are known as papillae. These papillae often have grooves or moats around their edges that become filled with liquid when we eat or drink. This chemical stimulation of the hair cells within the papillae sends sensory signals to the brain, resulting in the perception of taste.
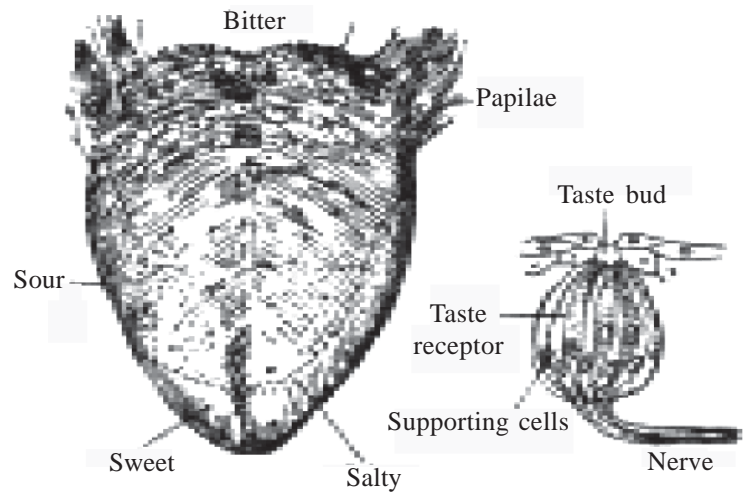

Fig.4.5: *The structure of the human tongue*

4.6 The Sense of Smell

The olfactory system, also known as the sense of smell, allows us to detect chemical compounds in the air. Of the three main senses that respond to distant stimuli, which include smell, hearing, and vision, smell is considered the most primitive. While it may be a minor sense in humans, it greatly enhances our enjoyment of food and appreciation of perfumes and deodorants. However, smell is of vital importance to many animals, particularly dogs, who use it to locate food and prey.

Olfactory receptors are found in two small patches located high up in the nasal passage, and embedded in a mucus-coated membrane known as the olfactory epithelium. When chemicals suspended in the air pass through the nasal passages, they stimulate the olfactory receptors and connect with the olfactory nerve. Humans can distinguish among approximately 10,000 different odors, with females typically more sensitive and accurate than males in odor recognition.

4.6.1 Deep Senses

A set of senses work together to provide information about an organism's movement and spatial orientation. These senses are known as the deep senses and consist of two distinct systems: the Kinesthetic system and the Vestibular system.

i.   **The Kinesthetic System:** Skeletal movement of the body is sensed through *kinesthesis*, a collective term for all the information that we get from receptors in the **muscles, tendons,** and **joints**. It provides us information about the movement of the body as well as information about bodily **posture** and **orientation**. Of course, vision helps us a lot in this respect.

ii.   **The Vestibular System:** Another group of receptors, located in the **inner ear**, signal the rotation of the head. These are receptors in the *semicircular canals* which are located within the **vestibular apparatus** of the inner ear. The three canals in the ear contain viscous liquid that moves when the head is rotated. The motion of this liquid bends hair cells that are located at one end of each **canal**. When bent these **hair cells** give rise to nerve impulses that provide information about the nature and extent of head movement or rotation. At the end of the semicircular canals are the **vestibular sacs**, which contain **hair cells** that are sensitive to the specific angle of the head. It provides information about the position of the head-straight up and down or tilted. The system responds to gravity and keeps us informed about our body's location in space.

INTEXT QUESTIONS ?

1.   The tip of the tongue is sensitive to _____ stimuli.

A. Sour   B. Bitter   C. Salty   D. Sweet

2.   The sense that respond to distant stimuli is:

A. Hearing   B. Smell   C. Vision   D. All the above

3.   Olfactory receptors are embedded in a membrane called:

A. Olfactory nerve   B. Nasal passage

C. Olfactory epithelium   D. None of the above

4.   The deep senses located in the inner ear are:

A. Kinesthetic system   B. Vestibular system

C. Semicircular canals   D. All of the above

5.   In kinesthetic system we get information from receptors in the:

A. Muscles   B. Tendons   C. Joints   D. All of the above

4.7   Mind, Brain and Consciousness

In the first part of the course, you learned about how our senses gather information from both the external and internal world. However, simply receiving this information is only half the story. The process of perception involves taking the sensory input and creating a conscious experience, such as perceiving a beautiful flower or experiencing a bitter taste. Perception will be discussed in more detail in a later lesson, but for now, we will focus on how the brain processes the information received from our senses to create this conscious experience. Typically, our conscious experience is the result of integrating information from various sensory modalities, including vision, hearing, touch, and more. In other words, our brain uses information from different senses to create a conscious sensory experience or sensation.

4.7.1 Consciousness

Firstly, our consciousness allows us to perceive and become aware of the world around us, including both external and internal events. In the ordinary waking state, we are conscious of our thoughts, feelings, and perceptions, as well as what is happening in our surroundings. However, if we were to become unconscious, we would not be aware of what is happening around us.

Secondly, the state of consciousness is not a static state and can change even during the waking state. We can perform actions both consciously and automatically. For instance, while driving a car, we may be talking to someone and not consciously aware of pressing the pedals or changing gears. In this example, the driver was conscious of the conversation, but the driving was an automatic process.

Finally, we can perform multiple tasks at once, but only if one of the tasks is automatic and does not require conscious effort. However, when learning a new task, such as driving, we need to allocate our attention and cannot perform other tasks simultaneously.

4.7.2 Computers and Human Beings

The comparison between computers and human beings is an interesting topic. Although modern computers are impressive, they cannot match the remarkable abilities of the human brain. While computers may have advantages over humans in certain aspects, such as having more memory and the ability to process numerous variables simultaneously through parallel processing, humans are limited to serial processing or performing one task at a time. For example, when reading a book that requires concentration, one cannot listen to music unless the music does not require attention. However, tasks that are well-practiced, such as driving a car, can be performed automatically while other tasks require conscious control.

It should be noted that computers cannot perform the function of thinking, at least not at present. They lack emotions, imagery, insight, desires, motives, and creativity that the human brain possesses. Computers can only perform to the extent that their hardware and programs allow them. In contrast, the human brain is capable of performing various cognitive and affective functions without limit. The most significant difference between the two is that human beings have consciousness, while computers do not.

The mind is commonly viewed as the functional counterpart of the brain, encompassing processes such as memory, reasoning, decision-making, mental imagery, and thought. While the brain has a tangible physical structure made up of neurons, the mind serves as its psychological equivalent. The cognitive actions that occur in the brain constitute the functioning of the mind. Through socialization and learning experiences, a person's inherent brain hardware is programmed to operate in certain ways.

4.7.3 Levels of Consciousness

According to Sigmund Freud, the founder of psychoanalysis, the human mind can be divided into three levels of consciousness: the conscious, the preconscious, and the unconscious. The conscious level represents our current thoughts and experiences, while the preconscious level contains memories that are not currently in our thoughts but can be easily retrieved.

The unconscious level, however, is like an iceberg, hidden beneath the surface and containing thoughts, desires, and impulses that we are largely unaware of. Human behavior is influenced by all three levels of consciousness, although not all psychologists agree on the validity of the unconscious level. While the conscious level is widely accepted, the preconscious level is seen as stored material that can be retrieved when needed. However, the existence of the unconscious level is controversial and is not accepted by many psychologists, particularly those in the experimental or cognitive psychology fields.

WHAT YOU HAVE LEARNT 👍

- ❏ Our sense organs are responsible for collecting information from the external world.

- ❏ Human beings have ten different senses: vision, audition, tactile, warmth, cold, pain, smell, taste, kinesthetic, and vestibular.

- ❏ Specific sense organs transform physical energy into neural signals and transmit them to the brain for processing, leading to perception.

- ❏ Vision is the most developed and often used sense organ in human beings. The visual receptors, rods and cones, are activated by light waves.

- ❏ Auditory receptors in the ears respond to sound waves produced by pressure changes in the atmosphere. The ear has three major divisions: outer ear, middle ear, and inner ear.

- ❏ Cutaneous senses from the skin provide information about the surface of our body, including pressure and touch, temperature sensation, and pain.

- ❏ Taste (gustation) is sensed with the help of our tongue, which contains taste receptors taste buds which are spread all across the surface and sides of the tongue. The taste buds together are called papillae.

- ❏ The sense of smell (olfaction) is sensed by the nose. The olfactory receptors are located in the nasal passage. These receptors are embedded in a mucus coated membrane which is called olfactory ephithelium.

- ❏ The kinesthetic and vestibular are the group of senses which inform the organism about its own movement and orientation. These are called deep senses.

✂ TERMINAL EXERCISE ✂

1. Explain briefly about the different sense organs in the human body?

2. What are the four major parts of the human eye and what is their function?

3. What are the major divisions of the human ear?

4. What are called deep senses and what are they responsible for?

5. What is called somesthetic system and what does it consist of?

6. Write a short note on the following:

   A) Levels of consciousness.

   B) Olfactory system.

   C) Computer Vs Human Brain.

   D) The processing of Stimulus information.

ANSWERS TO INTEXT QUESTIONS

ATTENTION AND PERCEPTION

<div style="float:left">**5**</div>

INTRODUCTION

The concept of attention has been extensively studied by various psychologists across the world as it is one of the most important cognitive processes in understanding human behaviour. In simple terms, attention is consciously focusing on one thing while ignoring the rest. Several cognitive psychologists have conducted experiments to understand how long we can pay attention to things and how many things we can attend to in a given period of time. As human behaviour is complex and multidimensional, the process of attention is affected by various factors and several studies have been conducted to understand these factors. We will discuss in detail about these aspects in this chapter.

In the previous chapter titled knowing the world around us, you have learned about the ability of our mind to sense things around us using our five senses, referred to as the process of sensation. Once a person receives the information through the senses, he or she selectively attends to the chosen stimulus and tries to make sense of it to respond effectively, therefore, engage in the processes of attention and perception.

OBJECTIVES

After studying this lesson, you will be able to:

- *Explain the meaning and functions of attention*
- *Describe the types of attention with examples*
- *Discuss the determinants of attention*
- *Understand span of attention*
- *Discuss the strategies to improve attention*
- *Explain the meaning and nature of perception*
- *Describe the factors affecting perception*
- *Discuss the laws of perceptual organization*
- *Discuss about perception of space, depth and distance*
- *Understand perceptual constancy*
- *Explain the errors in perception*
- *Explain extra sensory perception*
- *Discuss the importance of perception in daily life*

1.1 Meaning and Functions of Attention

Attention is the process of focusing and responding to one stimulus from several simultaneous stimuli. A stimulus is anything that produces a change in the environment such as light, sound, smell, etc. When a person senses the world around him and chooses to respond to a few things out of many things happening around him, he or she is engaging in the process of attention. For example, imagine the time when you went to a restaurant, there are many things happening around you, such as other people sitting and talking, waiters serving food at various tables, cleaning staff cleaning tables after people finished eating, children playing around and so many such events happening at the same time, however, as you enter you may first scan the whole place and pay attention to a vacant table so that you can sit there and order your meal and ignore other things that are happening.

Attention has been defined by Ross (1951) as "the process of getting an object or thought clearly before the mind". William James has defined attention as "attention is focusing of consciousness on a particular object. It implies withdrawal from some things in order to deal effectively with others. It is taking possession of one, out of several simultaneous objects or trains of thought by the mind, in clear and vivid form".

Attention is useful to us in many ways. Let us discuss the functions of attention: -

1. **Alertness:** Attention enables a person to be active in order to make a response as quickly as possible. For example, while taking attendance in a class, a student pays attention to the teacher, as she starts to call out the names of all the students in the order, the student gets alert to answer when his name gets called out. In this process of alerting oneself, one uses one's senses fully to be present in a particular situation. Moreover, paying attention is also very important for human beings and animals as a survival instinct to protect themselves from any potential threat in the environment.

2. **Vigilance (sustained attention) and signal detection**: Vigilance is remaining attentive in a directed way towards a particular goal for a longer period of time. For example, a bank watchman needs to stay vigilant during his night shift to keep the bank safe from thieves. Signal detention is basically the ability to differentiate whether a stimulus is there or not. A person can wrongly detect a signal when is it not present. For example, in a noisy place, thinking that one has heard the phone ring though it did not ring. Similarly, attention is very important to detect the correct signal as well, while driving a car when it is foggy, it is important for the driver to stay vigilant in order to avoid an accident.

3. **Search:** Attention is helpful in order to actively search for something we need. For example, if you lose your key, you search everywhere attentively to find it.

5.2 Types of Attention

There are different types of attention based on the duration and purpose of paying attention. The different types of attention are as follows:

1. **Selective attention:** The type of attention that involves consciously choosing what to focus on out of many things that occur simultaneously is called selective attention.

There are many factors that affect us in choosing what we want to pay attention to such as our interests, motives, needs, emotion, moods etc. The art of selectively paying attention involves our mental capacity of filtering out distractions. For example, when you are watching your favourite show on TV at home and your mother is trying to tell you the works that you have to do, you are selectively paying attention to the show and are able to follow it by ignoring the rest, although you may physically act as if you are listening to your mother.

2. **Divided attention**: As humans, we are capable of performing one task at a time efficiently, however, when we master certain tasks, we end up almost automatically engaging in such tasks and easily be capable of doing other tasks that require less attention simultaneously. This phenomenon is called automatic processing. For example, talking on the phone while driving. But we need to also remember that when we try to take up two or more tasks simultaneously, our attention gets divided between the tasks, therefore, the efficiency of performing those tasks reduce. For example, when you try to listen to a class and text a friend, though you can do both at the same time, either grasping the concept being taught in the class gets affected or you may end up sending a wrong text to your friend. Division of attention reduces the efficiency of performing a task because we have limited capacity to process the information. Multitasking, which is the modern way of life, is nothing but dividing our attention towards several tasks at the same time.

3. **Sustained attention**: when we pay attention to a particular thing for a longer period of time, it is referred to as sustained attention. For example, studying for an exam requires students to pay attention for a longer period of time. Sustained attention is also known as vigilance. Our concentration also gets enhanced as we engage in tasks that require sustained attention.

4. **Alternating attention**: When we pay attention to one task and shift the attention to another task and do this back and forth between various tasks, it is called alternating attention. In simple terms, switching between several tasks is alternating attention. For example, while you are cooking, based on the dish you have chosen, you may need to alternate your attention between cutting, baking, frying, dressing, cleaning and any other activities that are required.

5. **Voluntary attention**: The process of paying attention with an intention and toward achieving a goal is called voluntary attention. For example, while playing football, all the players pay attention intentionally throughout the game to score a goal.

6. **Involuntary attention:** When we are forced to pay attention to something, it becomes involuntary attention. For example, we are forced to pay attention to advertisements played in movie theatres before screening the movie. Bright lights, sounds, or strong smells also tend to attract involuntary attention.

5.3 Determinants of Attention

"Attention is the means by which we actively process a limited amount of information from the enormous amount of information available through our senses, our stored memories, and our other cognitive processes". (De Weerd, 2003a; Rao, 2003)There are many factors

that affect us when we pay attention to the world around us. The various factors that affect attention are classified into objective or external and subjective or internal factors. Objective or external factors are related to the characteristics of the stimuli that affect attention that remain outside the external environment. Subjective or internal factors are related to the characteristics or state of the person who is paying attention. Let us discuss these determinant factors in detail:

Objective Factors	Subjective Factors
• Novelty of the stimulus	• Interest
• Size of the stimulus	• Motives and physical state:
• Intensity of the stimulus	• Mindset, mental set and attitude
• Movement of the stimulus	• Mood and emotions
• Duration of the stimulus	• Habituation and Past experience
• Repetition of the stimulus	• Desire and goal / aim
• Complexity of the stimulus	• Readiness and expectation
• Contrast	

5.3.1 Objective or external factors

1. **Novelty of the stimulus:** Anything that is new attracts attention. Remember the times when you noticed something new in the places you visited, dint you stare at it for a longer time? For example, a new TV is bought at home and when you return from outside to see it, you pay attention to it.

2. **Size of the stimulus**: The bigger the size, the greater the attention it receives. For example, a big advertisement hoarding displayed at a flyover catches more attention compared to a small hoarding. However, anything that is too different from the normal size also attracts attention i.e., something that is too tiny. For example, if someone drives a toy car on the main road, immediately everybody pays attention to it as the size of it is too small compared to a normal car.

3. **Intensity of the stimulus**: A stimulus that is strong in intensity attracts more attention compared to a weaker tone. For example, loud noises, bright colors, and strong smelled perfumes get better attention.

4. **Movement of the stimulus**: A moving or changing stimulus attracts more attention compared to a static or constant stimulus. For example, if you are traveling in a train where everybody is sitting and suddenly when someone starts dancing, you tend to pay attention to that person.

5. **Duration of the stimulus**: Longer duration of stimulus attracts attention in some cases. For example, a church bell that is rung for a long time is a sign of a gathering of people. Sometimes too short a duration also catches attention, but there are chances that people can miss them if they are distracted by something else. For example, no smoking warning signs that get played during a movie for a very short duration catch the attention of the audience.

6. **Repetition of the stimulus**: Repeatedly shown stimulus attracts more attention than showing a stimulus only once. For example, advertisements are constantly repeated so that people pay attention and can recall effectively while purchasing that product.

7. **Complexity of the stimulus**: The more complex something is the more attention it will attract. For example, an architecturally complicated building attracts more attention than normal buildings.

8. **Contrast:** Contrast in color, design, sounds, etc., will attract more attention than the normal way of presenting something. For example, the zebra crossing is painted in white and black or yellow and black so that it is clearly visible and catches people's attention.

5.3.2 Subjective or internal factors

1. **Interest:** A person pays attention to something for a long duration when he or she is interested in it. For example, paying attention to a movie because you really love watching movies or your favourite actor is in it. Therefore, when we want to pay attention to something, we need to develop an interest in it. For example, if we want to learn a topic, we should find ways to make it interesting, such as underlining with colour pens, connecting the topic to our favourite things etc.

2. **Motives and physical state:** The purpose behind our actions plays an important role in attracting attention. Our basic biological motives such as hunger, thirst, sex attract attention. Other psychological motives such as need for achievement, power, and affiliation also attract attention. At different times, different motives can play a role in determining attention. Our physical state of sickness, tiredness, and discomfort also affect our attention. For example, it is difficult to pay attention to a class when you are unwell.

3. **Mindset, mental set, and attitude:** Our attitude in a particular situation affects our attention to a great extent. Our temperament, values, culture, and beliefs affect our attention. For example, an optimistic person tends to pay attention to the good things happening to him in life where as a pessimistic person always exaggerates the negatives.

4. **Mood and emotions:** Our emotions have a key influence on attention. The mood that we experience at a particular point in time directly affects our attention. For example, when we are in an angry mood, we tend to pay attention to others' mistakes more than their good characteristics.

5. **Habituation and Past experience:** Based on our past experience with things and experiences, we learn to pay attention to certain things and experiences compared to others. For example, A person who met with a bike accident pays more attention to traffic in order to avoid any mistakes. Moreover, something that we are used to, and we pay attention to it. We develop mastery by repeatedly practicing the skill that we want to master.

6. **Desire and goal/aim:** When we want to achieve or possess something, we pay attention to it. For example, a person who wants to become a cricketer pays more

attention to cricket matches, different styles, and techniques of the game and focuses on improving his or her game.

7. **Readiness and expectation:** Our readiness and expectation to receive or give something affects our attention. For example, a student pays attention to his behavior during his practical exam as he is being evaluated compared to his general class behaviour.

5.4 Span of Attention

The span of attention refers to the number of stimuli that we can pay attention to at one time. In simple words, when many things are presented to us, the number of things that we can grasp at a single time is called the span of attention. Sir William Hamilton (1859) and other psychologists conducted several experiments in understanding the span of attention for human beings. The findings of the studies reveal that normal adults can grasp up to 7-8 digits or alphabets at a time. There are various factors such as age, intelligence, experience, practice, habits, etc., that affect the span of attention. Postal pin codes and vehicle numbers are designed based on this concept so that people can grasp it easily. A Tachistoscope, which is an instrument used to measure the span of attention, is used by experimental psychologists to conduct experiments.

Attention span is different from the span of attention. Attention span is the duration of paying attention to a particular stimulus. This is also called sustained attention. In 2015, a study was done by Microsoft it was found that the average normal adult attention span was only 8.25 seconds. With technology and other factors affecting the attention span, it has been decreasing with time.

ACTIVITY 1

Technique to improve attention span and relationships

Mindful listening

When you have a conversation with your friend in person, try to listen to what your friend is telling you without interrupting. Avoid other distractions like using phone or looking at the surroundings. Observe your friend's body language and notice what he or she is experiencing. Become aware of what is going on within you while your friend is talking to you. Avoid thinking about what to respond or any other works that are pending, just be present there with your friend physically, emotionally, mentally and psychologically. Try to do this for 5 minutes and notice how it feels?

5.5 Strategies to Improve Attention

Based on the research and inputs given by Dr. Kirk Daffner, a neurologist and director of the Center for Brain/Mind Medicine at Harvard-affiliated Brigham and Women's Hospital, the following are the strategies to improve attention-

---

- Cognitive training – playing games that require focus and problem-solving skills, critical thinking, and creativity such as sudoku, jigsaw puzzles, chess, memory games etc can help in improving attention.

- Practicing mindfulness (being aware in the present without exercising any judgment) meditation and breathing exercises can enhance one's attention.

- Healthy lifestyle that includes having seven to nine hours of sleep every night, eating nutritious food and 150 minutes of exercise can be very beneficial in keeping us healthy, which in-turn act as a foundation to improve attention.

INTEXT QUESTIONS ?

1. When you are trying to watch TV while you are writing your notes, you are engaging in _____ type of attention.

2. Biological motives such as hunger, thirst and sex are some of the factors affecting attention. (T/F)

3. Attending a class and staying focused till the end is an example of sustained attention. (T/F)

4. List any four subjective factors affecting attention.

   a. _____

   b. _____

   c. _____

   d. _____

5. Span of attention for normal adults is _____ for digits and alphabets.

5.6 Meaning and Nature of Perception

We have understood that sensation is one of the cognitive processes through which we sense the world around us through our senses. However, the sensation only involves taking in the information, the process of perception follows sensation in order to understand the meaning of the stimuli that have been sensed. Perception is the process of interpreting stimuli in order to make an appropriate response. For example, when you hear a loud noise, your senses help you hear the noise, your perception enables you to understand that it is a loud noise coming from construction work that is being done beside your house.

Perception is the set of processes by which we recognize, organize, and make sense of the sensations we receive from environmental stimuli (Goodale, 2000a; Pomerantz, 2003). Another noteworthy definition given by the American Psychological Association (APA) of perception is "the process or result of becoming aware of objects, relationships, and events by means of the senses, which includes such activities as recognizing, observing, and discriminating."

Perception is a multifaceted and interconnected process that encompasses several physiological and psychological components. The accuracy of our sensory organs, the meaning of what we sense, the role of memory, proprioception (perception of our body position and movement), and an individual's mental state are all crucial factors that contribute to our perception.

Our perception of the world is important because it affects how we see and act within our environment. Everyone has their own way of looking at things, which can influence their behaviour. For example, when we buy something, it's not necessarily because it's the best, but because we think it is. Our perceptions can also affect our needs and desires. It's important for managers to understand how their employees perceive things, so they can work together more effectively. Perception can also shape our character and how we interact with others. To better understand people, it's helpful to try to see things from their perspective. Most importantly, our perception of reality is what shapes our behavior more than the actual reality itself.

5.7 Factors Affecting Perception

Factors affecting perception are quite similar to the factors affecting attention. There are **objective or external factors** such as size, novelty, movement, intensity, movement, duration, repetition, complexity, and contrast of the stimulus that affect perception. Similarly **subjective, internal, or psychological factors** such as personality, interest, motivation, biological drives, mood, emotions, attitude, and physical state also affect perception.

Perceptual learning is one of the factors that affect perception. Perceptual learning is our ability to discriminate between two similar, yet different stimuli based on our practice and experience and this ability remains relatively permanent once it is learned. For example, the ability to know which car horn sound is yours compared to other brand car sounds which are similar.

Our **cultural beliefs, social norms, and standards** also affect the way we perceive the environment. For example, people from individualistic cultures (American culture) perceive independence and seeking power as important whereas people from collectivistic cultures (Indian culture) perceive the same as being self-centered as they focus more on people. Another factor affecting perception is the perceptual set or readiness.
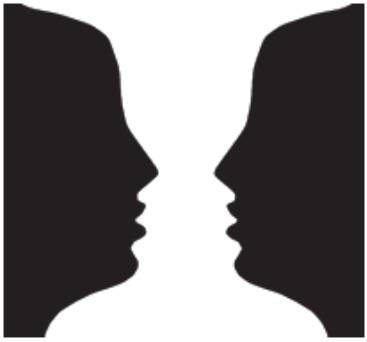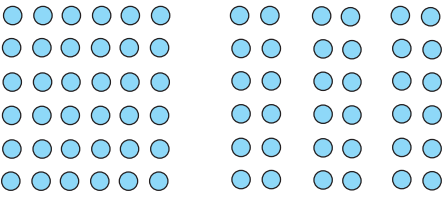
A perceptual set is focusing on certain aspects of a stimulus and ignores the rest based on what one perceives as important. In simple terms, we perceive what we expect to perceive. For example, when two people are asked to identify a picture that is unclear, they may perceive it differently.

5.8 Laws of Perceptual Organization

Gestalt psychologists such as Max Wertheimer, Wolfgang Kohler, and Kurt Koffka have studied the concept of perception extensively and have concluded that we perceive the world around us more meaningfully by organizing our understanding in a particular way and they formulated certain laws or principles that guide us in knowing the process of perception better. One of the important Gestalt principles on which these laws depend is

"the whole is greater than the sum of its parts" which means that when we are trying to perceive an experience as a whole it is much richer compared to analyzing it in different parts. For example, you do many things for your mother because you love her, but your love is not limited only to the things you do for her, it's much more as a whole.

Let us discuss the laws of perceptual organization given by Gestalt psychologists:

Figure-ground relationship: A figure is perceived better in relation to the background in which it exists. For example, in the figure shown in the next box, you can perceive two human faces if you look at white space as the background, however, you can also perceive a white vase if you consider the black area as the background.	
Proximity: Proximity means nearness. We tend to perceive objects that are close to each other as one group. For example, in the picture shown in the next box, picture 'a' is perceived as one group of dots, whereas, in picture 'b' we perceive it as having three groups of dots.	
Similarity: We perceive things that are similar in nature together as a group. Similarity can be based on shapes, colours, size, design etc. For example, in the figure shown in the next box, all the circles and triangles are perceived separately as two groups.	
Continuity: We perceive objects as having a continuous path rather than separate elements. As the human eye has a tendency to follow a direction while looking at the design, the same principle is followed in perceiving the stimulus as well. For example, in the picture shown in the next box, we perceive the pattern of dots in the direction that leads to perceiving the shape x of two lines meeting at a center rather than 4 lines.	
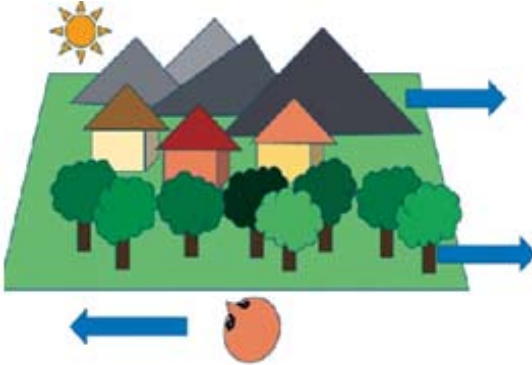
Closure: We tend to perceive a figure completely though there are any missing elements as we have the tendency to view objects as complete rather than viewing them as separate elements. For example, in the picture given in the next box, despite the missing gaps in the figure, we perceive them as a triangle and a square and not as three lines and four lines.	
Symmetry: We have a tendency to perceive objects in a balanced and complete manner. For example, in the picture given in the next box, it is perceived as three brackets rather than individual lines.	[ ][ ][ ]
Law of common fate: We perceive the objects moving in the same direction as one group. For example, birds are flying in the same direction as one group, and arrows pointing in one direction as one and the other direction as another group.	

5.9 Perception of Space, Depth and Distance
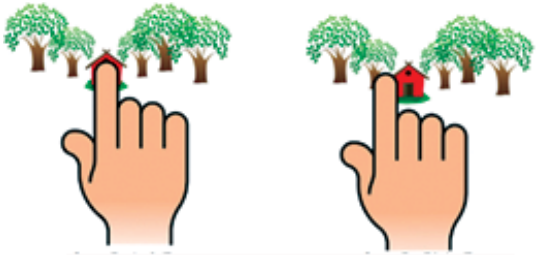
We perceive the world around us in a three-dimensional way (length, width, and depth) and this ability helps us to understand how far or deep an object is from where we are. This ability is called depth perception. Despite the fact that the images of objects projected onto our retina are two-dimensional, with only left-right and up-down directions, our brain helps us perceive the objects in a three-dimensional space. Space refers to the world around us in which objects exist. We perceive space, shape, distance, size, and direction of the objects in the space in order to function actively in our daily lives. An example of depth perception is when you are crossing the road, you need to perceive the distance of a vehicle in order to make your move carefully.

Visual cues are important for depth perception, as they allow the brain to interpret physical signals and enable us to see the world. Our senses sense the information and the brain aids in perceiving the information. To perceive depth, we rely on two types of cues. They are monocular and binocular cues.

Monocular cues: The cues that are used to perceive depth using one eye. There are four types of monocular cues used to perceive depth: Linear perspective, aerial perspective, interposition, and gradient texture.

Linear perspective: The distance between two far-off adjacent objects seems to be getting smaller with distance. This type of monocular cue is called linear perspective. For example, when we look at the railway tracks, as the tracks get far, we feel that they are getting closer to each other, and towards the end of the tracks, it seems like they are merging.	
Aerial perspective: Objects that exist at a distance tend to be unclear, hazy, and less detailed whereas objects that are closer appear to be clear and detailed. For example, When we look at a mountain that is far off, we can't notice the details of it clearly compared to a mountain nearby.	
Interposition: The position of the object is helpful in determining the distance of the object. When one object is covering another object, the object that is positioned in the front seems to be closer than the one that is covered. In the picture shown in the next box, the foremost mountain seems closer compared to the other two.	
Motion parallax: Objects that are close appear to move faster and objects that are at a distance appear to be slow or sometimes stagnant. Moreover, when you move your head from left to right, the objects that are closer to you seem to move in the opposite direction of your head movement, but the objects that are at a distance seem to move in the same direction. You can try it out by yourself by observing a far-off object and turning your head from left to right and then observing the movement of the objects.	*Distant objects appear to pass by slowly* *Near objects appear to pass by more quickly*
Texture gradient: The texture of the objects that are close appears clearly and the texture of the objects that are far seems to be blurred. In the picture, you can see that the rocks that are close are clearly visible compared to the rocks that are far.	

Binocular cues: The cues that require both eyes to perceive depth are binocular cues. The cues that are provided by both eyes are:

Retinal disparity or binocular parallax: Both our eyes process the same image from different angles as you can see in the picture because our eyes are approximately 6.3 centimeters apart from each other which is making us view the same objects in two different ways. This phenomenon creates depth perception.	**Seen By Left Eye** **Seen By Right Eye**
Binocular convergence: Both our eyes turn inward when we look at an object that is closer to us. As the objects get closer, our eyes tend to move inward to focus on that particular object. You can try this by yourself according to the picture given in the box.	

ACTIVITY 2

Exercise to improve depth perception

Use a pencil or pen and hold it at arm's distance and try to move the pencil closer to the eye and farther away from the eye, as you do this keep shifting your focus accordingly. Doing eye exercises like these repeatedly enhances your depth perception. Try it out and check for yourself.

5.10 Perceptual Constancy

Perceptual constancy refers to the tendency to perceive objects in the environment according to their standard shapes, sizes, and brightness despite any changes in the angle of observation and distance from which it is observed. In simple terms, we see many objects around us from far, near, front side, backside, in low light, in bright light, and from different positions, but, we are able to recognize those objects correctly as we are familiar with their original forms. This is called perceptual constancy.

Shape constancy: When we can perceive the shape of an object correctly despite viewing it from different angles. For example, in the following picture, you can identify a chair, from wherever you see it.

Chair   still a chair   still a chair   .... and still a chair
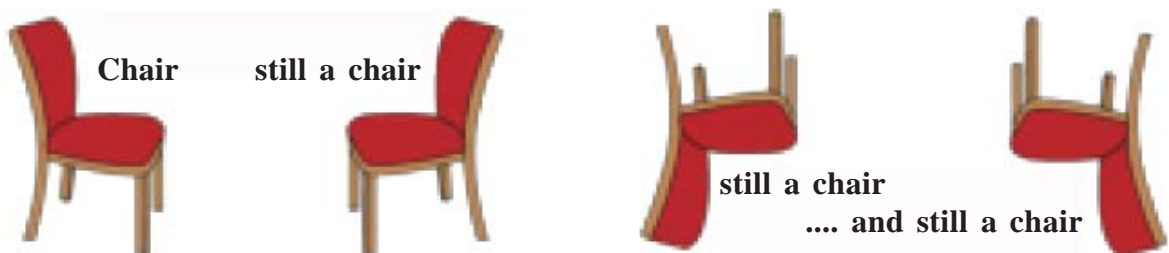
Size constancy: Perceiving the original size of an object accurately despite viewing it from different angles and distances. In the following picture, we can perceive the size of the car whether we view it from near or far as the same because we are familiar with the size of the car in general.

Choose the far   **Choose the near**
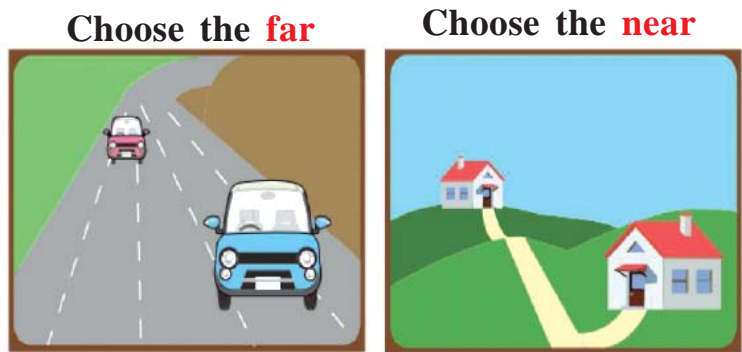
Brightness constancy: Brightness constancy is when we can perceive an object to have the same brightness despite the changes in light conditions in the environment. For example, white paper looks white whether it is kept inside a room or outside under the sunlight.
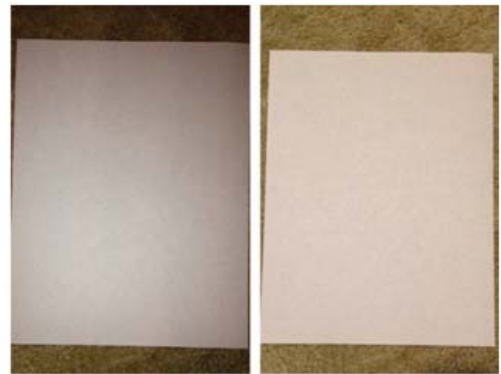
5.11 Errors in Perception

Sometimes, we tend to make mistakes in perceiving certain stimuli accurately because of faulty interpretation of sensory information, confusion, unclear stimulus, individual biases etc. The following are the errors in perception that can happen to us:

Illusions: Misinterpretation of a stimulus is called an illusion. In simple terms, it is falsely perceiving an object. When we perceive an object wrongly either because of incorrectly sensing and processing the object or due to our mental set or any other reasons, it is considered an illusion. For example, wrongly perceiving a stranger in the dark to be your friend. There are some illusions that are commonly perceived by most of us, whereas some illusions differ from individual to individual. Geometric figures have been used to explain illusions by various psychologists. Following are some of the geometric illusions:

1. **Muller Lyer illusion**: In the picture given below, which of the two lines is longer? Actually, both these lines are of the same size, however, the below lines where the arrows are pointing outside look longer compared to the line above it where the arrows are pointing inside. This type of illusion is called Muller-Lyer illusion.

2. **Horizontal vertical Illusion**: In the picture given below, one tends to perceive the vertical line to be longer than the horizontal line, however, both of these are of the same length. This is called the horizontal and vertical illusion.

---
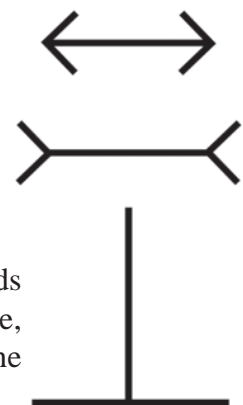
3. **Phi-phenomena**: When a set of still pictures or still objects are presented one after the other at a particular speed, we tend to perceive movement. For example, some movies that are motion pictures are nothing but series of pictures of all scenes that get projected on screen making us feel that we are watching a video. This type of illusion is called phi-phenomenon.

4. **Moon illusion**: Moon looks bigger on the horizon compared to the moon actually in the sky. This is because of the illusion our brain creates while perceiving size and distance.

Hallucinations: Perceiving a stimulus in the absence of a stimulus is called a hallucination. For an illusion to occur, we perceive a stimulus that is present in the environment wrongly, but for a hallucination, there is no stimulus present and our brain tricks us into believing that it is there. A person can experience hallucinations because of alcohol intoxication, the effect of medication, issues relating to brain functioning, and other psychological and physical conditions. A person can experience auditory (hearing voices and sounds that are not present), visual (seeing people or things that are not present), and tactile hallucinations (Feeling sensations that are not a result of external influence).

5.12 Extra Sensory Perception

Extrasensory perception (ESP) is a type of perception that is not dependent on the information from the senses and not on the previous learning as well. Parapsychology is the branch of psychology that deals with studying extrasensory perception, however, scientifically it is still in its infancy stage and not many people consider it a science. The types of extrasensory perceptions are:

Telepathy: The ability to communicate with another person without using words, written means, technology, or any other general means of communication. It is merely based on connecting to the mind of another person directly. For example, the ability to know what your friend is thinking.

Clairvoyance: The ability to become aware of an event or object without using sensory information. For example, if you have lost your wallet, using clairvoyance, you can locate where it is lost.

Psychokinesis: The ability to move objects without having physical contact with them. For example, in a few movies, you might have observed a seer moving a river from one place to another.

The concept of extrasensory perception is quite accepted and believed among the Indians as it is embedded in our Indian spirituality and several of these abilities are possessed by various seers and sages living in the Himalayas even today.

5.13 Importance of Perception in Our Daily Life

Perception is one of the most important cognitive processes that help us interact with the world around us and makes our life meaningful. From the following examples you can clearly understand how important perception is in our day-to-day life:-

- Perception is very important to recognize objects, patterns, sizes, shapes, colours, differentiating between sounds, smells, textures etc that exist in the world around us.

- Laws of perceptual organization can be useful in organizing and simplifying the world around us, otherwise, the complexity of the stimuli around us can make us feel overwhelmed.

- Depth perception is helpful in our day-to-day lives to gauge distances, sizes, shapes, colours of objects or of people around us and enables us to respond appropriately.

- Perceptual constancy enables us to grasp the changes in the environment without getting confused and overwhelmed.

- Perception is very important to understand human behaviour. We need to understand that there are several factors that affect our perception according to the situation we are in and the uniqueness of perception among individuals. This mere understanding can aid in improving our relationship with our loved ones.

- We can predict and control others' behaviours if we can understand their perceptual world.

- We can understand people's personalities, needs, desires, goals, and motives from the way they perceive the world.

INTEXT QUESTIONS ?

1. The cognitive process of interpreting sensory information is called _____

2. When you can clearly differentiate between two different types of 'raagas' or music styles, you are using _____ ability.

3. When you complete the missing gaps in a figure to perceive it meaningfully, you are employing _____ law of perceptual organization.

4. When you are playing tennis, you are vigilant in analyzing the speed and distance of the ball so that you can hit the ball accurately, you need your _____ ability to perform this function.

5. _____is when we can perceive an object to have same brightness despite the changes in light conditions in the environment.

6. Misperception of the stimulus is called as _____ whereas perceiving a stimulus in its absence is _____.

7. _____is the branch of psychology that deals with studying extra sensory perception.

8. When a set of still pictures or still objects are presented one after the other at a particular speed, we tend to perceive _____ and this illusion is referred to as _____.

9. The cues that require both the eyes to perceive depth are called as _____.

10. When we look at the houses from an aeroplane, they look very small, however, we are aware of the actual size of the house and do not get confused in perceiving it accurately, this is referred to as _____ _____.

WHAT YOU HAVE LEARNT 👍

❑ Attention is one of the important cognitive processes in understanding human behaviour which is the process of focusing and responding to one stimulus from several simultaneous stimuli.

❑ Functions of attention are alertness, vigilance and search.

❑ Different types of attention are selective, sustained, divided, alternating, voluntary and involuntary.

❑ The various factors that affect attention are classified into objective or external and subjective or internal factors. Objective factors are novelty, size, intensity, movement, duration, contrast, repetition, complexity of the stimulus. Subjective factors are Interest, motives and physical state, mindset, mental set and attitude, mood, and emotions, habituation and past experience, desire and goal/aim, readiness and expectation.

❑ Span of attention refers to the number of stimuli that we can pay attention to at one time.

❑ Various strategies to enhance attention involve cognitive training, mindfulness and healthy lifestyle.

❑ Perception is the set of processes by which we recognize, organize, and make sense of the sensations we receive from environmental stimuli (Goodale, 2000a; Pomerantz, 2003).

❑ Objective or external and subjective or internal factors that affect attention play a key role in affecting perception as well. Apart from these perceptual learning, cultural beliefs, social norms and standards, perceptual set affect our perception.

❑ Figure-ground relationship, similarity, proximity, closure, continuity, common fate, symmetry are the laws of perceptual organization given by gestalt psychologists.

❑ The ability that helps usunderstand how far or deep an object is from where we are is called as depth perception. And this aids us in perceiving the world around us in a three dimensional way (length, width and depth).

❑ Two types of cues that guide depth perception are monocular cues and binocular cues.

❑ Perceptual constancy refers to the tendency to perceive objects in the environment according to their standard shapes, sizes and brightness despite any changes in the angle of observation and distance from which it is observed.

❑ Shape, size and brightness are the three types of perceptual constancies.

- The mistakes we make in perceiving certain stimuli accurately because of faulty interpretation of sensory information, confusion, unclear stimulus, individual biases etc are referred to as errors in perception.

- Illusions and hallucinations are most common errors of perception.

- Extra sensory perception (ESP) is a type of perception that is not dependent on the information from the senses and not on the previous learning.

- The types of extra sensory perceptions are telepathy, clairvoyance and psychokinesis.

- Perception is one of the most important cognitive processes that helps us interact with the world around and makes our life meaningful.

TERMINAL EXERCISE

1. Explain the determinants of attention.
2. Discuss the types of attention with examples.
3. Write in detail about the laws of perceptual organization.
4. Discuss about perception of space, depth and distance
5. Describe the errors in perception.
6. Discuss the importance of perception in daily life

ANSWERS TO INTEXT QUESTIONS

PART 1

1. Divided
2. True
3. True
4. Interest, Motives, mental set and mood
5. 7-8 digits

PART 2

1. Attention
2. Perceptual learning
3. Closure
4. Depth perception
5. Brightness constancy
6. Illusion and hallucination
7. Parapsychology

8. Movement and Phi-phenomenon

9. Binocular cues

10. Size constancy

REFERENCES

- Morgan, C. T., King, R. A., Weisz, J. R., &Schopler, J. (1993). *Introduction to Psychology*. McGraw-Hill u.a.

- E.G Parameswaran, & C, B. (2002). *An Invitation to Psychology*. Neelkamal pvt. ltd.

- https://www.health.harvard.edu/mind-and-mood/tips-to-improve-concentration

- https://www.neurovisualperformance.ca/2020/04/12/fun-home-based-activities-to-strengthen-your-childs-vision/#:~:text=Focusing%20 on%20Static%20Targets% 20%E2%80%94%20focus%20and%20depth%20perception&text=One% 20exercise %20is%20to%20 hold,develops%20focus%20and%20depth%20perception.

LEARNING

INTRODUCTION

We engage in learning throughout our lives consciously and unconsciously. When you observe a child, you can clearly identify how the child learns to sit, crawl, walk, talk and various other skills. Moreover, you can also recollect the time when you learnt a new skill such as car driving, riding a bicycle, dancing, or singing etc, and how you went about achieving those skills. In all these examples, we refer to learning as one of the most important psychological processes impacting our lives significantly. Learning becomes crucial in achieving our goals and mastering skills. In this chapter, we will discuss the learning process, types and styles of learning, factors affecting learning, experiments in learning and learning disabilities.

OBJECTIVES

After studying this lesson, you will be able to:

- *Explain the meaning of learning and its process*
- *Describe the types of learning*
- *Discuss the factors influencing learning*
- *Explain the experiments in learning*
- *Describe the transfer of learning and its types*
- *Explain styles of learning*
- *Discuss learning disabilities*
- *Application of learning principles in daily life*

6.1 Meaning of Learning and Process of Learning

Learning is explained as a relatively permanent change in behaviour as a result of practice or experience. Psychologists have studied the concept of learning by conducting several experiments on animals and human beings and attempted to understand the mechanisms underlying this process.

Crow and Crow defined learning as "the acquisition of habits, knowledge and attitudes. It involves new ways of doing things, and it operates in an individual's attempt to overcome obstacles or to adjust to new situations."

M. L. Bigge "Learning may be considered as change in insights, behaviour, perception, motivation or a combination of these."

The following points explain the nature of learning:

● Learning is a behavioural change that lasts for a long time and does not include temporary changes in behaviour resulting from illness, maturation, tiredness and alcohol.

● Learning is a continuous process that a person engages in till the end of his life.

● Learning not only deals with the acquisition of new skills but also with modifying existing habits and behaviours.

● We can learn behaviours that are helpful to us and that are considered good or we can learn behaviours that affect us negatively as well.

● Learning depends on many factors that influence the person internally and externally.

● Learning does not include reflex actions or instincts that we all naturally possess. For example, when something comes close to us, we naturally blink our eyes, that is a reflex action that comes to us from birth.

● Learning can be a result of maturation as well. For example, babies can develop the ability to talk and express themselves using language only after their vocal muscles mature.

6.2 Learning Curve

A learning curve is a graphic representation of the relationship between learning performance on a task and the number of attempts or practice. We can understand that as one practices more, the person learns more. Different people learn differently. There are different learning curves represented in the figure shown here.

● Curve A represents the diminishing returns curve. Learning increases at an accelerated speed in the beginning and then slows down as the curve turns into a plateau. For example, learning a mobile game, you learn it quickly and get better at it and then no longer show interest to play it.

Diminishing-Returns
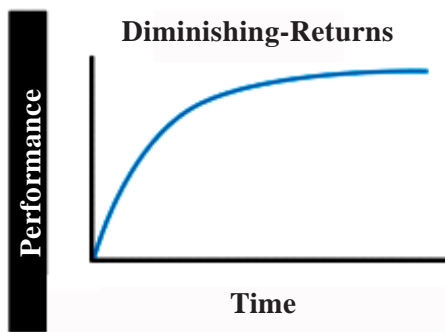
● Curve B represents an increasing returns curve where initially the learner learns slowly and with time increases the pace of learning as the learner gets better at it. For example, when you start to learn a car, you take time, but after a few months of practice, you get better at a rapid rate.

Increasing-Returns

- Curve C represents S-curve which is the increasing-decreasing curve where the learner begins to learn slowly and then the pace of learning increases as he gets better at it with practice, then, learning reaches a plateau where it stabilizes. For example, as you learn to stitch, you may take time in the beginning, but with practice, you get better at it and continue to stitch in the same way unless you are motivated to learn more styles and techniques.

Sigmoid (The S-Curve)
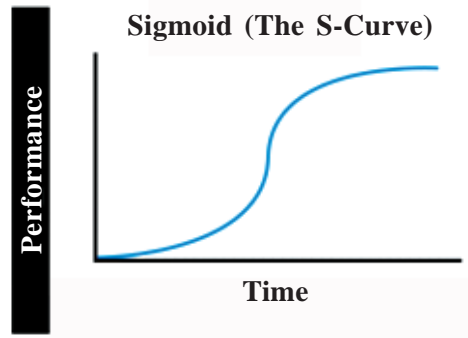
- Curve D is the complex learning curve where the learner initially learns the skill at a slow pace, then increases the speed of learning, then the improvement stabilizes as the learner practices, then the person gets the hang of the skill and finally improves rapidly to excel the skill. For example, learning to play tennis, a learner may begin to learn slowly, and then improve at it, but the learning may not progress

Complex
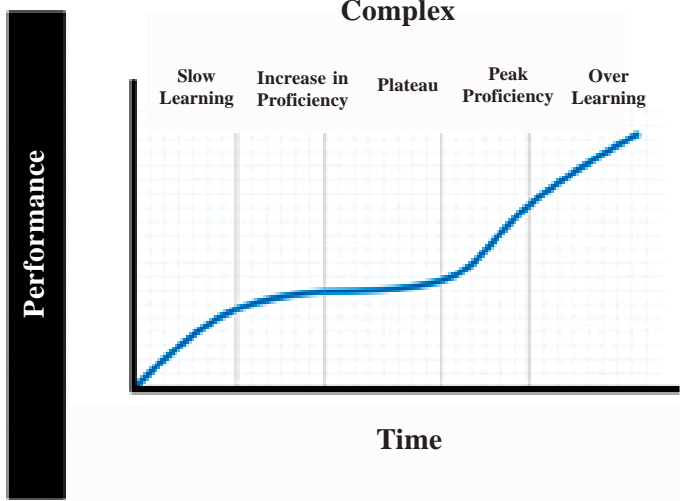
much, but after practising for a few months, the learner understands the tricks of the game and suddenly improves the learning at a rapid speed.

6.3 Types of Learning

Type	Concept	Example
Concept learning	Learning that is based on identifying, grouping and discriminating objects in the world around is called concept learning.	Learning about animals. Identifying dogs, cats, pigs etc though they all share common features such as 4 legs, having one tail, two eyes etc and possess few unique features.
Skill learning	Skill learning is developing the ability to perform a task efficiently. Learning a skill involves three stages- cognitive, associative and autonomous. The cognitive stage deals with understanding the task and remembering it so that one can reproduce it correctly. Associative stage deals with	Learning skills such as skating, cycling, sculpting, painting, dancing etc.

Type	Concept	Example
	practising the task so that one can minimise the errors in performing the task. The autonomous stage is when the learner can perform the task with very less effort, almost automatically as one has become perfect with it.	
Cognitive learning	Cognitive learning is learning that involves knowledge acquisition based on experience. A learner gathers new information and uses it appropriately according to the need. This requires the learner to use the brain's potential to integrate new information with existing knowledge while learning and implementing a new thing.	Students solving a case study Learning a new computer software
Verbal learning	Verbal learning is the learning that involves learning about the world around us through words, interacting, expressing and communicating using verbal language. We tend to learn words, repeat, memorize and recall as a part of verbal learning. Psychologists have studied verbal using free recall, paired association and serial learning methods. In free recall, the participant is asked to learn a list of words and repeat them in any order. In serial learning, the participant is asked to learn a list of words in a particular order and is asked to repeat them in the same order. In paired association learning, the first word acts as a stimulus and the second word is the response, the participant is asked to learn these pairs and is asked to give the response words as answers by presenting the stimulus words randomly.	Preparing to give a speech Interview preparation Debate preparation

6.4 Factors Influencing Learning

Many factors influence the process of learning and determine the efficiency with which learning takes place. Learning is affected by various factors concerning the learner, environment and the situation. Some of the factors are as follows-

i.   **Maturation**- Maturation refers to the biological growth and development of our body and the acquisition of certain psychological, physical and emotional capacities

as per the age of the person. As a person matures, the body becomes physically ready to learn new things. For example, a child will learn to walk only after the maturation of the muscular system in his body. Similarly, a child cannot understand abstract concepts until his brain matures. Each individual matures at a different rate, however, few common milestones as per age are specified by developmental psychologists and biologists which are expected by children to achieve as they grow and develop. Therefore, it is very important to gauge whether a person is physically, emotionally, and mentally ready to learn before we make any judgement or evaluation about his learning.

ii. **Reinforcement**: Another important factor affecting learning is reinforcement. Reinforcement is the process of increasing the likelihood of a particular behaviour using various methods. For example, giving a bonus to an employee for his good work so that he repeats the good work.

iii. **Motivation:** When an individual feels the drive to learn something, he tends to learn it effectively in comparison to a situation where the individual has no drive to learn. Different motives and needs drive different people. For example, a person who is motivated to become a cricketer in his life is always ready to learn new ways to improve his game.

iv. **Socio-cultural factors**: Culture refers to the commonly held beliefs, attitudes, customs and traditions of a group of people. All these aspects of culture can impact the learning of an individual belonging to a particular culture. Societal factors such as family, community, religion, caste, and class also have an impact on learning. For example, people belonging to Islam will be motivated to learn the Arabic language which can help them understand the holy scripture Quran.

v. **Feedback or knowledge of results**: Feedback or knowledge of results can affect learning positively. For example, a manager gives feedback to the employee on his work performance and the employee improves the work accordingly in order to perform well at his workplace.

vi. **Distribution of practice**: The duration of performing a task and rest periods while performing the task can affect learning significantly. When a task that is to be learnt is distributed into short practice sessions, it can benefit the learner to learn better compared to learning everything at the same time without taking any breaks. However, one should be careful that the breaks are not too many and not for too long a duration that takes away the focus on the task to be completed. For example, learning a difficult answer for an exam by taking two or three short breaks can help one learn the answer better rather than learning everything at once.

vii. **Meaningfulness**: Learning material that is meaningful is easier compared to material that is meaningless. A few experiments were conducted where the participants were asked to learn sets of 3-letter nonsense syllables (random letters put together that do not have any meaning eg. PKH JJH HYG) and 3-letter meaningful words (eg. HAT, BAT, MUG) and were tested on how many of each they could memorise. It was found that the participants could learn more meaningful words than nonsense syllables. For example, while preparing for an exam, a student can learn an answer

better if he understands the content rather than merely by hearting it.

viii. **Other factors:** Other factors such as fatigue, intelligence, interest, attitude and emotions can also affect learning. A person experiencing fatigue will not be able to learn efficiently. The intelligence of a person affects learning positively. A person having an interest can learn things better. Having a positive attitude towards learning is always beneficial to the learner to learn effectively. For students, school and teaching related factors play an important role in learning.

INTEXT QUESTIONS ?

1. Learning curve is a numerical representation of the association between learning performance on a task and the number of attempts or practice. **True / False**

2. Students solving a case study is an example of _____ type of learning.

3. _____ is a method used by psychologists to measure verbal learning.

4. When a task that is to be learnt is distributed into short practice sessions, it is difficult for the individual to learn effectively. **True / False**

5. _____ is one of the factors affecting learning.

6.5 Experiments in Learning

There were several experiments conducted on animals and human beings to understand the concept of learning in psychology. Theories and principles have been formulated based on this experimental evidence. JB Watson, Edward Thorndike, Clark L Hull, Ivan Pavlov, BF Skinner, and Albert Bandura, are some of the behavioural psychologists who have contributed immensely to get a deeper understanding of learning. The most popular experiments that resulted in important theories in this domain are classical conditioning by Ivan Pavlov, operant conditioning by BF Skinner and observational learning by Albert Bandura. Let us discuss these in detail.

6.5.1 Classical Conditioning

Classical Conditioning was developed by Ivan Pavlov who was a Russian physiologist. Pavlov's discovery of classical conditioning happened by chance when he was experimenting on dogs to study their digestive processes.

There are certain terms used in classical conditioning which need to be understood before delving into the theory. Let us examine the terms with examples:

● **Stimulus** – Anything in the environment that can be detected with the help of the sense organs and that which demands a response is the stimulus. For eg. Fan, T.V, chair, bottle, etc.

● **Response**- The behaviour that is demonstrated as a result of a stimulus is called the response. For eg. Switching on and off the fan, changing the T.V channel, Moving the chair, etc.

- **Unconditional Stimulus** (US)– A stimulus that elicits a reflexive or natural response in an organism is called an unconditional stimulus. For eg. Food, water, loud noises, dark room, etc.

- **Unconditional Response** (UR)– A response that is elicited naturally or in a reflexive manner. For eg. Mouth-watering behaviour when food is around, Reflexive actions of covering ears when loud noises are heard, closing eyes when exposed to harsh light, etc.

- **Neutral stimulus** (NS)– A stimulus that naturally doesn't evoke a response other than merely driving the attention of the person. For eg. Clapping sound, caller tone on the phone, electrical appliances, etc.

- **Conditioned stimulus (CS) and Conditioned response (CR)**- when the unconditioned stimulus is strongly and repeatedly paired with a neutral stimulus, the neutral stimulus becomes a conditioned stimulus eliciting a conditioned response. This process is called as classical conditioning. For eg. Situation –Pizza order delivery - Unconditioned stimulus – Pizza, Unconditioned response – Mouth-watering response, Neutral stimulus – doorbell, Conditioned stimulus – doorbell after getting paired with pizza delivery several times consistently, Conditioned response- mouth-watering behaviour as the bell rings.

Pavlov developed the classical conditioning theory based on a series of experiments conducted in his laboratory on dogs. Let us understand Pavlov's classical conditioning experiment with respect to the basic concepts elaborated in the above paragraph, clearly depicted in the figure given as follows:-

1. Food (meat powder) which is the unconditional stimulus (US) was presented to the dog.

2. Dog started salivating, which is the unconditional response (UR), at the sight of the food.

3. In the next step, Pavlov rang a bell (neutral stimulus) before the food was presented to the dogs.
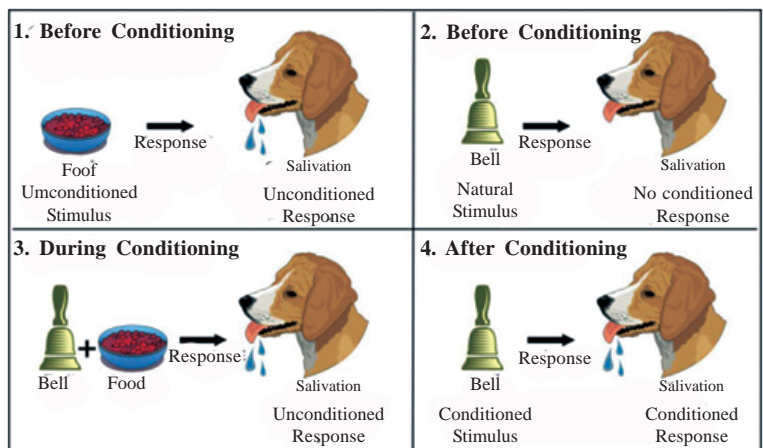
Fig. 6.1: *Classical Conditioning*

4. This process was repeated several times, and after a few trials, it was observed that the dogs started salivating (conditioned response) as soon as they heard the bell ringing (conditioned stimulus).

This experiment has brought insight into how people learn their behaviours by forming several stimuli-response associations. Hence, classical conditioning is also referred to as associative learning or stimuli-response learning. There are several learning principles/ general processes in classical conditioning which have been formulated based on Pavlov's experiment and they are:

i. **Acquisition** – Acquisition is the first step in the process of learning which occurs when the organism learns to give a conditioned response after associating a neutral stimulus with an unconditional stimulus and this gets strengthened with repeated trials. The adequate time gap between the unconditional stimulus and neutral stimulus is also very crucial for acquisition to occur. In Pavlov's experiment, acquisition occurs when the dog starts salivating after hearing the bell.

ii. **Extinction –** When the unconditional stimulus is not paired with the conditioned stimulus, the conditioned response begins to decrease or completely disappear, which is referred to as extinction. In Pavlov's experiment, when the food was not presented after ringing the bell, dogs reduced the salivation and they completely stopped it after a few trials, which demonstrates the process of extinction.

iii. **Spontaneous Recovery-** After extinction has occurred when the conditioned response is elicited without any re-training, it is called spontaneous recovery. This clearly shows that the conditioned response is not permanently extinct and can relapse after a rest period. Moreover, the process of reconditioning takes place more rapidly than the original conditioning. In Pavlov's experiment, after the extinction has occurred, the dog has salivated after hearing the bell ring after a few trials, this phenomenon can be referred to as spontaneous recovery.

iv. **Stimulus generalization and stimulus discrimination-** Eliciting a conditioned response after presenting a stimulus that is similar to the conditioned stimulus can be explained as the stimulus generalization. In Pavlov's experiment, Pavlov had tried to use the sound of the buzzer and the sound of a metronome, before the food was presented and the dog would salivate resulting in stimulus generalization. Eliciting a conditioned response to the conditioned stimulus by differentiating it from other similar stimuli can be explained as stimulus discrimination. There might be no response or a different response elicited to other stimuli other than conditioned stimulus. In Pavlov's experiment, when the dogs learned to salivate only after hearing the bell sound and not to the sound of the buzzer and sound of a metronome, it is called stimulus discrimination.

Let us understand the above-mentioned concepts in a real-life example. Sam, a 10-year-old, loves to eat chocolates (**Unconditional stimulus**) and he drools (**Unconditional response**) whenever he thinks of them. One day, his mom gets chocolates for him while returning home from the office and whenever she comes home, she honks (**Neutral stimulus**) for Sam to open the gate to park her car. She brings him chocolates several times a week. After a few days, Sam starts to drool (**conditioned response**) after hearing his mom's car horn (**conditioned stimulus**) and runs with joy to open the door. The process of **acquisition** has taken place in this stage. After a few days, his mom stops to get the chocolates as she gets busy with her office work and gets home late. After Sam realizes that his mom is no longer getting chocolates for him, he stops to drool at hearing the car horn. The process of **extinction** has occurred in this stage. However, one day he starts to think about the chocolates before his mom reaches home and suddenly, he starts to drool when he hears his mom's car horn. **Simultaneous recovery** has occurred at this point. If Sam would have drooled over neighbours' cars horns, other vehicles' horns, and other similar sounds, then we can say that **stimulus generalization** has occurred, however, if Sam only drools at

hearing his mom's car horn and not at any other vehicle's horn or a similar sound, then we can strongly say that **stimulus discrimination** has occurred.

Pavlov's theory is considered a scientific theory as it was based on objective experimentation. Pavlov was given credit for the introduction of learning principles which laid the foundation for other psychologists to develop their theories. The practical application of classical conditioning principles to address several real-life problems makes this theory extremely useful in the field of psychology.

6.5.2 Operant Conditioning

Operant conditioning was formulated by an American psychologist by name, Burrhus Frederic Skinner (B.F Skinner), around 1930's based on scientific experimentation. Operant conditioning is also referred to as instrumental conditioning, and according to B.F Skinner, behaviour is 'selected' and is maintained by its consequences, which means that the individual voluntarily chooses the behaviour he or she wants to engage in. In this theory, Skinner used the term operant to refer to any active behaviour produced by the individual that has consequences.

Skinner introduced the concept of reinforcement as a part of his theory. Reinforcement refers to any act/event in the environment that is the consequence of a response that increases the response. Punishment is the act/event in the environment as a consequence to the response that reduces the response. In simple terms, this theory emphasizes the importance of the consequences of behaviour in terms of rewards and punishments.

B.F Skinner has conducted several experiments to understand the role of reinforcement in affecting the behaviour of organisms. Initially, he conducted experiments on rats and pigeons to understand this phenomenon of operant conditioning. He devised 'Skinner's box' as shown below to perform the experiments:
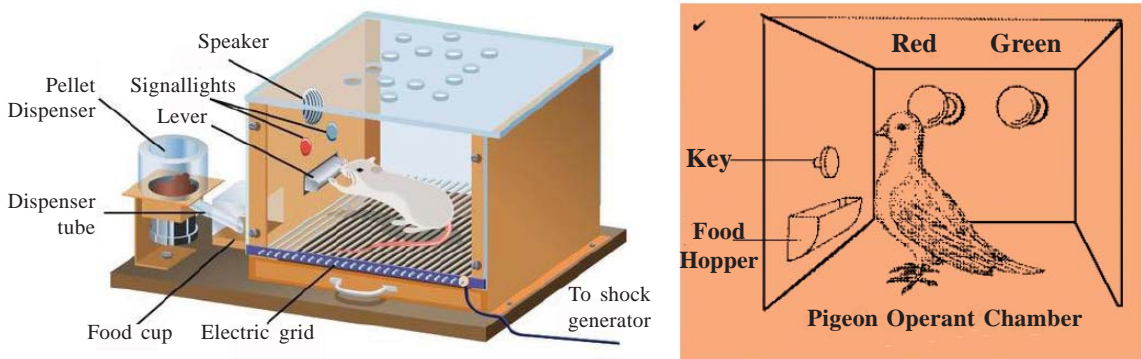
Fig. 6.2 : *Operant Conditioning*

Skinner first placed a hungry rat inside the Skinner's box and then dropped the food inside. This was repeated a few times and the rats ended up eating whenever the food was provided. In the next step, the food was not provided and the experimenter waited for the rat to make a response to get the reward (food). After some time, the rat began to explore the box and performed several actions through the trial-and-error method. Rat accidentally

ended up pressing the lever and the food was provided as a consequence. This process was repeated the next time by chance and the rat received the reward (food) accordingly. After repeating this process for few times, the rat began to learn that whenever the lever was pressed, food was presented, and after this learning has occurred, the behaviour of pressing the lever became more rapid and less random.

In another experiment, a hungry pigeon was placed in the Skinner's box and it was taught to peck the key to receive the food. This initial learning was based on classical conditioning because the key was in the dark, only before the food was served a green light appeared and the food was released only after the pigeon pecked. Hence, the green light acted as a conditioned stimulus before the unconditioned stimulus. The pecking behaviour was reinforced by the food and therefore, it was repeated several times, which could be attributed to operant conditioning.

Skinner believed that most human learning also takes place in a similar manner. Infants learn behaviours through reinforcement received from their parents, siblings, and significant others.

Reinforcement	Meaning	Example
Positive Reinforcement	Positive reinforcement is any reward that is provided as a consequence of a behaviour enabling the likelihood of increasing that behaviour.	A child is praised for completing his homework in time, he/she tends to do it more often to get praised by the parent.
Negative Reinforcement	Increasing a behaviour by removing an undesirable stimulus which is the consequence of that behaviour	Telling the child that if he behaves well during the shopping time, he will be allowed to escape cleaning his room for that day.
Positive Punishment	Undesirable/negative stimulus is added to decrease a behaviour	A tennis coach asks the player to do extra rounds of warm-up for coming late to the class.
Negative punishment	A positive/ attractive stimulus that is taken away to decrease a behaviour	A teacher tells a student who is a sports lover, when she gets talkative in class to not attend the sports class for that day.

Types of Reinforcement

Skinner has contributed significantly to establishing fundamental and important concepts in this theory. This theory is also empirically and experimentally robust and based on scientific laws and procedures. Numerous behaviour modification programs are devised based on the principles of operant conditioning. The simplicity and applicability of the theory attract many psychologists to pursue research in this area even in modern times.

List of positive reinforcers	List of negative reinforcers
Behaviour to be changes	
List of positive punishers	List of netagive punishers
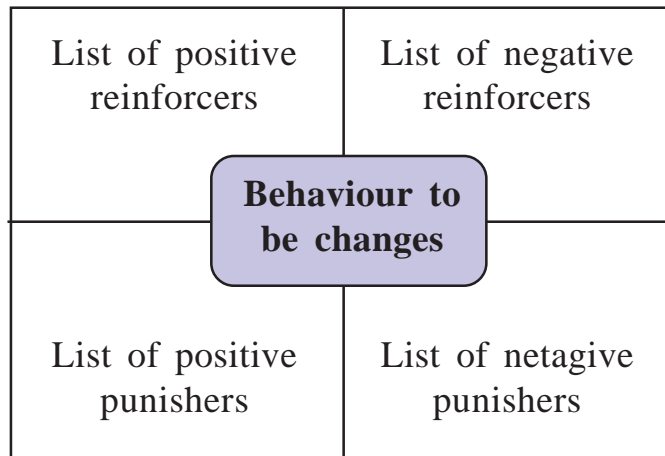
6.5.3 Observational learning

Albert Bandura, an American psychologist, has proposed the concept of observational learning. Observational learning is the learning that takes place by observing others. For example, learning the art of putting rangoli by observing an experienced woman do it live or from a video. This process of learning by observing and imitating a behaviour is called modelling. Observational learning is a part of the social learning theory proposed by Bandura. Bandura also discussed the concept of vicarious reinforcement which is engaging in a particular behaviour by observing another person getting rewarded for the same. For example, a student getting praised for submitting an assignment early motivates others also to submit before time. Observational learning has four steps and they are:

i. **Attention**: The process where we attend to the behaviour, we want to learn by focusing on that particular one and ignoring the rest. For example, if you want to learn to bicycle, you observe other people riding it on the road irrespective of many other things happening around you.

ii. **Retention**: In this step, one begins to remember the thing to be learnt so that it can be imitated. For example, to learn to bicycle, you have to remember how to use the peddle, handle, balance it, get on and off etc.

iii. **Motor reproduction**: Learning can be successful only when it is reproduced accurately. In this step, one learns to reproduce the behaviour that has been observed and remembered. One important consideration is that the person wanting to learn a behaviour must be physically able to replicate the behaviour. For example, a person who is differently abled will not be able to perform gymnastics.

iv.   Motivation: One of the factors affecting learning is the motivation to learn. Only if one has the willingness and drive to learn a behaviour, he or she can learn it successfully. For example, to learn a bicycle properly, one could get hurt in the process by falling and getting hurt, despite that learning it successfully does require motivation.

One of the most prominent experiments conducted by Bandura is the Bobo doll experiment to understand how people learn aggression. This experiment was conducted on preschool children.

Children were divided into three groups – the first group of children were exposed to an adult being aggressive (hitting, punching, verbal aggression etc) towards Bobo doll (you can see in the picture below), the second group of children were exposed to an adult who was non-aggressive to the bobo doll and the third group of children were not exposed to any adult models. This process took place for a period of 10 minutes and then all three groups of children were sent to a playroom where they had toys and were told that they can only play for two minutes in that room. The purpose was to create frustration among them. After this they were sent to another playroom which had Bobo dolls, aggressive materials, crayons, dolls, animal toys, trucks etc. They were allowed to play in this room for 20 minutes and were observed by the researchers.

Fig. 6.3: *Bobo doll experiment*

The children who were exposed to an adult being aggressive with the Bobo doll exhibited the same behaviour with the Bobo dolls in the playroom and others who were not exposed to any aggression, played with all the toys. The finding of this experiment is that children learn aggressive behaviours by observing others. Extension of this experiment also suggests that aggressive behaviours tend to get repeated if people get rewarded for it and tend to not be repeated if people get punished for indulging in aggressive behaviour.

6.6 Transfer of Learning

Transfer of learning is the effect of past learning on new learning. In simple terms, transfer of learning is what you have learnt in the past and affects what you are learning currently. For example, knowing a musical instrument (piano) will be useful in learning a new musical instrument (guitar). In our daily life as well, you can think of various tasks

that get easy because of our prior knowledge such as repairing machines, household chores, cooking etc. Based on whether the past learning is having a positive influence, negative influence or no influence on the new learning, transfer of learning is classified into three types and they are:

i. **Positive transfer of learning**: When past learning facilitates current or future learning it is called a positive transfer of learning. In simple terms, what you learnt earlier is useful in learning a new thing, it is a positive transfer. For example, knowing Telugu can be helpful in learning Kannada.

ii. **Negative transfer of learning**: When past learning hinders the current or new learning, it is called a negative transfer of learning. In simple terms, when your past knowledge makes it difficult for you to learn something new it is called a negative transfer of learning. For example, when you are trying to learn Carnatic music but your knowledge of Hindustani music makes it difficult. Another example is you are a tennis player trying to learn badminton, it gets quite difficult to unlearn a few strategies before you learn the new sport.

iii. **Zero transfer of learning**: When the past learning doesn't have any effect on your new learning, it is referred to as zero transfer of learning. In simple terms, what you learnt earlier is not related to your new learning, zero transfer occurs. For example, learning music is not connected to learning maths.

6.7 Learning Styles

As every individual is different in his own way, learning style also differs from person to person. A learning process involves all the stages of taking information, storing, organizing and utilizing it according to the situation. Learning style includes the process of achieving the goal of learning. According to Neil Fleming's VARK model for students, there are four learning styles and they are as follows:

Learning style	Meaning	Learning aids/Medium	Learning strategies
Visual learning style	Learners who fall under this category learn by looking at the visuals. They can best learn if the information is creatively presented in a visual form.	Pictures, info graphics, flowcharts, diagrams, maps, PPT's, videos etc.	Underlining with different coloured pens, drawing flowcharts & diagrams, using mind-maps, using flashcards.
Auditory learning style	These types of learners learn best by focusing on the audio content. They love to listen and grasp information.	Audio recordings, podcasts, explanations from a teacher or a friend, discussions, debates, sounds, listening to stories, verbal instructions, conversations etc.	Attend classes regularly, ask friends/teachers to explain and record it to listen multiple times, read information aloud, repeat key words aloud, and listen to audio clips while doing other tasks.

Learning style	Meaning	Learning aids/Medium	Learning strategies
Kinaesthetic learning style	These types of learners learn best by experiencing the thing to be learnt. They learn by touching and feeling.	Live demonstrations, practical sessions, role-playing, hands-on activities, activity-based learning, experimentation etc.	Using models to learn, learning by using tools, using play dough, experiencing the topic and connecting to real life.
Reading and writing learning style	These types of learners learn best by reading and writing down the information.	Making notes, using dictionaries, assessments reading from books, novels etc	Rewriting important points, taking running notes, and reading extra information about the topic.

There is no one best style of learning and no individual completely relies on learning using one style. Most people prefer learning predominantly one or two to learn and use other methods as and when the requirement is there. One can understand one's natural style of learning so that one can learn effectively.
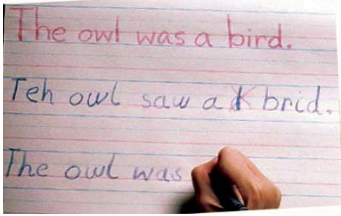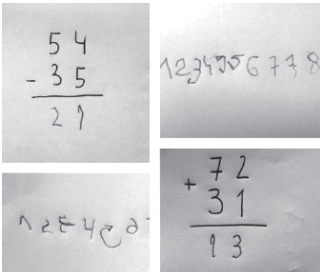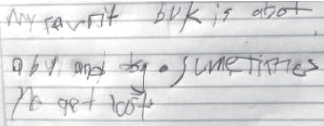
> **ACTIVITY**
>
> **How do I learn best?**
>
> Take four different topics of your choice and try out one learning style for each topic and decide for yourself which is your best learning style.

6.8 Learning Disabilities

Learning disability is an umbrella term used to describe a group of learning-related problems such as reading, writing, understanding, reasoning, analysing, memorizing, speaking etc. Children with learning disabilities are not lazy or not intelligent but their brain functions differently compared to other people. Learning disabilities could be due to perceptual problems, brain dysfunction, or brain injury. A child is considered to have a learning disability when his academic performance is below the expected performance for his age, class and intelligence. There are many learning disabilities, however, we will discuss three important types in this lesson. Three types of learning disabilities are as follows:

Type of learning disability	Meaning	Examples
Dyslexia	Difficulty with reading. Struggle to recognise words and spellings. Difficulty in grasping word sounds, and connecting letters with sounds. Children mispronounce words, confuse basic words, very poor reading skills, have difficulty in following instructions, spelling confusions, difficulty in producing certain sounds to read a word.	

Type of learning disability	Meaning	Examples
Dyscalculia	Difficulty with mathematical calculations. Have problems grasping numbers and math concepts. Problems with reasoning and number processing. Examples of dyscalculia include difficulty in counting items, arranging numbers from biggest to smallest, and difficulty in understanding math symbols.	
Dysgraphia	Difficulty with writing. Difficulty in remembering the correct numbers and letters. Difficulty in planning and organizing. Examples include writing illegible words, and reverse letters, being unable to write in a straight line, and confusing capital and small letters.	

6.9 Application of Learning Principles in Daily Life

Learning principles are extremely practical and we can observe these concepts of learning in our day-to-day life extensively. Following are some examples of applying learning principles in our daily life and study skills that can aid in learning:

- Classical conditioning is useful in understanding our phobias and fears. For example, fear of looking at a dog's picture, because one is scared of dogs, is because of conditioning.

- Behavioural therapy techniques such as systematic desensitization, flooding, and relaxation techniques that are used to treat behavioural problems are formulated based on classical conditioning principles.

- Advertisers and digital marketing experts use classical conditioning principles to create an association between the product and purchasing experience.

- Classical conditioning principles are used to do pet training and to treat alcohol addiction as well.

- Behavioural training techniques such as shaping, successive approximation, token economy, are based on the reinforcement strategies of operant conditioning.

- TV and media violence restriction (A-rating of movies having high violence), violent video games restriction have been imposed based on observational learning.

- Understanding learning styles of students can help teachers devise their teaching strategies in order to get good results.

- Employers in the companies use positive reinforcements such as incentives, bonuses, flexible job timings, corporate vacations etc. to increase employees' work performance.

6.10 STUDY SKILLS

· Planning what you want to study in advance (making a to-do list or a timetable) and dividing the subject to be learnt into small segments to learn methodically will not overwhelm

- Try to make your learning interesting by using creative methods such as flashcards, diagrams, mind maps, flowcharts, watching videos etc.

- Revising what you have studied before and after your study time is very essential in consolidating the learning.

- Learning disability is an umbrella term used to describe a group of learning-related problems such as reading, writing, understanding, reasoning, analysing, memorizing, speaking etc.

- Dyslexia, dyscalculia and dysgraphia are three types of learning disabilities.

INTEXT QUESTIONS ❓

Fill in the blanks

1. A stimulus that elicits a reflexive or natural response in an organism is called _____.

2. Eliciting a conditioned response after presenting a stimulus that is similar to the conditioned stimulus is called _____.

3. A teenage girl learns how to tie a saree by observing her mother drape it, this is an example of _____ learning.

4. When a student comes late to class, asking the student to submit an extra assignment is an example of _____ type of punishment.

5. Observational learning has four steps and they are attention, _____, motor reproduction and _____.

Match the following

1.	Visual	A	Role plays & experimentation
2.	Auditory	B	Making notes
3.	Kinaesthetic	C	Flowcharts & diagrams
4.	Reading/writing style	D	Reading aloud

WHAT YOU HAVE LEARNT 👍

- Learning is explained as a relatively permanent change in behaviour as a result of practice or experience

- Learning is a continuous process that a person engages in till the end of his life.

- Concept learning, skill learning, cognitive learning and verbal learning are the types of learning.

- Learning is affected by various factors concerning the learner, environment and the situation. Maturation, reinforcement, motivation. socio-cultural factors, feedback, distribution of practice, meaningfulness are some of the factors affecting learning.

- Most popular experiments that resulted in important theories in this domain are : Classical conditioning by Ivan Pavlov, Operant conditioning by BF Skinner and observational learning by Albert Bandura.

- When an unconditional stimulus is repeatedly and strongly paired with a neutral stimulus, it becomes a conditioned stimulus that can elicit a conditioned response. This process is called as classical conditioning.

- Acquisition, extinction, spontaneous recovery, stimulus generalization and stimulus discrimination are principles of classical conditioning.

- Learning that is based on consequences is called as operant conditioning. Positive and negative reinforcement, positive and negative punishment are principles of operant conditioning.

- Learning by observing others is called observational learning. Attention, retention, motor reproduction and motivation are steps in observational learning.

- One of the most prominent experiments conducted by Albert Bandura is the Bobo doll experiment to understand how people learn aggression.

- According to Neil Fleming's VARK model for students, there are four learning styles and they are visual, auditory, kinaesthetic and reading/writing style.

- Transfer of learning is the effect of past learning on to the new learning. Positive transfer is when past learning facilitates new learning and when past learning hinders new learning, it is negative transfer of learning.

- Learning principles are extremely practical and we can observe these concepts of learning in our day-to-day life extensively

INTEXT QUESTIONS ❓

1. What is learning? Describe the factors affecting learning
2. Discuss two experiments in learning.
3. What is transfer of learning? Write about its types.
4. Write about different learning styles with examples.
5. Describe learning disabilities.

ANSWERS TO INTEXT QUESTIONS ✍

PART A

1. False
2. Cognitive
3. Free recall
4. False

5. Motivation

PART B

1. Unconditional stimulus

2. Stimulus generalization

3. Observational learning

4. Positive punishment

5. Retention, motivation

Match the following

1. c

2. d

3. a

4. b

REFERENCES

- Morgan, C. T., King, R. A., Weisz, J. R., &Schopler, J. (1993). *Introduction to Psychology*. McGraw-Hill u.a.

- E.G Parameswaran, & C, B. (2002). *An Invitation to Psychology*. Neelkamal Pvt. Ltd.

- https://bau.edu/blog/types-of-learning-styles/#:~:text=According%20to%20the%20VARK%20system,kinesthetic%2C%20and%20reading%2Fwriting.

- https://ldaamerica.org/types-of-learning-disabilities/

- https://www.valamis.com/hub/learning-curve

REMEMBERING AND FORGETTING

INTRODUCTION

- Can you tell your friends name?

- Do you remember your first day in the school?

Learning has lasting value only as we remember it without memory, there could be no durable learning. With the capacity of memory that we are able to relate to different events, experiences, conditions, people and objects. This means for an effective learning it is essential that we should be able to preserve our past experiences and learning and make use of them whenever needed. In the psychological world thy ability of retention and repeating is known as "Memory". Welearn and remember some things well we do forget other things easily. Memory tends to be highly selective. Remembering of learned material depends upon many factors such of the nature and importance of the material how we acquire it. Psychologists have been studying various aspects of memory. In this lesson, we will study how our memory works, different types of memories, the factors which increase or decrease our memory capacity, what can be done to improve memory.

OBJECTIVES

- *describes nature of memory*

- *differentiates short term memory and long term memory*

- *explains causes of forgetting*

- *describes the ways to enhance memory*

7.1 Memory and Its Aspects

Memory is a perceptually active mental system. It receives, encodes, modifies, retains and retrieves information. When we talk about memory the acquisition process is called encoding.

Encoding: The acquisition process is called encoding, how we organize information.

Storage: Where the encoded material is stored.

Retrieval: Utilization of stored material when it is needed.

Encoding $\rightarrow$	Storage $\rightarrow$	Retrieval
Put into memory	Maintains in memory	Recover from memory

When the information is stored in memory we call it as availability. Accessibility is retrieval when we need what is already there. Forgetting is the failure of retrieval. The encoding, storage and retrieval processes are used in each of the three systems of memory.

INTEXT QUESTIONS ❓

Choose the correct alternative

1. Memory is thought to be made up of _____ stages.

   a. one

   b. two

   c. three

   d. four

2. The retention (saving) of encoded material over time

   a. Encoding

   b. Storage

   c. Retrieval

   d. Rehearsal

3. The processing of information into the memory system

   a. Storage

   b. Encoding

   c. Rehearsal

   d. Rehearsal

7.2 Types of Memory

The encoding, storing, retrieval processes are used in each of 3 systems of memory.

1. Sensory information storage

2. Short term memory

3. Long term memory

7.2.1 Sensory memory (Sensory Information Storage-SIS)

Thus memory starts with sensory inputs from the environment. This information is held in the sensory register that is associated with sensory channel, vision, hearing, touch, etc.

Sensory memory is a very short term memory store for information being processed by the sense organs. Sensory memory has a limited duration to store information, typically less than a second. It is often thought of as the first stage of memory. Your sensory memory creates something of a quick "snapshot" of the world around you.

Sensory images disappear quickly their interpretations may be kept longer in the memory system. This storage is useful in situations where a stimulus is exposed very briefly such as in viewing motion pictures in television in maintaining a continuity during the time taken a for the eye to blink. Some psychologists would prefer to discuss it under perception rather than memory.

7.2.2 Short Term Memory (STM)

From the sensory register the information may be passed on to the short term storage where it is held for 20 to 30 seconds. The duration of short term memory is very limited. It is also known as primary or active memory. It is also known as primary or active memory. It is commonly suggested that short term memory can hold only 7±2.

The information in short term memory highly susceptible to interference. Any new information memory will quickly that enters short term displace old information. The capacity of short from memory can be increased by grouping the items into many groups or chunks. By grouping upto 40 items can be stored in STM. Some of the Information from STM is transferred to long term memory. For this, the items should be repeat number of times. This is known as rehearsal. For example short term memory holds a phone number that has just been recited.

7.2.3 Long Term Memory (LTM)

Long term memory refers to the memory process in the brain that takes information from the short-tem memory, store and creates long lasting memory. Long team memory can hold an unlimited amount of information for an indefinite period of time. Long term memory is important because it helps us recall major events in our lives.

LTM can be further divided into Explicit and Implicit memories.

Table-1: Difference between STM and LTM

Feature	Short term memory	Long term memory
Capacity	Limited upto 7 items	Unlimited
Duration	20-30 sec	Days to life time
Type of Information	visual images, sounds, words	Meaningful material life events

7.2.4 Eyewitness memory

Eyewitness memory is a person's episodic memory for a crime or other witnessed dramatic event. It plays a pivotal role in many criminal trials. Eyewitness memories are susceptible to a variety of errors and biases. They can make errors in remembering specific details and can even remember whole events that did not actually happen.

7.2.5. Autobiographic memory

Autobiographical memory refers to memory for one's personal history. Example memories for experiences that occurred in childhood, the first time learning to drive a car, and even such memories as where we were born autobiographical memories organized in three levels.

Life time period: Periods of time in which some aspect of personal life remainded.

General events: The major occurrences covering several days or months.

Event Specific knowledge: It involves details about a particular event or happening in one's life.

INTEXT QUESTIONS ?

1. Short term memory holds information for about.
    a. fraction of seconds
    b. 15-30seconds
    c. 45-50 seconds
    d. years or decades

2. A memory system for permanently strong, managing and retrieving information for further use is
    a. short term memory
    b. long term memory c
    c. explicit memory
    d. implicit memory

3. The simplest way to maintain information is short-term memory is to repeat the information in a process called
    a. chunking
    b. rehearsal
    c. revision
    d. recall

4. The information related to the procedure of riding a bike, folding laundry, and experience of climbing a tree as 7 years old is stored in
    a. short term memory
    b. long team memory
    c. sensory memory
    d. working memory

7.3 Forgetting

Memory is a very complex psychological process in terms of Storage, processing, retrieval. We often fail to remember due to brain damage result of memory functions called amnesia. Remembering and forgetting are both natural processes subject to number of factors in everybody's life.

Forgetting or disremembering is the apparent loss or modification of information already encoded and stored in an Individual's short or encoded and long term memory.

7.3.1 Causes of forgetting

1. **Decay:** With the passage of time what is learned is forgotten. The memory traces formed in the brain gets faded when not used for a long time. It is also called "leaky bucket theory"

2. **Interference:** Forgetting many cause due to interference. One type of learning interfere with the learning of another type. There are two types of interference.

    Proactive Interference: In this type of Interference, past learnt material interference with newly learnt material older memories Interfere with the retrieval of newer memories.

    For example, if you move into a new house you might find yourself accidently writing your old address down when filling out forms.

    Retroactive Interference: In this type of Interference present learnt material interfere with recalling of past learnt material. In case of retroactive. Interference learning new things can make it more difficult to recall things that we already know.

3. **Lack of Rest and Sleep:** Continuous leaning without rest and sleep may lead to greater forgetting due to inefficient consolidation, forgetting is slow during sleep.

4. **Nature of material learned:** Forgetting also varies with the nature of the material learned. Ebbing Hans verified the fact that humans remember things that are meaningful better than things that are not.

5. **Motivated forgetting:** According to Frued forgetting takes place because the event is unpleasant. We forget because we do not want to remember something. We push them out of consciousness if we don't like them. Frued called this process repression. Also we find strong tendency to remember incomplete tasks more than completed tasks. This has been termed as zeigarnik effect.

6. **Failure to store:** Due to inadequate encoding of material improper storage when the person is under emotional pressure at that time also causes forgetting.

INTEXT QUESTIONS ❓

Choose the correct alternatives.

1. When new learning disrupts the ability to recall past, stored information _____ has been said to occur.

    a. Retroactive

    b. Proactive

    c. Inhibition

    d. Repression

2. Memory researches define forgetting as the

   a. Inability to retain information in working memory long enough to make use of it.

   b. Sudden loss of information after head trauma

   c. Inability to retrieve information from long term memory

   d. Process by which information is lost in transit from short term memory to long term memory

3. According to Frued "motivated forgetting _____

   a. Repression

   b. Regression

   c. Displacement

   d. Projection

4. The "Decay theory" is sometimes called

   a. Trace theory

   b. Interference Theory

   c. Leaky bucket theory

   d. None of the above

7.4 How to Improve Memory

Memory consists of four factors- learning, retention, recognition and recall. Improvement in any one or more can improve the memory as a whole. Forgetting usually a source of trouble for person. As a result most of us are interested in improving our memory. The study of memory aids and related techniques is called mnemonics. Some of the techniques used in improving memory are listed below.

1. **Will to learn:** There must be a strong will to learn for achieving desired success in learning. Where there is a will, there is a way. Materials read, heard or seen without intention or mood are difficult to be remembered at later times.

2. **Attention:** Attention is one of the major components of memory. In order for Information to move from your short term memory into your long term memory you need to actively attend to this information. Try to study in a place free of distraction such as television, music and other diversions.

3. **Grouping and Rhythm:** Grouping and Rhythm also facilitates learning and help in remembering. For example a telephone no. 567345234 can be easily memorized and recalled if we try to group it as 567 345 234.

   Similarly rhythm also proves as an aid in learning and memorizing. Children learning effectively the multiplication tables in the sing song fashion.

4. **Repetition and practice:** Repetition and continuous practice adds effective memorization. An intelligent repetition with full understanding always helps in making the learning effective and enduring. Things repeated and practiced frequently are remembered for a long time.

5. **Get some sleep:** Researchers have long known that sleep is important for memory and learning. Research has shown that taking a nap after you learn something new can actually help you learn faster and remember better.

6. **Follow principle of Association:** Attempts should be made to connect it with one's previous learning with so many related things on the other. Sometimes for association and recall the letter VIBGYOR has proved as an effective aid for remembering the colours of the spectrum.

7. **Visualize concepts:** Senses are said to be the gateways of knowledge and it has also been found that the things are better learned and remembered when presented through more than one senses. Pay attention to the photographs, charts and other graphics in your textbooks. If you don't have visual cues to help try creating your own.

8. **Arranging better learning situation:** Environmental factors also effect the learning process. Therefore due care should be takes to arrange better learning situation and environment.

9. **Mnemonic devices:** These are aids that help us organize information for encoding. They are especially useful when we want to recall larger bits of information such as steps, stages, phases, Ex: Mr. VEM J. SUN can easily recall the correct order of planets- Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

INTEXT QUESTIONS ?

1. Which is a good method of revision?

   a. Intense sessions

   b. Spaced learning

   c. 1 hour on / hour off

   d. late night sessions

2. _____ are the devices to organise information for coding

   a. Abbreviations

   b. Mnemonics

   c. Tools

   d. None of the above

3. Memory can be improved when information to be learnt is

   a. Organized

   b. Written

   c. Spoken

   d. Elaborated

4. Which of the following can enhance memory?

   a. Massed practice

   b. Staying awake for as long as possible after studying

   c. Rote memorization

   d. Rehearsing

WHAT YOU HAVE LEARNT

❑ Human memory is a dynamic system. It helps to retain information and make available for future use.

❑ We receives information through senses. The information registered in the sensory memory through selective attention. It goes to short term memory (STM). Then it enters into long term memory (LTM).

❑ STM has limited capacity and lasts only for a few seconds or minutes.

· LTM has unlimited capacity and persists for hours and months or even the entire life time.

❑ We can enhance memory by using mnemonic techniques, concentration, organising material, proper sleep.

TERMINAL EXERCISE

1. Write a note on different types of memory.

2. What is forgetting? What are the factors that cause forgetting?

3. Write your experience with mnemonic devices?

4. Write a short note on proactive, retroactive interference?

ANSWERS TO INTEXT QUESTIONS

In text questions-1:	1. c	2. b	3. b	
In text questions-2:	1. b	2. b	3. b	4. b
In text questions-3:	1. a	2. c	3. a	4. c
In text questions-4:	1. b	2. b	3. a	4. d

GOING BEYOND THE REALITY THINKING AND REASONING

8

INTRODUCTION

In day to day life simple problem requires use of thinking. Human beings "keep on thinking". The process goes on almost all the 24 hours.

Dicarte had said "I think so I exist". Thinking differentiates us from animals. The solution to the problem emerges after processing information that is available to you from the environment and past experiences. Thinking is a complex cognitive process which involves several kinds of operations. In this lesson you are going to learn about important aspects of thinking and reasoning.

OBJECTIVES

After studying this lesson you will be able to

- *understands the concept of thinking*

- *explains the thought process*

- *describes the steps in problem solving*

- *explains different types of reasoning*

- *explain the use of language in thought process*

8.1 What is Thinking?

Thinking is a complex psychological process which involves several kinds of operations. Thinking essentially involved the formation of images and the subsequent associations among them. Human thinking is a symbolic process and the symbols used or images and concepts. Thinking maybe connected with deriving new insights. Thus imagination and reasoning or combined in thinking.

In short thinking has been defined as the organisation of concepts or ideas.

Thinking relies on variety of mental structures such as i) concepts ii) schemes iii) mental images.

Let us consider these mental structures.

8.1.1 Components of thought process - Concepts

1. Concepts: A concept is a general idea that stands for a general class and represents the common property of all objects. Concepts are important symbols of higher mental process. Concepts are mental structures. They are the building blocks of thinking. They allow us to organise knowledge in a systematic way. Concepts may be concentrate (Ex: a dog, table, tree etc.), or abstract (Ex: honesty, democracy, justice etc.). The child requires the concrete concepts much earlier in life and later on abstract concepts. Piaget indicates that the child first learns object concepts (Ex: ball) and develops more abstract concepts only as he grows older.

8.1.2 Process involved in concept formation

Two processes are involved in the concept formation.

Abstraction: Concept formation takes place by abstracting similarities and differences between objects. Essential features are noted and unessential features are ignored.

Generalization: It is the process by which abstracted quality is tried on similar objects.

2. Schemas: Schemas are more complex than concepts. Each schema contains many distinct concepts. For example each of us possesses a self schema, mental framework holding lot of information about ourselves. This self schema will include many different concepts about ourselves.

Most words represent concepts as they refer not to a single object or event but to a whole class. For example the word 'house' refers to a class of buildings with common features. It has rooms, kitchen, toilet, store etc. The word building is more general than house. The word building is a larger concept that includes houses, offices, market etc. Concepts also represent properties (Ex: green or large), abstractions (Ex: honest, love) and relations (Ex: bigger than).

Learning of concepts utilizes the psychological processes of generalization and discrimination. For example, when a child learns the concept 'dog' he/ she may generalize the term initially to include all small animals (Ex: cat). But from parental corrections and process of learning the child learns to make finer discrimination until the concept is correctly formed. At this moment, it was only the family dog. However, the child may generalize the concept to include other dogs of different breeds and sizes. The child may further refine the concept and distinguish between pet dog and street dog, friendly dog or aggressive dog etc.

For example you may consider yourself as intelligent, attractive, healthy, hard working and pleasant. Schemas help people to organize their knowledge of the world and understand new information.

3. Mental images

Thinking also involves the manipulation of visual, auditory or other images. Once we form a mental image of any object, person or situation we perceive it and think about it just as we would if it actually existed. Sometimes we would refer to it as we see things in our mind's eye.

An image is a rough retrieval of our past experience. Images pay an important role in thinking. Quality of images differ from one individual to another. Sensory experiences in the absence of the relevant objects are known as images. It has been found that we usually think in words (the concepts e.g. table). At other times we reply on mental images such as visual image of the table. Mature person will try to find solution through mental rotation.

INTEXT QUESTIONS ?

1. Thinking involves mentally grouping similar objects, events and ideas into
   a. Concepts
   b. Symbols
   c. Algorithms
   d. Systematic search

2. Thinking is essentially
   a. A physical phenomenon
   b. A cognitive activity
   c. A psychomotor process
   d. An effective behavior

3. Which of the following is / are a tool(s) of thinking?
   I.   Mind maps
   II. Cognitive research trust
   III. Concepts
   a. Both I and II
   b. Both I and III
   c. Both II and III
   d. I, II, III

8.2 Reasoning and Decision Making

Reasoning is a mental process. Reasoning occurs when there is a difficulty or a problem. Reasoning is involved in logical thinking, problem solving and decision making. The individual follows certain rules in reasoning and decision making. Reasoning may be classified into two broad categories.

   i.   Inductive reasoning
   ii. Deductive reasoning

8.2.1 Inductive reasoning

In this type of reasoning, we proceed from particular facts to a general conclusion. On the basis of the facts observed and experienced under similar conditions. We try to discover universal relations or generalizations. Inductive reasoning leads to adding new knowledge. Scientific laws are inferred by inductive reasoning.

Ex: I feel hungry.

He feel hungry.

She feel hungry.

They feel hungry.

Therefore all feel hungry.

8.2.2 Deductive reasoning

Involves combining bits of knowledge previously obtained on different occasional and drawing conclusions from it. It is a process of applying the already known laws or principles to the specific problem. It is an inference made from general laws.

Ex: All men are mortal – Major premise Socrates is a man – minor premise.

Conclusion: Socrates is mortal.

8.2.3 Decision making

In everyday life, we often make personal, economic, social and political decisions, which could have far reaching consequences.

Decision making is a kind of problem solving in which quite a few alternatives are available and one has to make a choice. For example, in career selection you will have different alternatives you will consider the different good and bad points about different careers and you make a decision.

INTEXT QUESTIONS ?

1. The barrel contains 100 apples. Three apples selected at random were found to be ripe. Therefore probably all 100 apples are ripe.

    Which type of argument?

    a. Inductive

    b. Deductive

    c. Hypothetical syllogism

    d. Modus ponens

2. Product of two consecutive integers is divisible by 2. Therefore 4 x 5 = 20 is divisible by 2. This is an example of which type of reasoning.

   a. Abductive

   b. Informal

   c. Inductive

   d. Deductive

3. Which of the following sequences best describes the deductive logic of inquiry?

   a. A theory – data – hypothesis

   b. Data – theory – hypothesis

   c. Theory – hypothesis – data

   d. Empirical pattern – hypothesis – theory

8.3 Problem Solving

Life is string of endless problems. Man faces problems when he finds that there is a difference between what be expected and what he actually in various aspects of life. The problem is solved when we reach our goal.

Problem solving situations are those where the solution to the problem is not readily evident. This happens often even daily in our life. People confront simple problems as well as more complex problems. When we encounter a problem we reply on memories of how we have handled similar situations in the past. Problem solving involves reasoning. Reasoning involves a sequence of symbolic activities and fellows certain rules.

Psychologists have studied various rules/ steps in thinking which man adopts in solving his simple and complex problems.

8.3.1 Steps in problem solving

1. **Recognition of the problem:** Until and unless you recognize a problem, there is no thinking to solve it.

2. **Gathering data:** This step involves gathering more information on the nature of the problem and possible solutions. Which were tried in different situations.

3. **Formulation of hypothesis:** The hypothesis is formulated on a possible solution in the present situation. Intelligence and other cognitive abilities help in the formulation of hypothesis.

4. **Verification of hypothesis:** In this step, efforts are made to confirm the correctness or otherwise of the solution.

5. **Formulation of conclusion:** Based on the finding of the previous step the solution is finally accepted or rejected as the case may be.

1.   A tentative solution to problem is called _____.

2.   The first step in problem solving is _____.

8.4 Language and Thought Process

Without language it would not have been possible to express our feelings and communicate with others. In fact it is language which differentiates us from the lower spices. The child by the age of 6 months first starts saying "ma… ma… ma" (babbling) and it is enjoyable sound both for the child as well as the parents and others.

Initially the child learns to communicate in the language being used at home called mother tongue. Later the child learns a formal language at school. The child may then learn two languages.

Language is a vehicle of though and a tool for all kinds of social interaction. Language conveys intentions feelings, motives, attitudes and belief etc.

Language and Thought

Thinking and language have a close relation. Language is a treasure of symbols called words. Language plays an important in thinking. In thinking, we often use a form of silent language. Watson called thinking as 'inner speech'. If language is essential for thinking then an obvious question that arises is what happens to those in whom there is no language or the people whose language is not well developed.

It has been argued that such people can use sign language and understand each other's thoughts. For example, deaf people can think and communicate in sign language. One can say that language is an essential tool of thinking, but it cannot be said that thinking is not possible without language.

Language is helpful in thinking and at the same time language works as a vehicle of thought. That is whatever we think it is communicated through language.

WHAT YOU HAVE LEARNT

❐   Thinking is a mental or cognitive process that often starts with a problem situation.

❐   Thinking involves many types of mental structures such as concepts, schemas and mental imaging.

❐   Formation of concepts involves generalization and discrimination. Concepts can be concrete and abstract.

❐   Schema refers to a mental structure consisting of several concepts.

❐   Problem solving is an important aspects of thinking. It starts with a problem, moves with certain mental operation and finally reaches to a solution that terminates the problem.

❑ Language is helpful in thinking and at the same time language works as a vehicle of thought.

❑ Reasoning is a mental process for drawing inferences. There are two main types of reasoning i.e. inductive and deductive reasoning.

❑ Deductive reasoning moves from general premises to specific conclusion. In contract, inductive reasoning consists.

✂ TERMINAL EXERCISE ✂

1. What do you understand by the term 'Thinking'? Enumerate its chief characteristics.

2. What is reasoning? What are its different kinds?

3. Write a short note on method of problem solving?

4. Differentiate between Thinking and Reasoning?

ANSWERS TO INTEXT QUESTIONS

8.1   1. a   2. b   3. a

8.2   1. a   2. d   3. c

8.3   1. Hypothesis   2. Identifying the problem

MOTIVATION

9

INTRODUCTION

When you walk a long distance on a sunny day, you feel thirsty and want to drink something to quench your thirst. Similarly, you eat something when you feel hungry. Likewise, if a question is asked why do you work? The answer can be to earn money or to make a living. The causes of behavior can be well explained by the concept of motivation. It is a psychological process.

OBJECTIVES

On completing this lesson, you will be able to:

- *Understand the meaning and nature of motivation.*

- *Describe the motivation cycle and types of motives.*

- *Explain the factors affecting motivation.*

- *Comprehend the need for motivation.*

- *Analyze the influence of Motivation on Learning.*

9.1 Meaning of Motivation

Motivation is a driving force behind human actions that directs and energizes a person to achieve a goal. It is a desire to act and is a crucial element in setting and attaining our objectives. It can be said as wanting a change in thoughts, feelings, self-concept, behavior, relationships and emotions. It helps you to get closer to your goals. It includes the social, emotional, biological and cognitive forces that activate human behavior.

It is a psychological construct that influences ones behavior. It arises from internal factors like desires and beliefs and external factors like recognition and rewards. The term motivation is derived from the Latin word movere, meaning "to move". It is a combination of motive and action. It can be referred to as arousal of movement in an organism. When we are motivated, we move and take action.

Motivation determines an individual's level of performance in various activities which include work, education, personal and professional. By understanding what drives individuals, we can better design effective strategies to promote positive behavioral change and achieve desired outcomes. The essence of motivation is persistent and energized goal-directed behavior.

INTEXT QUESTIONS ?

1. Fill in the blanks with correct alternative:

   a) Motivation is a _____ force behind human actions to achieve a goal.

   b) The term motivation is derived from the Latin word _____ meaning _____.

   c) The essence of motivation is energized _____ behavior.

2. Define motivation.

9.2 Nature of Motivation

It has three components: Activation, Persistence, and Intensity. Activation is making a decision to initiate a behavior. An example for activation would be wanting to lose 10 kgs weight knowing that simply wishing to lose weight is not enough.

Persistence is the continued effort towards accomplishing the goal set overcoming all the obstacles. An example of persistence is working hard, doing rigorous workouts, burning fat etc., to reduce weight even though you are tired.

Intensity is the strength and concentration that goes into achieving the aimed goal. Refining diet for weight loss and seriously implementing it to accomplish the goal can be considered as intensity.

All the above three components of motivation can impact whether you achieve your goal. Activation if strong means that you are more likely to pursue a goal. Persistence and intensity will determine if you are working towards the goal and the sincere efforts you devote to accomplish it.

Motivation can be influenced by different factors including social, psychological, environmental and biological factors. Hence the nature of motivation is always multifaceted and complex.

INTEXT QUESTIONS ?

Fill in the blanks with appropriate words:

1. The three components of motivation are _____, _____ and _____.

2. _____ is the continued effort towards accomplishing a goal.

3. Intensity is the _____ and _____ that goes into achieving the goal.

9.3 Types of Motivation

1. **Intrinsic Motivation** arises from within an individual and is driven by internal factors as curiosity and personal interests. It brings inherent satisfaction and pleasure and a person gets intrinsically motivated to engage in an activity regardless of any external recognition or reward.

2. **Extrinsic Motivation** comes from external sources and a person engages in an activity to get rewards, recognition, or appraisal. Example: an employee works diligently to prosper in career.

3. **Social Motivation** is influenced by social factors such as recognition and acceptance. This can drive behaviors such as participating in social activities and seeking friendships.

4. **Biological Motivation** is driven by biological factors such as thirst, hunger, sleep and sexual drive. These instincts are essential for our survival.

5. A**chievement Motivation** helps to accomplish or achieve a goal and become successful in life. It is influenced by self-confidence, self-esteem, some personal values and the desire for recognition.

6. **Cognitive Motivation** involves intellectual challenges and the pursuit of knowledge. It is related to problem solving, curiosity and the desire to understand. It helps in exploring new ideas and engaging in intellectual activities.

INTEXT QUESTIONS ?

1. What are the different types of motivation?
2. Define intrinsic motivation.
3. Explain extrinsic motivation with an example.

9.4 Motivation Cycle

The motivation cycle is a process in which motivation arises, sustains and leads to goal-directed behavior. It can vary in duration, complexity and intensity depending on the individual.
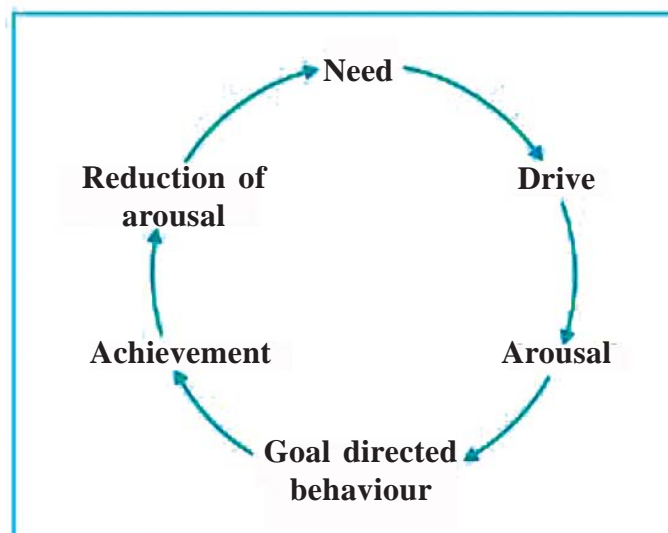
Fig. 9.1 : *Motivation Cycle*

It generally involves the following different stages.

i. **Need/Drive:** Initially the motivation cycle begins with an identified drive/need by an individual. The needs can be psychological such as need to be friendly or can be physiological such as hunger.

   For example, feeling hungry (need) creates drive to collect food (action) to satisfy the hunger (outcome).

ii. **Goal Setting**: After recognizing need or drive, individuals set goals to satisfy that need or drive. Goals set can be short-term or long-term and specific, measurable, achievable, relevant and time-bound (SMART).

iii. **Motivation and Action:** Keeping the goal in mind, individuals get motivated and act towards the goal. This involves emotional, cognitive and behavioral processes which include planning, decision making and persistent effort. In this process motivation can be fuelled by some intrinsic and extrinsic factors.

iv. **Outcome/Feedback**: Feedback of the actions done can help individuals to evaluate their progress and modify their plans and efforts to accomplish their goals/targets. Outcome if positive reinforces and enhances motivation while negative outcome such as failure decreases motivation.

v. **Evaluation**/**Reappraisal:** Individuals evaluate their progress and modify their strategies accordingly to become successful.

vi. **Renewal/Restart:** Sometimes individuals may restart or renew the motivation cycle to achieve new goals or reassess their strategies to restart their motivation if they do not achieve their goals.

Comprehending the motivation cycle in a proper way certainly helps individuals to target their goals.

INTEXT QUESTIONS ❓

Fill in the blanks with appropriate words.

1. Feeling hungry is a _____ need.

2. Need to be friendly is a _____need.

3. SMART stands for _____,_____,_____,_____ and _____.

9.5 Types of Motives

Motives are the underlying driving forces or reasons that influence human behavior. They initiate, direct and sustain behavior towards a particular outcome. Motives can be diverse and they can vary among individuals and different contexts. Some common types of motives include:

i. **Biological motives** are often considered to be primary motives needed for basic survival of individuals. These are rooted in physiological needs and examples include thirst, hunger, sleep and sexual desire.

ii.   **Social motives** are important for fulfilling emotional, social needs and establishing good social relationships. Examples include acceptance, recognition, intimacy and belongingness.

iii. **Achievement motives** are associated with targeting and achieving goals, and aiming at success. Examples include recognition of one's skills, capabilities and the need for achievement.

iv.   **Cognitive motives** are related to processes of seeking knowledge, learning and understanding. These are important for understanding the world. Examples include the need for exploration and intellectual stimulation.

v.   **Emotional motives** are related to emotional experiences and are important to manage emotions for emotional well-being. Examples include the need for proper emotional expression and management.

vi.   **Power Motives** are crucial for gaining control and influence in social contexts and achieving leadership positions. These are related to the desire of power and control over others. Examples include the need for authority, dominance and power.

vii. **Aesthetic motives** are important for engaging in creative activities and gaining aesthetic experiences in an artistic way. These motives are related to the appreciation of art, beauty and aesthetics. Examples include the need for self-expression, creativity and aesthetic experiences.

Motives can vary over time in response to various internal and external factors. They also change in terms of priority and strength. Recognizing and understanding underlying motives can help individuals to introspect their human behavior for better management of their own motivation and others.

INTEXT QUESTIONS ?

Fill in the blanks with suitable words.

1.   _____ motives are related to processes of seeking knowledge, learning and understanding.

2.   Emotional motives are important to manage_____.

3.   Examples for power motives include _____,_____ and _____.

9.6 Factors Affecting Motivation

Several factors affect motivation and influence human behavior. They can be broadly categorized into internal and external factors.

I. Internal factors:

i.   **Needs and desires:** When needs and desires are not fulfilled, individuals get motivated and act accordingly to meet them. Examples of such needs are physiological needs (e.g., thirst, hunger), cognitive needs (e.g., learning, curiosity), social needs (e.g., belongingness), emotional needs (e.g., seeking pleasure), and other personal aspirations.

ii.   **Personality and individual differences:** As different personalities have different characteristics and traits, these individual differences have great influence on motivation.

For example an individual with a high need for achievement sets more challenging goals and gets highly motivated.

On the other hand a person with a high need for power works hard to gain control and power. Also some personality factors like optimistic thinking, high self-esteem and self-efficacy also impact motivation.

iii.   **Values, beliefs and attitudes:** Attitudes, beliefs and values can either promote or hinder motivation. Someone with a positive attitude and strong belief may be highly motivated to achieve success while someone with negative attitude may get demotivated towards his goal.

II.   External Factors

i.   **Environment:** Positive and supportive work environment enhances motivation while a stressful and negative environment demotivates an individual or employee.

ii.   **Incentives and Rewards:** Incentives, financial rewards, appraisal and recognition can impact motivation.

iii.   **Social factors:** Factors like competition, social relationships, social support and peer pressure can impact motivation.

iv.   **Feedback:** Feedback on performance helps individuals to introspect themselves and monitor their progress. It definitely impacts individual's level of motivation.

v.   **Self-**efficacy: Belief and confidence in one's own ability to accomplish a goal, known as self-efficacy can impact motivation. On the other hand low self-efficacy demotivates a person.

vi.   **Deadlines:** Deadlines increase motivation and individuals work with sense of urgency avoiding procrastination.

Motivation can be influenced by both internal and external factors and varies depending on the situations and individuals.

Motivation is a dynamic and complex process and it is crucial to understand the factors affecting motivation to achieve desired goals and enhance individual's performance.

INTEXT QUESTIONS ❓

1.   What are the internal factors which affect motivation?

2.   How does environment affect motivation?

3.   What is meant by self-efficacy?

9.7   Need for Motivation

Human beings face different obstacles and challenges in pursuing their goals. In this process they need to get motivated and motivation serves as a spark or driving force and it initiates, directs and sustains human behavior helping them to attain desired outcomes.

Some reasons for the need for motivation:

i.   **Goal-directed behavior**: Motivation provides the energy, helps and directs individuals to set and achieve meaningful goals may be short-term or long-term. Without motivation they may not focus and may get distracted.

ii. **Enhanced performance:** Individuals if motivated utilize all their skills, abilities and capabilities to the best of their potential and enhance their performance. This can be observed in various domains such as education, sports, work and personal development.

iii. **Overcoming Obstacles:** Motivation helps individuals to overcome obstacles and challenges that occur in the pursuit of their goals. It gives the needed determination and helps individuals to face difficulties, failures and setbacks.

iv. **Satisfaction:** Motivation helps individuals accomplish their tasks, boosts their self-confidence and self-esteem and finally contributes to their well-being and satisfaction.

v.   **Growth and development:** Motivation encourages individuals to gain new skills, new experiences, stretch beyond their comfort zones, drives them to work hard for continuous development and growth. This finally leads to their self-growth and self-actualization.

vi. **Increased involvemen**t: Individuals if motivated engage more in activities and are more likely to be proactive. With enthusiasm, they work more actively which results in high productivity and creativity.

vii. **Positive impact on others:** Motivated individuals serve as inspiration to their family members, friends and colleagues. They become exemplary and have positive impact on others. They serve as role models and help others to accomplish their goals.

Hence, motivation is always much needed for individuals and it has a crucial role in human behavior as it drives them to set and achieve goals. It is quite essential for personal and professional success.

INTEXT QUESTIONS ❓

1.   List the reasons for the need for motivation.

2.   Explain the positive impact of motivated individuals on others.

9.8 Influence of Motivation on Learning

Motivation has significant impact on learning. It affects an individual's effort and persistence in involving in learning activities.

i.   **Increased effort:** Motivated learners enthusiastically invest time, energy, put in effort and persist in learning activities. They overcome all challenges and setbacks and keep going in the learning process.

ii. **Improved participation:** Motivated learners actively participate in various learning activities and become proactive.

iii. **Enhanced focus and attention:** Motivation improves learners focus and attention during learning process. They will be alert, attentive and focused while working or learning. This also helps in retention of information gained and they always prioritize their learning goals staying mentally engaged.

iv. **Better memory:** Motivation has impact on memory. It enhances their brains ability to retain information for a longer time.

v. **Positive attitude:** Motivated learners have optimistic or positive mindset towards learning. They tend to learn with increased curiosity, enthusiasm and enjoyment.

vi. **Higher performance:** Motivated learners work diligently and achieve better learning outcomes. Motivation provides them energy and directs them towards greater performance.

vii. **Lifelong learning:** Learners if motivated develop a love for learning and try to explore new skills and knowledge. This will lead to a sustained interest in learning throughout and also promotes their growth and development.

Hence, motivation plays a significant role in influencing different aspects of learning. It impacts the effectiveness of learning in a positive way. Learners definitely can benefit from the power of motivation to enhance their learning experience.

INTEXT QUESTIONS ?

Fill in the blanks with appropriate words:

1. Motivation affects an individual's _____ and _____ in involving in learning activities.

2. Motivated learners have ____ mindset towards learning.

WHAT YOU HAVE LEARNT 👍

❐ Motivation is a psychological construct that influences ones behavior. It arises from internal factors like desires and beliefs and external factors like recognition and rewards.

❐ The three components of motivation are Activation, Persistence and Intensity.

❐ The motivation cycle is a process in which motivation arises, sustains and leads to goal- directed behavior.

❐ Motives, the underlying reasons that influence human behavior can be diverse and vary among individuals and contexts.

❐ Motivation is affected by some internal factors like needs, individual differences, values, attitudes etc and by some external factors like environment and social factors.

❐ Motivation is quite essential for personal and professional success.

❐ Motivated learners invest time, energy and effort and keep going in the learning process.

1. Define motivation and explain the nature of motivation.

2. Describe the motivation cycle.

3. What are the different types of motives?

4. Explain the factors affecting motivation.

5. Why is motivation needed for learners?

6. Explain the influence of motivation on learning.

ANSWERS TO INTEXT QUESTIONS 🖋

9.1

1. a) driving

    b) movere, "to move"

    c) goal – directed

2. Motivation is a driving force behind human actions that directs and energizes a person to achieve a goal. It explains why a person does something.

9.2

1. Activation, persistence and intensity.

2. Persistence

3. Strength, concentration

9.3

1. Intrinsic motivation, extrinsic motivation, social motivation, biological motivation, achievement motivation and cognitive motivation.

2. Intrinsic motivation arises from within an individual and is driven by internal factors as curiosity and personal interests.

3. Extrinsic motivation comes from external sources and a person involves in an activity for rewards or recognition.

    Example: An employee works hard for promotion.

9.4

1. physiological

2. psychological

3. Specific, measurable, achievable, relevant and time- bound.

9.5

1. cognitive
2. emotions
3. the need for authority, dominance and power.

9.6

1. a) Needs and desires

   b) Personality and individual differences

   c) Values, beliefs and attitudes

2. Positive and supportive work environment enhances motivation while a stressful and   negative environment demotivates an individual or employee.

3. Belief and confidence in one's own ability to accomplish a goal is known as self-efficacy.

9.7

1. a) Goal-directed behavior

   b) Enhanced Performance

   c) Overcoming obstacles

   d) Satisfaction

   e) Growth and development

   f) Increased involvement

   g) Positive impact on others

2. Motivated individuals serve as inspiration to their friends, colleagues and family members. They help them as role models to accomplish their goals.

9.8

1. effort, persistence
2. optimistic or positive

———∽∞∾———

EMOTIONS

10

INTRODUCTION

When we spend time with our childhood friends after a long time we feel happy; when our loved ones meet with an accident/injury we feel sad, when we grab a good job or get selected in an interview we feel proud of ourselves. When we do not write an examination well, we become disappointed; when we have to address a gathering, we feel nervous. Similarly love, fear, anger, sadness, joy, surprise, disgust, shame and many more emotions are experienced by us in our day to day life.

In this lesson, you will study the concept of emotion, basic emotions, the general characteristics of emotions and how they direct our behavior.

OBJECTIVES

On completing this lesson you will be able to:

● *explain what is an emotion;*

● *describe the general characteristics of emotions;*

● *comprehend the types of emotions – positive and negative emotions;*

● *analyze emotions and physiology; and*

● *understand emotional management*

10.1 What is Emotion

The English word 'emotion' is derived from the French word 'emouvoir' which is based on the Latin word 'emovere'. It means to stir up, excite, agitate or move. Emotions are complex psychological and physiological states that are experienced in response to a particular stimulus or situation. Emotions give meaning to our lives and experiences.

Emotions are subjective feelings that can range from pleasant to unpleasant and can be defined as a certain behavior that reveals the feelings to the external world.

Human beings generally experience different emotions which include happiness, sadness, fear, anger, disgust, hatred, regret etc. These emotions can be triggered by a wide range of factors including personal experiences, social interactions and cultural norms. Emotions influence our thoughts, behaviors and decisions.

How do you react when you are

	Happy	Sad	Nervous
i.	_____	_____	_____
ii.	_____	_____	_____
iii.	_____	_____	_____

INTEXT QUESTIONS ?

Fill in the blanks with appropriate words:

1. The English word 'emotion' is derived from the Latin word _____.

2. Emotions are complex _____ and _____ states experienced in response to a stimulus.

3. Emotions influence our _____, _____ and _____.

10.2 General Characteristics of Emotions

Emotions have certain definite characteristics and behavioral patterns. Some of the general characteristics of emotions are as follows:

i. **Subjective experience:** Emotions are internal experiences which mostly occur when any need is challenged or satisfied. It occurs as a reaction or response that is not directly observable.

ii. **Duration and intensity:** Emotions can be short-lived or long- living depending on the situation and individual and can range from low to high intensity.

iii. **Emotions and expressions:** Emotions have certain muscular and overt behavior. Few strong emotions are expressed through facial expressions, body language and tone. Smiling, laughing, crying, attacking, fighting are also expressions of emotions.

iv. **Emotions and reasoning:** Reasoning locks emotions and few strong emotions block logical thinking. Emotion is a form of reaction than reasoning and in few critical situations emotions may be immediate without any scope for reasoning and thinking.

v. **Emotions and mood:** Emotions have generally strong intensity and even after they cease, we continue to be in the same mood for a longer time. Anger, fear etc continue for a longer time.

vi. **Emotions and internal response:** When emotions are experienced, they lead to certain disturbances in the autonomic nervous system, visceral organs and ductless glands.

Given are two situations where you might feel a strong emotion. Express yourself in the box against given.

Situation	How do you express yourself
1. You heard some of your friends talking about a party they have been invited to. They stopped talking about it when you walked up to them.	
2. Your teacher assigned you a project. You have to present it in front of your classmates which you really don't like.	

10.3 Types of Emotions

Positive and Negative Emotions

Emotions are a kind of energy in motion, a way of expressing oneself in life and has a specific role to play in our life.

Emotions expressed by human beings can be broadly categorized into primary or basic emotions and secondary or complex emotions. They include both positive and negative emotions.

Emotions expressed by human beings can be broadly categorized into primary or basic emotions and secondary or complex emotions. They include both positive and negative emotions.

The basic emotions include

- Happiness / enjoyment / delight / relief / satisfaction / bliss / pride / contentment etc

- Sadness / loss / grief / gloom / dejection/ sorrow / depression etc

- Anger / fury / irritability / outrage / annoyance etc

- Fear / nervousness / anxiety / concern / safety etc

- Surprise / wonder / astonishment / shock etc

- Disgust / contempt / repulsion / aversion etc

Secondary or complex emotions are influenced socially and culturally and are more difficult to define and recognize. The secondary emotions include Anxiety, hope, gratitude, pride, compassion, empathy, love, shame, guilt, envy, jealousy etc.

Positive emotions are fuelled by a hidden desire and are useful for moving towards what one wants. Enthusiasm, interest, curiosity, action etc are few examples of positive emotions.

Negative emotions are fuelled by a hidden fear and are useful in moving away from what one doesn't want. Grief, hatred, regret, blame, anger etc are few examples of negative emotions.

INTEXT QUESTIONS ❓

Fill in the blanks with suitable words.

1. Emotions are broadly categorized into _____ and _____.

2. Grief, blame, anger are examples of _____ emotions.

ACTIVITY

Give a compliment to your friend about her dress and looks. Observe her facial expressions, feelings and body language.

After some time, irritate her in a discussion with her opposing her ideas. Now again observe her expressions.

Did you notice any difference in these two situations?

10.4 Emotions and Physiology

We all experience different emotions in our day to day lif. Emotions when experienced cause some physiological changes in our body. These changes are produced because of the autonomic nervous system which regulates some involuntary bodily functions like heart rate, breathing and digestion. So, emotions involve the nervous system, the brain, the hormones and the behavioral reactions, both instrumental and expressive.

When we feel happy, we may feel a sense of relaxation due to the release of endorphins and our breathing also slows down. But, when we experience fear, the blood rushes to our skeletal system to facilitate the fight or flight responses.

When there is a quick, strong and unexpected stimulus, the entire muscular system undergoes adjustments. These bodily changes include sudden head movements, blinking of the eyes etc.

Sometimes the voice gets affected in emotions. The voice becomes loud when excited and low under fear. All these may happen to meet the critical situations thereby helping us to preserve our wellbeing.

So, the interplay between emotions and physiology is complex. It is important to understand the connection between emotions and physiological responses to regulate emotions, manage stress and maintain good health.

Let us study more about the organs associated with emotional experiences. Those organs are Autonomic Nervous System, Adrenal glands and Hypothalamus.

i. **Autonomic Nervous System:** It plays a significant role in regulating emotions in the human body. It has two branches: the sympathetic nervous system and the

parasympathetic nervous system. They work together to maintain homeostasis or body's balance. When we experience a strong emotion like fear, the Sympathetic nervous system (SNS) gets activated, triggers the "fight or flight" response. It inturn prepares the body to tackle the danger or threat. The SNS increase heart rate, constricts blood vessels and prepares body for fighting or running away.

On the other hand, the Parasympathetic nervous system calms down the body and slows down the heart rate after the danger has passed.

ii. **Adrenal glands:** These are small glands found above the kidneys. These play a significant role in regulating the body's response to emotions and stress. They produce hormones like adrenaline and cortisol which help the body to mange stressful or emotional situation.

Adrenaline increases heart rate, blood pressure and prepares the body for fighting or running away in response to a danger.

Cortisol, on the other hand regulates blood pressure, blood sugar levels and emotions.

iii. **Hypothalamus:** It is a small region in the brain which plays an important role in regulating emotional responses. It is involved in the regulation of the endocrine system and autonomic nervous system. It also involves in the sleep-wake cycle which has impact on emotional regulation. Disruptions in this cycle have links to mood disorders such as anxiety and depression.

INTEXT QUESTIONS ?

Fill in the blanks with appropriate words.

1. The involuntary bodily functions like heart rate and breathing are regulated by _____ system.

2. _____are released when we feel relaxed or happy.

10.5 Emotional Management

Emotional Management is a process of managing one's emotions in a healthy way. It is very important as failing to a manage emotions can lead to depression, anxiety and relationship problems.

Strategies for managing emotions effectively:

1. Recognize your emotions in different situations and observe how it is affecting you.

2. Be mindful and always be present in the moment observing your feeling and thoughts. This will help you to focus on your emotional responses.

3. Practice to change your response to an unpleasant situation in a more positive or at least neutral way.

4. Do engage yourself in various positive relaxation techniques like yoga, meditation etc to reduce stress and manage emotions.

5. Talk to a close family member or a trusted and caring friend who can help you to manage your emotions if you are experiencing intense emotions or struggling with a difficult situation.

Emotional management involves enough patience and good practice. Develop healthy habits and implement good strategies for healthy and peaceful living.

INTEXT QUESTIONS ?

Fill in the blanks with appropriate words.

1. Failing to manage emotions can lead to _____, _____ and _____.

2. Examples of positive relaxation techniques are ___ and _____.

WHAT YOU HAVE LEARNT

❑ Emotions are complex psychological and physiological states experienced in response to different situations.

❑ Human beings experience both positive and negative emotions. These emotions influence our thoughts, behaviors and decisions.

❑ Emotions can be short-lived or long lived and can range from low to high intensity.

❑ Few emotions are expressed through facial expressions, body language and voice.

❑ Emotions cause certain disturbances in the autonomic nervous system/visceral organs and ductless glands.

❑ Emotion Management is managing emotions for healthy living. Failing to manage emotions causes anxiety, stress and depression.

TERMINAL EXERCISE

1. What is emotion? Give examples of few basic and secondary emotions.

2. Explain the general characteristics of emotions.

   Write few examples of positive and negative emotions.

3. Describe the physiological changes produced in the body while expressing different emotions.

4. What is Emotional Management?

ANSWERS TO INTEXT QUESTIONS

10.1

1. emovere
2. psychological, physiological
3. thoughts, behaviours, decisions.

10.2

1. I feel dejected and sad.

    I try to manage my emotions and walk away from them.
2. I feel tensed and nervous. But I overcome it and prepare myself to give the presentation.

10.3

1. primary or basic emotions, secondary or complex emotions.
2. negative

10.4

1. autonomic nervous
2. endorphins

10.5

1. depression, anxiety, relationship problems.
2. yoga, meditation.

———⌒∞⌒———

DEVELOPMENT: IT'S NATURE

11

INTRODUCTION

How were you 10 years ago and how you are now? Do you find any noticeable changes in your body? Do you find any changes in your behaviour? You will notice that from birth onwards changes of various kinds are taking place in an individual's life, which continue even during old age. The way they change differs from individual to individual. However, the fundamental underlying patterns of growth remain more or less the same and take place in an orderly way. An infant after birth will undergo a lot of changes from child to old age. These changes occur in all human beings and it is referred as human development. The human development does not just involve the biological and physical aspects of growth, but also the cognitive and social aspects associated with development. The human being growth is never static. From conception to death, he/she undergoes changes. There are progressive changes in response to environmental conditions. The nature of human development is with different aspects of development occurring at different stages of life. These developmental stages are characterized by specific milestones and challenges that individuals must understand for their well-being. In this lesson you will understand the nature of human development and main approaches to study the development.

OBJECTIVES

At the end of his unit, you will be able to:

●   *learn about human development and its nature*

●   *understand the factors that influence human development*

●   *helps us understand the complex interplay of biological, psychological, and social factors that influence growth and development across the lifespan.*

11.1 What is Development?

Development is a complex and multifaceted process that is influenced by a variety of factors, including genetics, environment, and individual experiences.

Development is not a linear process, and different aspects of development occur at different stages of life. For example, physical development is most rapid during infancy and childhood, while cognitive development continues throughout adolescence and into adulthood.

Understanding the nature of development is essential for promoting healthy development and addressing the challenges and opportunities that arise at each stage of life. It can also

inform the development of interventions and policies aimed at supporting individuals across the lifespan.

11.2 Nature of Development

Development refers to the process of growth and change that occurs in individuals over time. This process can be observed in multiple domains, including physical, cognitive, and socio-emotional development. Development is a complex and dynamic process that is influenced by a variety of factors, including genetics, environment, and individual experiences. Understanding the nature of development is essential for promoting healthy development and addressing the challenges and opportunities that arise at each stage of life.

Multiple Domains of Development

Physical Development   Cognitive Development   Socio-emotional Development
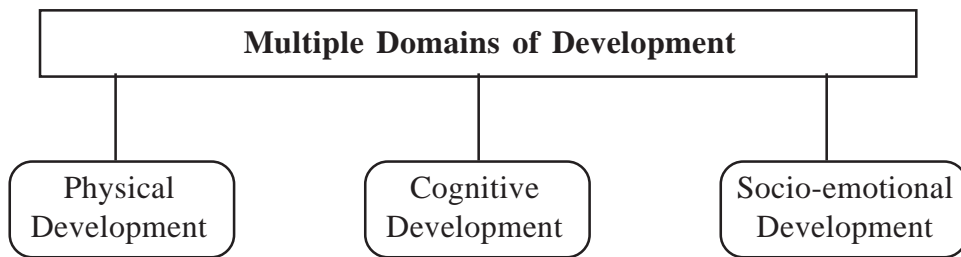
Fig. 11.1: *Domains of Development*

Physical development involves changes in the body's size, shape, and physical abilities, such as motor skills and sensory abilities.

Eg: An infant learning to roll over, a child growing taller and stronger, or an older adult experiencing change in vision or hearing.

Cognitive development refers to the growth and change in an individual's ability to think, reason, and learn.

Eg: A child learning to understand cause and effect, a teenager developing abstract thinking skills, or an older adult experiencing change in memory and cognitive functioning.

Socio-emotional development involves changes in an individual's social and emotional skills, such as the ability to form relationships, regulate emotions, and understand others' perspectives.

Eg: A teenager developing a sense of identity, or an older adult experiencing changes in their emotional well-being.

INTEXT QUESTIONS ❓

Choose the correct option from the given A,B,C and D.

1. Which of the following best describes the nature of human development?

   A. A simple, linear process of growth and maturation.

   B. A complex, multidimensional process of growth and change.

   C. A predetermined process controlled entirely by genetics.

   D. A passive process that is largely influenced by environmental factors.

2.   Which of the following factors can influence human development?

   A. Genetics

   B. Environmental factors

   C. Social and cultural factors

   D. All of the above

Fill in the blank with the appropriate word.

3.   Human development is a complex and _____ process of growth and change.

4.   Identify which the following is physical, cognitive or socio- emotional development and write which suits correct against it.

Characteristic feature	Domain of development
Problem-solving and reasoning skills	
Attachment and bonding	
Growth in height, weight and body composition	

11.3 How Development Occurs?

Human development occurs through two processes of maturation and learning. Maturation refers to the natural, biological changes that occur as an individual grows and develops. For example, infants are born with reflexes such as sucking, rooting, and grasping, which are essential for their survival. As they grow and develop, their physical abilities improve, enabling them to sit up, crawl, walk, and eventually run.

While learning refers to the acquisition of new skills, knowledge and behaviours through experience. Learning, on the other hand, involves acquiring new skills, knowledge, and behaviours through experience. For example, children learn to speak by listening to and imitating the sounds they hear around them. They also learn social skills by interacting with others and observing their behaviour. As they continue to learn and grow, they develop more complex abilities, such as abstract thinking and critical reasoning. Overall, human development occurs through a complex interaction of both maturation and learning. While biological maturation sets the stage for development, learning plays a crucial role in shaping an individual's abilities, personality, and behaviour.
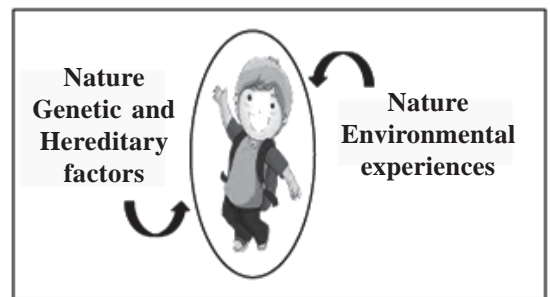
Fig. 11.2: *Genetic and Environmental Influences on development of an individual*

Development also occurs through a complex and dynamic interplay between genetic, environmental, and individual factors. This process is always like a debate between the nature versus nurture, as it involves the interaction between innate biological factors and environmental experiences.

Genetic factors play a significant role in determining many aspects of development, including physical and cognitive characteristics.

Eg: Genes determine an individual's eye colour, height, and susceptibility to certain diseases.

Environmental experiences, such as social interactions, cultural practices, and exposure to toxins or stress, also play a critical role in shaping development.

Eg: Children who grow up in enriched environments with stimulating toys and experiences tend to develop better cognitive skills than those who grow up in deprived environments. Similarly, exposure to stress or trauma can have negative effects on development, particularly in the areas of socio-emotional and cognitive development.

Personal experiences, such as learning opportunities and personal choices, also influence development.

Eg: A child who actively engages in learning activities and seeks out new experiences is likely to develop better cognitive skills than a child who is passive and avoids challenges.

11.3.1 Importance of Development

Development occurs across the lifespan and is characterized by different stages and milestones. These stages are marked by unique challenges and opportunities for growth and development. Understanding the developmental milestones of children can help adults communicate and interact with them more effectively. The studying of human development and its nature can help individuals enhance their own personal growth and development. The changes that occur across the lifespan, help the individuals to navigate better with the challenges and opportunities of life and achieve their full potential.

Growth Curve

A growth curve is a graphical representation of an individual's growth over time. It typically charts an individual's height, weight, or other physical measurements against their age or time since birth.
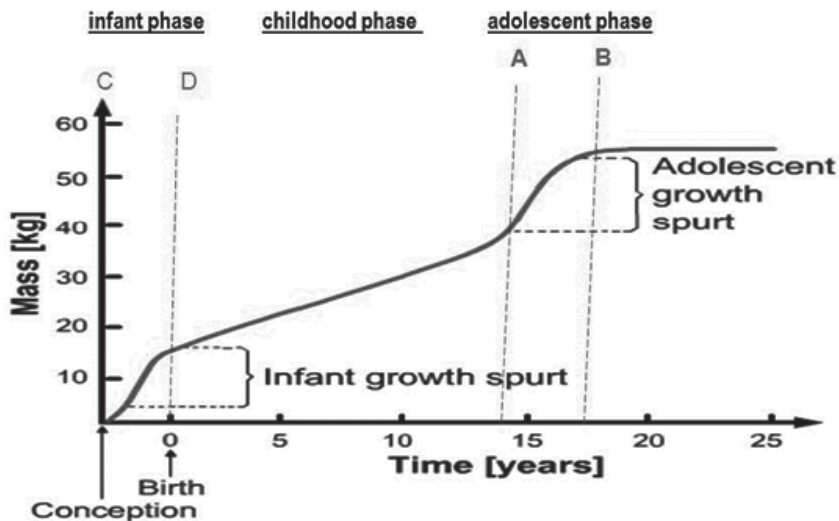
Fig. 14.3 : *Growth Curve*

The curve itself shows the expected pattern of growth for an individual, with an upward slope representing increasing height and weight over time. It is clearly evident form the above graph the growth is very fast in the first five years. Thereafter from five years to 12 years the pace of growth is normal. The following from 12 years to 18 years it is again very fast.

The growth curve of a human being typically follows a pattern of different developmental stages, each characterized by unique physical and cognitive changes. The following are descriptions of these different developmental stages:

Stage	Age	Description
Infancy	birth to 2 years	Infants grow very rapidly. During this stage, gaining weight and length, develop new motor skills, such as rolling over, crawling, and walking.
Childhood:	2 to 12 years	Children grow rapidly till 3 years of age and from 5 to 12 years the growth is like a plateau stage. During this stage they do running, jumping, and throwing, and develop problem-solving abilities, and social skills.
Adolescence:	12 to 18 years	The growth is very rapid. The development of secondary sexual characteristics, and hormonal changes, abstract thinking skills and the formation of a sense of identity occurs in this stage.
Adulthood	18 years of age to old age	Gradual increase in growth with changes in body composition and health, acquisition of new knowledge and skills, as well as changes in thinking and memory abilities.

It's important to note that these developmental stages are not fixed and may vary depending on cultural and individual factors. Additionally, the boundaries between these stages may be fluid, and individuals may continue to experience growth and development throughout their lives.

Growth curves are often used to assess an individual's growth patterns and compare them to population norms. For example, a child's height and weight growth curves can be used to assess their overall health and development and to identify any potential issues or concerns.

Despite the fact that every person experience growth and development in their own distinct manner, influenced by their individual circumstances, there exist fundamental principles that are inherent in the process of development and can be observed across all humans. These principles are referred to as the principles of development, which we will now demonstrate.

11.4 Principles of Development

The principles of human development refer to the underlying concepts that guide our understanding of how people grow and change throughout their lives. Here are some key principles of human development:

i. Development is a continuous process: It occurs throughout the lifespan, from conception to death.

ii. Development is multidirectional: The different aspects of development can change at different rates and in different directions. For example, physical development may slow down as a person ages, while cognitive development may continue to improve.

iii. Development is influenced by both nature (genetics) and nurture (environment), as well as the interaction between the two.

iv. Development is characterized by critical periods, or specific times in development when certain skills or abilities must be acquired in order for development to proceed normally.

v. Development is influenced by both individual and cultural differences: These can have a significant impact on the course of development.

vi. Development is influenced by both stability and change: Some aspects of development remain stable over time, while others may change significantly.

vii. Development is influenced by a range of environmental factors: These includes the family, peers, school, community, and culture.

Understanding these principles of human development can help us to better understand the complex and dynamic process of human growth and change, and can inform strategies for promoting healthy development across the lifespan.

Do you know that

- Babies don't shed tears until they're at least one month old.

- The young child's brain has basically the same structures as the adult brain.

- Your ears never stop growing!

- If you live to age 70, your heart will have beat around 2.5 billion times!

11.5 How is the Knowledge of the Principles of Development Important?

The principles of human development are important because they provide a framework for understanding how people grow and change throughout their lives. By studying and applying these principles, we can gain insight into the factors that influence human development and the processes that shape our development over time.

Here are some ways in which the principles of human development are important:

i. **Understanding individual differences:** The principles of human development highlight the importance of individual differences in development.

ii. **Informing interventions and programs:** The principles of human development provide guidance for developing effective interventions and programs to support healthy development across the lifespan.

iii. **Supporting healthy development:** The principles of human development can inform policies and programs that support healthy development, such as early childhood education, parent education, and community-based programs.

Advancing scientific understanding: Finally, the principles of human development are important for advancing our scientific understanding of human growth and change. By studying and refining our understanding of these principles, we can deepen our knowledge of human development and inform future research and practice in this field.

INTEXT QUESTIONS ❓

Choose the correct option from the given A,B,C and D.

5. Which of the following statements is true about human development?

   A. Development stops at adulthood.

   B. Development is a universal process that occurs in the same way for all individuals.

   C. Development is influenced by both nature and nurture.

   D. Development is solely determined by genetics.

6. Which of the following is a critical period in human development?

   A. Infancy

   B. Childhood

   C. Adolescence

   D. Adulthood

State whether the following statements are True/False

7. The human growth curve is a smooth, continuous curve that represents the gradual increase in size and weight of an individual over time.   True / False

8. Growth and development occur at the same rate during all stages of the human growth curve.   True / False

9. The human growth curve follows a linear pattern throughout childhood and adolescence.
                                                                    True / False

11.6 Approaches to Study Development

There are several approaches to studying development, each with its own set of assumptions, methods, and goals. Here are some of the main approaches to studying development:

11.6.1 Cross Sectional Approach

The cross-sectional approach is a research method used to study development that involves comparing individuals of different ages at the same point in time.

Features of this approach involves selecting a sample of individuals from different age groups (e.g., 5-year-olds, 10-year-olds, and 15-year-olds) and collecting data from each group at the same time. Data can be collected through various methods, such as surveys, questionnaires, and observations. Researchers can use this method to identify differences between age groups and to explore patterns of development across the lifespan. This approach is often used in large-scale studies, such as population surveys or epidemiological studies, and can provide a snapshot of a particular age range or population at a particular point in time.

Advantages of this approach are relatively quick and efficient, as data can be collected from multiple age groups at the same time. It allows researchers to identify developmental trends and differences across different age groups, providing a broad picture of development. It can be used to investigate multiple variables or factors at the same time.

Limitations of this approach are it does not provide information about individual developmental trajectories over time, as data is collected only once for each age group. It does not account for individual differences or changes that may occur within age groups. Differences between age groups may be confounded by factors such as historical events, cultural changes, or cohort effects. This method does not provide information about causality, as it is a correlational design.

11.6.2 Longitudinal Approach

The longitudinal approach is a research method used to study development that involves following the same group of individuals over an extended period of time, and collecting data at multiple time points.

Features of this approach involves selecting a sample of individuals and collecting data from them at multiple time points, such as every year or every few years. Data can be collected through various methods, such as surveys, questionnaires, interviews, observations, and physiological measures. Researchers can use this method to investigate changes and stability in developmental processes over time, and to identify individual trajectories of development. This approach is often used in studies of developmental disorders or other conditions that change over time.

Advantages of this approach are providing information about individual developmental trajectories over time, allowing researchers to identify patterns of change and stability in developmental processes. It can provide information about the direction of causality between variables, as changes in one variable can be followed by changes in another over time. It

can provide more accurate and reliable data than cross-sectional studies, as it controls for individual differences and minimizes the impact of cohort effects or historical events. It can be used to investigate the effects of interventions or treatments over time.

Limitations of this approach can be time-consuming and expensive, as it requires following individuals over an extended period of time. It can be subject to attrition or dropout, as individuals may move or drop out of the study over time. It may be subject to practice effects, as individuals may become more familiar with the study measures over time. It may be limited by the availability of resources or funding to conduct long-term studies.

Understanding the different approaches to human development can help researchers to choose appropriate research methods and study designs to answer specific research questions. By selecting the most appropriate approach or combination of approaches, researchers can improve the reliability and validity of their findings.

WHAT YOU HAVE LEARNT

❐ Development describes the growth of humans throughout the lifespan, from conception to death. It refers to development as patterns of change over time.

❐ Development is a complex and dynamic process that is influenced by a variety of factors, including genetics, environment, and individual experiences.

❐ The principles of developments includes that it follows a pattern or a sequence, it is a continuous process, aspects of growth develop at different rates, and it is a product of the interaction of the organism and environment:

❐ The stages of development in the human growth curve and the characteristics of each stage.

❐ Studying the approaches to human development is essential for gaining a comprehensive understanding of the processes and factors that contribute to human growth

TERMINAL EXERCISE

1. What is human development?

2. What factors influence human development?

3. Does development stop at a certain age? Why

4. What is the shape of the human growth curve and what are the different phases of growth it typically includes?

5. Write about the different approaches to study development.

ANSWERS TO INTEXT QUESTIONS

1. B. A complex, multidimensional process of growth and change.

2. D. All of the above.

3.   multidimensional.

4.   i) cognitive development

     ii) socio-emotional development

     iii) physical development

5.   C. Development is influenced by both nature and nurture.

6.   A. Infancy.

7.   True.

8.   False. Growth and development occur at different rates during different stages of the human growth curve.

9.   False. The human growth curve follows a sigmoidal (S-shaped) pattern, with rapid growth in infancy, a slower growth rate in childhood, a growth spurt during adolescence, and finally a plateau during adulthood.

DOMAINS OF DEVELOPMENT

12

INTRODUCTION

Can an old man do all the activities done by a child? What are the differences you have noticed in a child, young man and an old man? There are certain characteristics which remarkably differentiates all these stages of growth. As you observe your surroundings, it becomes evident that individuals undergo a range of changes throughout their lives, starting from birth and lasting until old age. The individuals experience includes growth and development, acquisition of language, numeracy, and literacy, as well as moral reasoning. Along the way, we form friendships, experience puberty, enter into matrimony, raise children, and age. Although we are unique in many ways, we share fundamental experiences such as learning to walk by the first year and speak by the second year of life. This unit aims to introduce you to the various developmental processes and changes that occur in different domains throughout the lifespan, including prenatal, infancy, childhood, adolescence, adulthood, and old age.

OBJECTIVES

After studying this unit, you will be able to

- *Understand about development tasks*
- *recognize the various stages of human life span development*
- *identify the key features of development in each stage*
- *explain about Freud's theory of psychosexual development*

12.1 Developmental Tasks

Scientists use domains of development as categories to characterize human growth. These domains consist of physical, cognitive, and social aspects that impact human development.

Domains of development refer to the different aspects or areas of human growth and development that occur over the course of a lifespan. These domains are interrelated and can impact each other. Each domain of development is important and interdependent, and each may have unique characteristics and milestones. Understanding these domains can help individuals and their elders to promote healthy development and address areas of concern as needed.

Here are some of the key developmental tasks that individuals typically go through from birth to adolescence:

i. **Infancy (0-2 years):** During this stage, infants learn to trust their elders and begin to develop a sense of self. They also start to develop basic physical and cognitive skills, such as learning to crawl, walk, and speak.

ii. **Early childhood (2-6 years):** Children continue to develop physical skills and begin to explore the world around them. They also develop a sense of autonomy and start to assert their independence. During this stage, children also learn language and begin to develop social skills, such as sharing and cooperating with others.

iii. **Middle childhood (6-12 years):** During this stage, children continue to develop physically, cognitively, and socially. They become more adept at problem-solving and begin to develop a sense of morality and empathy for others. They also start to form stronger relationships with peers and may begin to develop a sense of identity.

iv. **Adolescence (12-18 years):** Adolescents experience significant physical changes as they enter puberty, and they may also begin to question their values and beliefs. During this stage, they begin to develop a stronger sense of identity and may struggle with issues of self-esteem and self-worth. They also become more interested in romantic relationships and may begin to explore their sexuality.

Overall, each stage of development is critical for building a strong foundation for the next stage, and each individual may progress through these stages at their own pace.

Try it yourself

Prepare a list of ages of different children who live your neighbourhood/locality. Now using the above information identify them in which stage they are.

12.2 States of Development

There are different models of human development that describe different stages and time frames, but here is a general overview:

Stage	Time Frame
Prenatal development	This stage begins at conception and ends with birth, typically lasting around 38-42 weeks.
Infancy	This stage starts at birth and lasts until around 2 years old.
Early childhood	This stage ranges from around 2 years old to 6 years old.
Middle childhood	This stage spans from around 6 years old to 12 years old.
Adolescence	This stage starts at around 12-14 years old and lasts until around 18-21 years old, depending on cultural and societal norms.
Early adulthood	This stage ranges from around 18-21 years old to 40-45 years old.
Middle adulthood	This stage spans from around 40-45 years old to 65-70 years old.
Late adulthood	This stage starts at around 65-70 years old and lasts until the end of life.

Try it Yourself

> Prepare a family chart of your family members and identify the different stages of life.

INTEXT QUESTIONS ?

Fill in the blanks with correct answers

1. The stage of prenatal development typically lasts around _____ to _____ weeks.

2. Infancy is the stage of human development that starts at _____ and lasts until around _____ years old.

3. The stage of early childhood ranges from around _____ years old to _____ years old.

4. Middle adulthood spans from around _____ years old to _____ years old.

Identify whether the following statements are True or False

Prenatal development begins at birth.	
Adolescence starts at around 18-21 years old.	

12.3 Aspects or Areas of Development

There are several different aspects or areas of development that individuals can experience throughout their lifespan. These include:

  i. **Physical development:** This refers to changes in the body and its systems, including growth, motor skills, and changes in sensory perception.

 ii. **Cognitive development:** This refers to changes in thinking, memory, language, and problem-solving abilities. It includes both the acquisition of new knowledge and the ability to use that knowledge in different contexts.

iii. **Emotional development:** This refers to changes in an individual's emotional experiences, expression, and regulation. It includes the ability to identify and understand one's own emotions as well as the emotions of others.

 iv. **Social development:** This refers to changes in an individual's relationships with others, including the ability to form and maintain friendships, navigate social hierarchies, and engage in cooperative and collaborative activities.

  v. **Moral development:** This refers to changes in an individual's understanding of right and wrong, and the ability to make ethical judgments and act in accordance with ethical principles.

These areas of development are interrelated and can influence each other. For example, emotional development can influence cognitive and social development, and cognitive

development can influence moral and spiritual development. Understanding these different areas of development can help individuals, families, and communities support healthy growth and development across the lifespan

12.3.1   Physical Development

Physical development refers to the changes that occur in the body, including growth, changes in body composition, and the development of physical abilities and coordination. Here are some areas of physical development:

i.   **Gross motor skills:** These are large muscle movements, such as crawling, walking, running, jumping, and throwing. They are essential for physical activities and sports.

ii. **Fine motor skills:** These are small muscle movements, such as grasping, holding, and manipulating objects. They are important for activities such as writing, drawing, and using tools.

iii. **Sensory development:** This includes the development of the five senses: sight, hearing, touch, taste, and smell. Infants use their senses to explore the world around them and to learn about their environment.

iv. **Body size and proportions:** This refers to changes in height, weight, and body proportions. Children grow rapidly during infancy and early childhood, and their body shape and size change as they age.

v.   **Development of body systems:** This includes the development of the cardiovascular, respiratory, digestive, and nervous systems, among others. These systems are crucial for the functioning of the body and for overall health.

vi. **Puberty and sexual maturation:** This refers to the physical changes that occur during adolescence, including the development of secondary sexual characteristics, such as breasts and facial hair, and the onset of menstruation and sperm production.

Overall, physical development is an important aspect of a child's growth and well-being, and it is influenced by a combination of genetic and environmental factors. Providing children with opportunities to engage in physical activities and encouraging healthy habits, such as a balanced diet and regular exercise, can promote their physical development.

12.3.2   Motor Development

Motor development refers to the development of physical abilities and coordination skills. It involves the growth and refinement of the body's motor skills and the ability to control body movements. Here are some areas of motor development:

i.   **Gross motor skills:** These are large muscle movements, such as walking, running, jumping, climbing, and throwing. They are crucial for physical activities and sports and are essential for overall health.

ii. **Fine motor skills:** These are small muscle movements, such as grasping, manipulating objects, and using tools. They are important for activities such as writing, drawing, and tying shoelaces.

iii. **Hand-eye coordination:** This involves the ability to use the eyes and hands together to complete tasks such as catching a ball, hitting a target, or threading a needle.

iv. **Balance and coordination:** This refers to the ability to maintain balance and coordination while standing, walking, or engaging in physical activities.

v. **Sensory integration:** This involves the ability to integrate sensory information from different parts of the body to perform coordinated movements. For example, a child must be able to use visual, auditory, and tactile information to catch a ball.

vi. **Perceptual-motor skills:** These are abilities that involve the interpretation and processing of sensory information to make decisions and execute movements. For example, a child must be able to judge the distance and trajectory of a ball to catch it.

vii. **Reflexes:** These are automatic responses to stimuli, such as the rooting and sucking reflexes in infants.

Overall, motor development is an important aspect of a child's growth and well-being, and it is influenced by a combination of genetic and environmental factors. Providing children with opportunities to engage in physical activities and practicing specific motor skills can promote their motor development.

12.3.3 Cognitive (Mental) Development

Jean Piaget, a Swiss psychologist, proposed a theory of cognitive development that identified four stages of mental development that individuals go through from birth to adulthood. The four stages are:

i. **Sensory motor Stage (Birth to 2 Years):** In this stage, infants and toddlers experience the world through their senses and motor activities. They develop object permanence, the understanding that objects continue to exist even when they are not seen, and begin to understand cause and effect.

ii. **Preoperational Stage (2 to 7 Years):** In this stage, children use symbols to represent objects and ideas. They develop language and use it to communicate with others. However, their thinking is still egocentric, meaning they have difficulty seeing things from other people's perspectives.

iii. **Concrete Operational Stage (7 to 12 Years):** In this stage, children begin to think logically and understand cause and effect relationships. They develop the ability to classify objects into categories, and understand the concept of conservation, which means that an object's properties do not change just because its appearance does.

iv. **Formal Operational Stage (12 Years and Up):** In this stage, adolescents and adults develop the ability to think abstractly and hypothetically. They can understand complex ideas and make logical deductions. They can also think about their own thinking, known as metacognition.

Piaget believed that individuals progress through these stages in a fixed order, and that the completion of each stage lays the foundation for the next. However, he also recognized that the timing and pace of development can vary from person to person.

12.3.4   Moral Development

Moral development refers to the changes that occur in an individual's understanding of right and wrong and their ability to reason morally. Here are some areas of moral development:

i.   **Pre-conventional morality:** This stage is characterized by a focus on obedience and avoiding punishment. Children in this stage may follow rules simply to avoid punishment, and they may believe that something is right or wrong based solely on the consequences.

ii. **Conventional morality:** This stage is characterized by a focus on social norms and expectations. Individuals in this stage may be more concerned with following rules and meeting the expectations of authority figures, and they may judge the morality of an action based on how it will affect others.

iii. **Post-conventional morality:** This stage is characterized by a focus on moral principles and values that transcend social norms and expectations. Individuals in this stage may be more concerned with personal values and beliefs than with following rules, and they may be willing to challenge social norms if they conflict with their own moral principles.

iv. **Empathy and perspective-taking:** These are important skills for moral development, as they allow individuals to understand the feelings and perspectives of others and to consider the impact of their actions on others.

v.   **Moral reasoning:** This involves the ability to reason about moral dilemmas and to make decisions based on ethical principles. It includes the ability to recognize conflicting values and to evaluate the consequences of different courses of action.

Overall, moral development is influenced by a combination of genetic and environmental factors, including parenting practices, cultural values, and exposure to moral role models. Providing children with opportunities to engage in moral reasoning and ethical decision-making, and modelling moral behaviour can promote their moral development.

12.3.5   Language Development

Language development in children is a process that begins at birth and continues throughout childhood. Here are some key milestones and stages of language development in children:

i.   **Pre-linguistic Stage (Birth to 12 Months):** Infants communicate primarily through crying, cooing, and babbling. They start to recognize familiar voices and sounds and begin to associate meaning with words.

ii. **Holophrastic or Single Word Stage (12 to 18 Months):** Toddlers begin to use single words to communicate and express their needs and wants. They start to understand simple commands and can follow simple instructions.

iii. **Two-Word Stage (18 to 24 Months):** Toddlers start combining words to form simple sentences, such as "Mommy go" or "more juice." They also begin to understand basic grammar rules, such as subject-verb agreement.

iv. Telegraphic or Short Sentence Stage (24 to 30 Months): Toddlers begin to use short sentences with more complex grammar, such as "I want cookie" or "Daddy go work."

v. Preschool Stage (3 to 5 Years): Children's vocabulary expands rapidly, and they begin to use more complex sentences and understand more advanced grammar rules. They can have longer conversations and understand concepts like past and future tense.

vi. School Age Stage (5 to 12 Years): Children continue to refine their language skills, learning more complex grammar and expanding their vocabulary even further. They can understand and use figurative language, such as metaphors and similes.

Throughout these stages, children also develop literacy skills, including the ability to read and write. They learn to recognize letters, sound out words, and eventually read and comprehend written texts. Language development is influenced by a child's environment, social interactions, and exposure to language, and can vary significantly between individuals.

12.3.6   Personality Development

Personality development of a child is a complex process that involves a combination of genetic, environmental, and social factors. Here are some key factors that contribute to personality development in children:

i. Temperament: A child's temperament, which is largely influenced by genetics, can affect their personality development. For example, a child who is naturally shy and introverted may be more likely to develop a cautious and reserved personality.

ii. Parenting: Parenting style and the quality of the parent-child relationship can have a significant impact on personality development. Children who experience warmth, support, and consistent discipline from their parents are more likely to develop positive personality traits like self-esteem, empathy, and resilience.

iii. Socialization: Children learn about the world and develop their personalities through interactions with others, including peers, teachers, and family members. Positive socialization experiences, such as being praised for good behaviour or having opportunities to collaborate with others, can foster positive personality traits.

iv. Culture: Cultural norms and values can influence personality development in children. For example, cultures that prioritize cooperation and collectivism may foster personalities that are more collaborative and cooperative, while cultures that emphasize individualism may foster personalities that are more independent and self-reliant.

v. Experiences: Life experiences, both positive and negative, can shape a child's personality. Traumatic experiences, such as abuse or neglect, can lead to negative personality traits like anxiety or aggression, while positive experiences, such as academic success or community involvement, can foster positive personality traits.

It's important to remember that personality development is a lifelong process and that children's personalities are not set in stone. Positive experiences, supportive relationships, and other factors can help children develop positive personality traits and overcome any negative ones.

12.3.7   Emotional development

Emotional development is the process by which an individual learns to understand and manage their emotions. It involves developing the ability to recognize, express, and regulate emotions in oneself and others. Here are some key aspects of emotional development:

i.   **Self-Awareness:** Emotional development begins with self-awareness, which is the ability to recognize and understand one's own emotions. This includes being able to identify and label different emotions, understand how they are triggered, and recognize how they affect one's behaviour.

ii.   **Empathy:** Empathy is the ability to understand and share the emotions of others. It involves recognizing and responding to others' emotional cues, such as facial expressions and tone of voice, and being able to take their perspective.

iii. **Regulation:** Emotional regulation is the ability to manage one's own emotions in a healthy and appropriate way. This includes being able to calm oneself down when upset, express emotions in a constructive way, and cope with stress and adversity.

iv.   **Social Skills:** Emotional development also involves developing social skills, such as the ability to communicate effectively, resolve conflicts, and form positive relationships. These skills are essential for healthy emotional development, as they enable individuals to interact with others in a positive and supportive way.

Emotional development is a lifelong process, and individuals continue to develop their emotional skills throughout their lives. Positive experiences, supportive relationships, and other factors can help individuals develop healthy emotional skills and overcome any emotional challenges they may face.

12.4 Sigmund Freud's Tehory of Psychosexual Development

Sigmund Freud's theory of psychosexual development describes how a child's personality develops through a series of stages, each characterized by a particular conflict or challenge that the child must resolve. According to Freud, these stages occur during the first six years of life, and their successful resolution is critical for healthy personality development. Here are the stages according to Freud:

i.   **Oral Stage (0-1 year):** During this stage, the infant's primary focus is on oral stimulation, such as sucking and biting. The main challenge is to resolve the conflict of weaning from the breast or bottle without experiencing too much anxiety.

ii.   **Anal Stage (1-3 years):** During this stage, the focus shifts to the anal area, and the main challenge is toilet training. If the child is over-controlled or harshly punished, they may develop an anal-retentive personality, while a lack of control or punishment may result in an anal-expulsive personality.

iii. **Phallic Stage (3-6 years):** During this stage, the focus shifts to the genitals, and children become more aware of their gender identity. The main challenge is to resolve the Oedipus or Electra complex, which involves a child's unconscious desire for the opposite-sex parent and jealousy toward the same-sex parent.

iv. **Latency Stage (6-puberty):** During this stage, the focus is on developing social and intellectual skills, and sexual urges are largely suppressed.

v. **Genital Stage (puberty-adulthood):** During this stage, the focus returns to the genitals, and the individual develops mature sexual relationships. Successful resolution of earlier conflicts leads to healthy relationships and a well-adjusted personality.

It's worth noting that Freud's theory of psychosexual development has been criticized for its lack of empirical evidence and for placing too much emphasis on early childhood experiences. Nevertheless, it remains a significant contribution to the field of psychology and continues to influence many aspects of modern psychoanalytic theory and therapy.

INTEXT QUESTIONS ?

7. Which of the following is NOT an area of physical development?

   a) Fine motor skills

   b) Gross motor skills

   c) Hand-eye coordination

   d) Sensory integration

8. Which of the following is NOT a component of cognitive development?

   a) Perception

   b) Memory

   c) Attention

   d) Reflexes

9. Which of the following is NOT a component of language development?

   a) Reading

   b) Writing

   c) Speaking

   d) Problem-solving

WHAT YOU HAVE LEARNT

❐ We have learned that developmental tasks are the critical milestones that individuals must achieve as they progress through different stages of life, which are shaped by various factors and require specific skills and abilities to be accomplished.

❐ In the domains of development, we have learned about various areas of human development, including physical development, cognitive development, moral development, and language development.

◄ TERMINAL EXERCISE ►

1. What are developmental tasks, and how do they vary across different stages of human life span?

2. What are some of the common developmental tasks that individuals face during adolescence?

3. How do developmental tasks relate to physical, cognitive, emotional, and social changes in human beings?

4. What is the role of developmental tasks in shaping personality and identity development in human beings?

ANSWERS TO INTEXT QUESTIONS

1. 38-42

2. birth, 2

3. 2, 6

4. 40-45, 65-70

5. False. Prenatal development begins at conception and ends with birth.

6. False. Adolescence typically starts at around 12-14 years old and lasts until around 18-21 years old.

7. d) Sensory integration

8. d) Reflexes

9. d) Problem-solving

HINTS TO TERMINAL EXERCISES

1. Refer 12.1

2. Refer 12.1

3. Refer 12.3

4. Refer 12.3.6

ADOLESCENCE: TRANSITION AGE

13

INTRODUCTION

Have you noticed any changes in the boys and girls between the ages 14 to 17? What types of changes have you noticed? Is there any clear difference from their previous age to the present age? Most of you might have observed the sudden increase in the height of the boys and girls, acne on the face and voice changes. This age is called as the adolescence or transition age. Transition does not mean a break or change from what has already happened, but it does mean moving from one stage to another. During this age individual's position is ambiguous and there is confusion about the role the individual is expected to play. They don't know whether they have to behave like adults or child. Before this stage, children will be mostly dependent on their parents but after attaining this age they start to think independently. Adolescence is a significant period of development between childhood and adulthood, marked by physical, psychological, and social changes. In this chapter, you will understand the unique needs and concerns of adolescents and provide them with the support they need to successfully navigate this critical phase of their lives.

OBJECTIVES

After studying this chapter, you will be

- *explain the importance of adolescence*
- *understanding the physical, cognitive, and emotional changes that occur during adolescence.*
- *exploring the social, cultural, and environmental factors that influence adolescent development.*
- *understanding adjustment and coping issues of adolescents*
- *identifying the risk and protective factors that impact adolescent health and well-being, including mental health issues, and risky behaviours*
- *learning how to support and guide adolescents as they navigate the challenges and opportunities of this stage of life.*

13.1 What is Adolescence?

Adolescence is a stage of development that typically occurs between the ages of 10 and 19 years old. It is a period of significant physical, cognitive, emotional, and social changes as young people transition from childhood to adulthood. Adolescents may experience

rapid growth and physical changes such as puberty, as well as increased cognitive abilities and abstract thinking. They may also experience a range of emotions, including excitement, anxiety, and uncertainty, as they navigate the challenges of growing up. This period is marked by an increasing desire for independence and self-discovery, as well as experience a range of emotions, including excitement, anxiety, and uncertainty as they face the challenges of growing up. It is a time of exploration, self-discovery, and independence, as well as a period of high risky behaviours and mental health issues.

During adolescence, young people commonly encounter confusion, hesitation, and a sense of self-discovery. This may be due to the fact that, although their physical appearance resembles that of an adult, they are still maturing mentally and emotionally. Parents and elders may show different behaviour towards them, sometimes treating them as children and at other times as adults, which contributes to feelings of uncertainty regarding their role and sense of self. Such conflicting expectations and treatment can result in difficulties related to self-identity as adolescents struggle with questions about their true identity and purpose.

Try it Yourself

Interact with your family members like father/mother, elder brother/elder sister, uncle/aunt or grandfather/grandmother and ask them the following question.

Think about a challenging situation that they faced during their own adolescence. Write about how they coped with the situation and what they learned from it.

13.2 Developmental Tasks During Adolescence

Developmental tasks are important milestones that individuals must achieve during a particular stage of development to successfully move on to the next stage. Some of the main developmental tasks during adolescence include:

i.   **Developing a Sense of Identity:** Adolescents are exploring who they are and who they want to become. They are developing a sense of identity by exploring their beliefs, values, and interests.

ii. **Establishing Autonomy:** Adolescents are seeking more independence and control over their lives. They are developing the skills to make decisions and take responsibility for their actions.

iii. **Developing Intimacy:** Adolescents are developing relationships with others, including peers, romantic partners, and family members. They are learning how to communicate, build trust, and maintain healthy relationships.

iv. **Achieving Emotional Regulation:** Adolescents are learning how to regulate their emotions, including anger, anxiety, and stress. They are developing coping strategies to deal with challenges and setbacks.

v.   **Preparing for Adulthood:** Adolescents are preparing for the transition to adulthood by developing academic and career goals, learning practical skills such as budgeting and time management, and exploring their roles in society.

The above developmental tasks can be challenging for adolescents to navigate, but they are critical for their overall growth and development. It is important for parents, teachers, and guardians to provide support and guidance to adolescents as they work to achieve these tasks and prepare for the challenges and opportunities of adulthood.

13.3 Physical Changes During Adolescence

Adolescence is a period of significant physical changes as the body undergoes a rapid growth spurt, which typically begins between the ages of 8 and 13 years old for girls and between 10 and 14 years old for boys. Some of the main physical changes that occur during adolescence include:

Physical Change	Characteristics
Puberty	Puberty is marked by the development of secondary sexual characteristics, such as breast development in girls and the growth of facial hair in boys. This is triggered by the release of hormones, which leads to the development of the reproductive system.
Rapid growth	During adolescence, young people experience a rapid growth, which results in an increase in height and weight. This growth typically occurs earlier in girls than in boys, and it can last for several years.
Changes in Body Composition	As young people grow taller and gain weight, their body composition also changes. Girls tend to accumulate more body fat during puberty, while boys tend to gain more muscle mass.
Changes in Voice	During puberty, boys voices deepen as their vocal cords thicken, while girls voices remain relatively unchanged.
Changes in Skin	Adolescents may experience changes in their skin, such as increased oil production and acne, which can be attributed to hormonal changes.

These physical changes can be challenging for young people, but they are a normal part of the adolescent experience. It is important for parents and guardians to provide support and guidance to adolescents as they adjust to these changes and develop healthy habits to support their physical and emotional well-being.

INTEXT QUESTIONS ❓

Choose the correct option from the given A, B, C and D.

1. What is adolescence?

    a) A stage of development that occurs between 5 and 10 years old

    b) A stage of development that occurs between 10 and 19 years old

    c) A stage of development that occurs between 20 and 30 years old

    d) A stage of development that occurs between 40 and 50 years old

2. Which of the following is a physical change that occurs during adolescence?

    a) Development of wrinkles

    b) Growth of facial hair in girls

    c) Development of secondary sexual characteristics

    d) Decrease in height

3. What is a developmental task during adolescence?

    a) Learning to walk

    b) Learning to read

    c) Developing a sense of identity

    d) Learning to drive

◀13.4▶ Psychological Characteristics of Adolescents

Apart from physical changes adolescents undergo psychological changes that appear in the

13.4.1   Emotional Development of Adolescents

During adolescence, emotional development involves a complex combination of social, cognitive, and biological factors. Adolescents experience a wide range of emotions, and they often struggle to regulate these emotions effectively. Some of the key aspects of emotional development during adolescence include:

   i.   **Increased emotional intensity:** Adolescents tend to experience emotions more intensely than children or adults. They may feel emotions more strongly and have more difficulty controlling their emotional responses.

   ii.   **Heightened self-consciousness:** Adolescents become more aware of their own thoughts and feelings, and they become more self-conscious about how they appear to others. This can lead to increased anxiety and self-doubt.

iii. **Greater need for independence:** Adolescents has a strong desire to assert their independence and autonomy. They may resist authority figures and challenge social norms and conventions.

iv. **Greater risk-taking behaviour:** Adolescents may engage in risky behaviour as they explore their own boundaries and test their limits. This can include experimenting with drugs and alcohol, engaging in sexual activity, or engaging in dangerous sports or activities.

v. **Developing empathy and social skills:** Adolescents begin to develop more complex social skills and the ability to empathize with others. They also become more sensitive to social norms.

13.4.2 Cognitive Development of Adolescents

Cognitive development during adolescence is characterized by significant changes in the way that individuals think, reason, and process information. During this time, young people experience substantial changes in their intellectual abilities, including:

i. **Development of abstract thinking:** Adolescents develop the ability to think abstractly and hypothetically, which enables them to consider multiple possibilities and potential outcomes. This allows them to engage in more sophisticated problem-solving and decision-making.

ii. **Increased meta-cognitive abilities:** Adolescents become more aware of their own thinking processes and develop the ability to reflect on their own thoughts and behaviours. This leads to increased self-awareness and self-regulation.

iii. **Improved reasoning and logic:** Adolescents develop the ability to reason logically and systematically, which allows them to analyse complex information and draw logical conclusions.

iv. **Development of moral reasoning:** Adolescents begin to think more deeply about ethical and moral issues, and they develop their own moral reasoning based on personal values and beliefs.

v. **Improved memory and attention:** Adolescents develop more advanced memory and attention skills, which enable them to learn and retain information more effectively.

13.4.3 Moral Development of Adolescents

Moral development refers to the changes and growth in an individual's understanding of what is right and wrong, as well as their ability to make ethical decisions. Adolescence is a period of significant moral development, as young people begin to establish their own values, beliefs, and moral reasoning.

During adolescence, young people start to question the moral values and beliefs that have been imparted to them by their parents and other authority figures. They begin to develop their own sense of right and wrong, and they may also become more aware of the social and cultural factors that shape moral behaviour.

One of the most influential theories of moral development is Kohlberg's theory of moral reasoning, which proposes that individuals progress through six stages of moral development, starting with a focus on obedience and punishment, and eventually progressing to a concern for universal ethical principles. As adolescents progress through the stages of moral development, they may begin to think more critically about social and political issues and become more interested in social justice and human rights. They may also develop a stronger sense of personal values and ethics, and may become more confident in their ability to make ethical decisions.

Overall, adolescence is an important aspect of their overall development, and it is influenced by a wide range of factors, including social, cultural, and environmental factors, as well as individual characteristics such as temperament and personality.

13.4.4   Personality Development of Adolescents

Personality development refers to the changes and growth in an individual's pattern of thoughts, feelings, and behaviours over time. Adolescence is a period of significant personality development, as young people navigate the transition from childhood to adulthood.

During adolescence, young people begin to develop a clearer sense of self, and they may become more aware of their strengths, weaknesses, and unique qualities. They may also become more interested in exploring their identity and establishing their own sense of who they are and what they stand for. Adolescents may experiment with different roles, values, and beliefs as they try to figure out who they are and where they fit in the world.

Another important aspect of personality development during adolescence is the development of emotional regulation skills. Adolescents may experience intense emotions such as anger, anxiety, and sadness, and they may struggle with managing these emotions effectively. Through experiences and guidance from parents, peers, and other adults, adolescents learn how to regulate their emotions and respond to situations in a more adaptive way.

Overall, parents, teachers, and other adults can play a critical role in supporting the personality development of adolescents by providing positive role models, opportunities for exploration and growth, and a supportive and nurturing environment.

INTEXT QUESTIONS ❓

Choose the correct option from the given A,B,C and D.

4.   What are some positive coping skills that can help adolescents manage their problems?

    A. Avoiding problems

    B. Using drugs or alcohol

    C. Relaxation techniques, problem-solving, and mindfulness

    D. Ignoring the problem

5. Why is it important for adolescents to maintain a healthy lifestyle?

    A. To look good for others

    B. To meet societal expectations

    C. To contribute positively to society

    D. For their physical and emotional well-being

6. What is one way adolescents can manage stress?

    A. By avoiding stress altogether

    B. By keeping their feelings bottled up

    C. By seeking professional help immediately

    D. By using techniques such as deep breathing, meditation, and exercise

7. When should adolescents seek professional help for mental health concerns?

    A. Only when their problems are severe

    B. Only when they feel like it

    C. Only when they have exhausted all other options

    D. Whenever they feel they need it

13.5 Adjustment and Coping with Adolescent Problems

Adolescence is a challenging time for many young people, as they undergo significant physical, cognitive, and emotional changes. Adolescents face a range of problems and difficulties, such as academic stress, peer pressure, relationship issues, and mental health concerns.

Issues related to their body and self	Body image issuesPuberty-related changesEating disordersSelf-esteem issues like Guilty, Shame and InferiorityBody dysmorphic disorder
Issues related to family	Conflict among the familySocio- economic backgroundLess supportive environmentLiving conditions
Issues related to school	Academic stressConflicts with peersBullyingPoor marks
Issues related to society	Discrimination based on gender or casteSocietal pressures

However, there are several ways that adolescents can cope with and adjust to these problems:

i. **Developing positive coping skills:** Encourage adolescents to learn and use positive coping skills, such as relaxation techniques, problem-solving, and mindfulness.

ii.   **Seeking support:** Adolescents should be encouraged to seek support from trusted friends, family members, or mental health professionals.

iii.   **Maintaining a healthy lifestyle:** A healthy diet, regular exercise, and adequate sleep can all contribute to physical and emotional well-being. Encourage adolescents to prioritize their physical health as well as their mental health.

iv.   **Developing good communication skills:** Adolescents should be taught how to communicate effectively with others, including expressing their thoughts and feelings clearly and respectfully.

v.   **Learning to manage stress:** Adolescents should be taught techniques for managing stress, such as deep breathing, meditation, and exercise.

Overall, it's important to provide adolescents with a supportive and understanding environment that helps them develop the skills and strategies they need to cope with and adjust to the challenges of adolescence.

13.6 Some Contemporary Problems Faced by Adolescents

Adolescence can be a challenging period of development, and there are several contemporary problems that young people may face during this time. Some of the main contemporary problems faced by adolescents include:

i.   **Mental Health Issues:** Adolescents may experience a range of mental health issues, such as anxiety, depression, and substance abuse. These issues can be caused by a variety of factors, including hormonal changes, peer pressure, and academic stress.

ii.   **Cyberbullying and Online Harassment:** With the rise of social media and online communication, cyberbullying and online harassment have become major issues for adolescents. These can lead to anxiety, depression, and other mental health issues.

iii.   **Substance Abuse:** Adolescents may experiment with drugs and alcohol, which can have serious long-term consequences for their physical and mental health.

iv.   **Sexual Health:** Adolescents may face challenges related to sexual health, such as unwanted pregnancy, sexually transmitted infections, and sexual violence.

v.   **Academic Pressure:** Adolescents may face significant academic pressure, including pressure to succeed in school, to meet parental expectations, and to prepare for college or university.

vi.   **Social Media Addiction:** Adolescents may become addicted to social media, which can negatively impact their mental health, sleep patterns, and overall well-being.

It is important for parents, teachers, and other elders to be aware of these contemporary problems and to provide adolescents with the support and guidance they need to successfully navigate these challenges. By addressing these problems and promoting healthy habits, adults can help adolescents to develop into resilient and capable adults.

INTEXT QUESTIONS ?

8. Which of the following is a contemporary problem faced by adolescents?

    a) Retirement planning

    b) Chronic pain

    c) Substance abuse

    d) Memory loss

Answer: c) Substance abuse.

9. What is the role of parents, educators, and caregivers in supporting adolescents?

    a) Ignoring their problems and letting them figure it out on their own

    b) Providing support and guidance as they navigate the challenges of growing up

    c) Criticizing and belittling them for their mistakes

    d) Taking control of all aspects of their lives to prevent mistakes

Answer: b) Providing support and guidance as they navigate the challenges of growing up.

WHAT YOU HAVE LEARNT 👍

❐ Adolescence is an important phase in human growth that indicates the shift from childhood to adulthood.

❐ Throughout this stage, individuals experience substantial transformations in their physical, emotional, and cognitive aspects, which influence their sense of self and character.

❐ Adolescents encounter various prospects and obstacles, such as establishing connections, building self-assurance, and selecting their path in life.

✂ TERMINAL EXERCISE ✂

1. What is the age range for adolescence?

2. Why is adolescence called as transition change?

3. What changes have you observed in boys and girls during adolescence. Prepare a list of those changes.

4. Write about some of the developmental tasks during adolescence?

5. Mention some of the contemporary problems faced by adolescents?

6. What is the role of parents, educators, and caregivers in supporting adolescents?

ANSWERS TO INTEXT QUESTIONS

1. b) A stage of development that occurs between 10 and 19 years old.
2. c) Development of secondary sexual characteristics.
3. c) Developing a sense of identity.
4. c) Relaxation techniques, problem-solving, and mindfulness
5. d) For their physical and emotional well-being
6. d) By using techniques such as deep breathing, meditation, and exercise
7. d) Whenever they feel they need it.
8. c) Substance abuse.
9. b) Providing support and guidance as they navigate the challenges of growing up.

HINTS TO TERMINAL EXERCISE

1. Refer 13.1
2. Refer 13.1
3. Refer 13.2
4. Refer 13.2
5. Refer 13.6
6. Refer 13.6

ADULTHOOD AND AGING

14

INTRODUCTION

What do you want to be when you grow up? What do you hope to achieve in life? What are your plans for your golden years?

Every day, we ask ourselves questions like these and countless others. Every day, our lives become more complicated. We now have several choices to make along the road. There are several changes occurring in people's lifestyles at every stage of life. The most stable stage of life is adulthood. Adults acquire stability by adjusting both their internal and external environments. For instance, a person who loses their job desperately looks for a new one and tries to adapt to it.

The present lesson starts by describing some of the important features of adulthood. It then brings out the physical and psychological changes taking place during adulthood. The later section of the lesson deals with problems of coping and adjustment during this period. Some of the psychological interventions for the aged are also given briefly.

OBJECTIVES

After studying this lesson, you will be able to:

● *describe some of the important developmental tasks to be performed during adulthood;*

● *explain the important features of adulthood; and*

● *enumerate the problems of adjustment in old age*

14.1 Psychological Perspective on Adulthood

It is believed that most of the development ends with adolescence. Only wisdom continues to grow during adulthood. However, there are many specific development tasks during adulthood and old age requiring the grown up to engage in specific development and make special adjustments in life. In this respect the perspectives given by Havighurst and Levison are quite relevant.

Early Adulthood: Selecting a mate, learning to live with a married partner, starting a family, Rearing children, Managing a home, Getting started in an occupation, Taking on civic responsibility and Finding a congenial social group.

Middle Age: Achieving adult civic and social responsibility, Establishing and maintaining an economic standard of living, assisting teenage children to become responsible and happy adults, developing adult leisure time activities, relating to one's spouse as a person, Accepting

and adjusting to the physiological changes of middle age and Adjusting to aging parents

Old Age: Adjusting to decreasing strength and health, adjusting to retirement and reduced income, adjusting to death of spouse, Establishing an explicit affiliation with members of one's own age group, Meeting social and civic obligations and Establishing satisfactory physical living arrangements.

Havighurst's developmental tasks are based on life situations. Another psychological perspective is that of Daniel Levinson who derived his data from clinical studies of men only. Levinson's stages are described.

i. **Leaving the family (20-24):** A transitional period from adolescence to early adulthood that involves moving out of the family home and establishing psychological distance from the family, analogous to Erikson's stage of identity versus role diffusion.

ii. **Getting into the adult world (early 20s to 27-29):** A time of exploration and provisional commitment to adult roles in occupational and interpersonal areas and of fashioning an initial "life structure".

iii. **Settling down (early 30s to early 40s):** A period of deeper commitment, sometimes involving the expansion motif of Jung and Kuhlen.

iv. **Becoming one's own man (35-39):** The high point to early adulthood. The midlife transition (early 40s) : A developmental transition involving a sense of bodily decline and a vivid recognition of one's mortality, as well as an integration of the feminine aspects of the self as postulated by Jung.

v. **Restabilization and the beginning of middle adulthood (middle 40s):** A period in which some men make new creative strides but other lose their vitality, you can realize that the specific development tasks are related to the different

social demands on a person at different stages of life. The need to take up an occupation or to enter into a marital relationship during early adulthood, for example, may be seen as leading to developmental tasks and challenges of seeking and succeeding in an occupational role or selecting a life partner in marriage. The social demands of different stages of life and hence, the developmental tasks depend on the nature of the society and the cultural norms. In Indian joint family system, for example, the nature of marriage and mate selection are different and, therefore, the nature of developmental tasks are also different from what has been observed by Levinson or by Having Hurst. Similarly, moving out from the family home is a common feature of western societies or modern urban industrial economies. As such, the processes and problems of development during adulthood and old age are specific to the social context of the grown ups.

14.2 The Period of Adulthood

The period adulthood starts from young adulthood and ends with age.

Young adulthood: The period of young adulthood begins from the age of twenty years onward. The major concerns of young adults in 20s are to establish themselves in life, job, and family. The young adult wants to seek social and economic security in preparing for a role of greater independence and responsibility in society.

Middle Age: From the period of his twenties and thirties, the individual arrives at middle age in the forties and fifties. Middle age is characterized by competence, maturity, responsibility and stability. These are the important characteristics for middle-aged adults. This is the time when one wants to enjoy the success of job, satisfaction derived from family and social life. The individual looks forward to the successes of children. Attention gets more focused on health, the fate of children, aging parents, use of leisure time and plans for old age. For women, menopause occurs between the age of forty-five and fifty. Menopause is sometimes accompanied by some distressing physical and psychological symptoms in women. Men during this period show greater amount of concern towards their health, strength, power, and sexual potency.

Old Age: The period of old age begins at the age of sixty. At this age most individuals retire from their jobs formally. They begin to develop some concern and occasional anxiety over their physical and psychological health. In our society, the elderly are typically perceived as not so active, deteriorating intellectually, narrow-minded and attaching new significance to religion. Many of the old people lose their spouses and because of which they may suffer from emotional insecurity.

14.3 Physical and Cognitive Changes During Adulthood and Aging

Normally people see old age as a period of decline in physical and mental health. This section deals with physical and psychological aspects of aging. With advancing age, there are certain inevitable and universal changes such as chemical changes in cells, or gradual loss of adaptive reserve capacity. There are also certain cognitive changes taking place from middle adulthood onwards. These changes are slow and gradual. They become more prominent among the elderly people.

a) Physical Changes

It has been found that the organ system of most persons show a 0.8 to 1 percent decline per year in functional ability after the age of 30. Some of this decline is normal, some is disease related and some are caused by factors such as stress, occupational status, nutritional status and various environmental factors.

Major physical changes with ageing are described as

1.   External changes
2.   Internal changes, and
3.   Changes in sensory capacities.

1. External Changes

External changes refer to the outward symptoms of growing old. The more observable changes are those associated with the skin, hair, teeth, and general posture.

There are changes in the skin. The most pronounced change is wrinkling. Wrinkling process begins during middle years. Skin also becomes thick, hard and less elastic. It becomes brittle and dry.

With advancing age, the hair of the person continues to turn white and loses its luster. It continues to thin. By the age of fifty-five, about 65 percent of men become bald.

It is estimated that at age 65, fifty percent people have lost all their teeth. For many, dentures become a way of life. Over the time, the production of saliva is diminished. This increases the risk of tooth decay.

Physical strength begins to decline from age 30 to age 80 and above. Most weakening occurs in the back and leg muscles, less in the arm muscles. There is a progressive decline in energy production. Bones become increasingly brittle and tend to break easily. Calcium deposits and disease of the joints increase with age.

Muscle tissue decreases in size and strength. Muscle tone becomes increasingly difficult to maintain with age because of an increase in fatty substance within the muscle fibres. This is often caused by the relative inactive role thrust on the elderly in our society. Exercise can help maintain power and sometimes even restore strength to the unused muscles. Changes in the general posture become more evident in old age.

The loss of teeth, balding and greying of the hair, wrinkling of the skin and lack of physical strength all has a potentially negative effect on an individual's self-concept and confidence.

2. Internal Changes

Internal changes refer to the symptoms of growing old that are not visible or obvious. We shall examine some of the changes taking place with increasing age in the respiratory system, gastrointestinal system, cardiovascular system, and central nervous system.

i.   **The Respiratory System:** With increasing age, there is reduction in breathing efficiency. The lungs of an old person do not expand to take in as much air as the lungs of a young person. Decreased oxygen supply makes the old person less active, less aware and less strong. This decline seems to be part of normal aging process.

ii. **The Gastrointestinal System :** With increasing age there is decreased capacity for biting and chewing, decrease in the production of digestive enzymes, decreased gastric and intestinal mobility and lack of appetite.

iii. **The Cardiovascular System:** Cardiovascular system which includes the heart and the blood vessels show the effects of normal aging rather slowly. With the aging process there is a decrease in the elasticity of blood vessels and blood cell production also. Increase-in time required for heart to return to rest and arterial resistance to the passage of blood is also found. Many old individuals are found to be suffering from high blood pressure. However, healthy old individuals are found to have blood pressure similar to those of young healthy individuals.

iv. **The Central Nervous System (CNS) :** The CNS shows certain universal changes as a function of age. There is decreasing rate of arterial and venous flow. Beginning at about age 60, there is a reduction of cerebral blood flow. There is also a decline in oxygen and glucose consumption. Number of cells and cell endings are found to be decreasing. The most definite change is the slowing down of responses.

3. Changes in Sensory Capacities

With advancing age, there is gradual slow down in the sensory abilities. We communicate with the outer world through our senses. Losses in any senses can have profound psychological consequences.

i. **Vision:** Increasing age brings in several problems in vision. The lens continues to lose elasticity. The pupils become smaller, irregular in shape. The eyelids have a tendency to sag. Colour vision becomes less efficient. Cataract and glaucoma are commonly found among the elderly. People with cataracts have blurred vision. This also interferes with normal vision.

ii. **Hearing:** Hearing seems to be at best around the age 20. From then onwards there is a gradual decline. Most hearing loss is not noticed. However, in the case of hearing problem, it can be improved by a hearing aid.

iii. **Other senses:** The senses of taste and smell decline with old age. This decline affects appetite and nutritional requirements of the elderly. You must have noticed that many old persons demand food that is overly sweet or spicy. This is because the four basic tastes, sweet, bitter, sour, and salty, all generally diminish in sensitivity. Sensitivity to touch appears to increase from birth to about 45 and then decreases sharply.

14.4 Cognitive Changes During Adulthood and Aging

The term 'Cognition' refers to the processes by which information is acquired, stored, and used. In this section, four major aspect of cognition-memory, learning, attention and intelligence will be discussed in relation to adulthood and aging.

i. Memory

Memory is one of the most central aspects of cognition. Memory has been defined as 'the mental processes of retaining information for later use and retrieving such information'.

No significant age differences may be found in short-term memory task like forward digit span or word span. Older subjects do not perform as well on the tasks that demand repeating numbers in reverse order. Old persons are found to perform poorer than young ones on long-term memory tasks which require processing of information and organization of material.

a) Memory of the Elderly

Memory performance with advanced age is affected by several factors. Some of the important factors are given below.

b) Beliefs about Memory Old persons'

beliefs and attitudes about their memory ability affect their memory performance. Research shows the role of beliefs, perceptions, attitudes, and knowledge in memory abilities. Questionnaires typically ask respondents how frequently they forget names and events, how

anxious they are about forgetting, what they know about how to improve memory and what strategies they employ in remembering. Older adults have been found to have more difficulties with their memory than do younger adults. The common expression among elderly has been 'I am getting old'. Elderly persons are often found to be complaining about their memory failures.

c) Use of Memory Strategies

Memory requires the use of strategies. Memory performance would be better for those who can use effective memory strategies. An example of memory strategy is repeating to yourself over and over again the items you want to buy is connected with something that is familiar. For example, if you want to remember the name of somebody, you may associate that person with some popular figure. You can also use memory aids such as a diary or writing out a list of items you want to buy at the grocery store. Most of us use some such strategies every now and then but we are not aware of using them. In their everyday lives, the elderly persons are more likely to use diaries, making lists of things to buy, etc. than using rehearsal or association strategy.

b. Life Styles of Elderly

The type of daily activities in which elderly persons engage determines their memory performance. The elderly persons who engage in daily activities like playing chess or bridge, their performance on some of the memory and reasoning tasks is found to be better than elderly non-players. Another aspect of lifestyle determining cognitive performance is regularity in the structure of daily life. Regularity of sleep patterns, daily exercise, following regular schedule of everyday activities helps to maintain everyday cognitive functioning.

c. Learning

Learning involves formation of new association. It means acquisition of general rules and knowledge about the world. It is believed that learning performance tends to be poorer during late than early adulthood. Can older people acquire new information and skills? Can they try new careers? Such questions are difficult to answer. We must note that the ability to learn may be relatively unchanged in old persons. Factors such as poor motivation, lack of confidence, test anxiety, etc. may lower performance on learning tasks.

Old persons' learning performance maybe very close to that of young persons if older persons are allowed more time or can self-pace the tests. They were found to perform better when there is no time pressure and the material is presented very distinctly and in a simplified manner.

d. Attention

The term attention refers to the manner in which we focus on what we are doing. People vary in how wide their attention span is. If attention span is too narrow, one looses a lot of information. Old people may not differ from young people in terms of their attention span as such. However, they get easily distracted by any kind of interference. With training, attention can be improved.

e. Intelligence

As has been pointed out earlier many of our impressions of old age originate from inaccurate knowledge or misconceptions. How do elderly persons perform on intelligence test? Most of the intelligence tests require speed of performance. We have already discussed that old persons are slower on reaction time. Thus lower performance on intelligence tests may be due to slower reaction time than due to a decline in intellectual functions. General knowledge does not decline with age. Among the elderly, we often find reduced abilities for complex decision making and slowing of performance. Hardly any losses in verbal comprehension, social awareness and the application of experience may be noticed among the older people.

Intelligence in adulthood and aging maybe viewed as enabling the individual to cope with a variety of demanding everyday tasks and events. Everyday intelligence of the elderly maybe determined by their ability in reading road maps, understanding labels, filling out forms, understanding charts, conversations, TV programmes, doing shopping, driving during rush hours, and performing many other daily jobs.

You may remember that we have already discussed that elderly work best when they are away from pressure and can set their own pace. Moreover, the factor of general health is very important to be considered. Healthy individuals and those who lead happy and active life generally show no or little loss of intellectual abilities during old age.

INTEXT QUESTIONS ?

1. List the factors in memory performance of the elderly

   _____

2. How can be everyday intelligence of the elderly be judged?

   _____

14.5 Problems of Adjustment in Old Age

How does one adjust to the aging process? Different people adopt different coping strategies to adjust with their current life situations. Some aged people try to remain very active by engaging themselves in social roles, enjoy interpersonal relationships and happily participate in some type of occupational activities while others tend to remain socially isolated and withdrawn. The level of activity and nature of engagement is determined by health status, socioeconomic status and family status of the elderly. Let us study about some of the related problems;

i. Poor Image Problems faced by Older People

Older people in general do not like themselves as much as younger people. Older men are generally found to have lower self-esteem than older women. This may be due to the fact that men's self-esteem is related to their occupational achievement while women tend to derive their feelings of self-worth from family circumstances. Thus when men retire in

old age or loose their occupational status, their selfesteem goes down. Women, on the other hand, continue to derive self-satisfaction by their family involvements.

ii. Happiness

When asked "Is your life exciting?" majority of elderly men and women report that they hardly had any feeling of excitement in their lives and that their life is very dull with nothing to look forward to. However, before we conclude that life gets duller as one goes along, we need to consider many factors towards one's own self as an old person and kind of expectations from life.

iii. Economical Problems

Self-employed elderly persons or those having their family business continue to work until they die or became disabled. Those who work for others retire after a certain age. Individual's personal attitude toward retirement varies as a function of a number of factors such as income, educational level, and occupational level.

Adjustment to retirement is often difficult for individuals. Retirement requires adjustment to a new life-style characterized by decreased income, lesser activity level, and increased free time. Retirement causes extreme stress in males because in our society a significant part of men's identity depends on their jobs. Loss of job thus results in loss of self –esteem and self-worth. Retired people find it difficult to adjust to retirement because of financial problems, illness, and feelings of loneliness. Retired individuals have to make several adjustments in their roles, personal and social associations, and in their sense of accomplishment and productivity. However, it does not necessarily mean that retirement results in negative consequences for everybody. In case of some, it may not have any adverse effects on their selfesteem and life satisfaction. Health may even improve for some after retirement. Retired individuals may find more time for social and hobby-related activities especially if they have adequate economic resources and are healthy to engage in these activities.

iv. Death

Elderly persons are not afraid of death per se. They do, however, fear to a great extent the dying process — the process of dying in pain or dying alone. Their feelings related to death may be due to specific occurrences in their lives such as being moved from home to nursing home, failing health, or the loss of one's spouse. Thus fear about death must be understood in light of current life circumstances, the individual's own value system, and what death personally means to a person.

v. Depression

Older persons often show two major symptoms of depression: depressive mood (sadness, guilt, hopelessness, helplessness) and reduced behaviour (giving up, apathy). Many elderly persons also represent their depression somatically by complaints (such as loss of appetite, sleep disturbances). Both biological factors (biochemical disturbances) and social/cultural factors (cultural views regarding the worth of the aged person, isolation, retirement, institutionalization) can contribute to depression in aged persons. Other factors such as perceived loss of sexuality, material possessions, and failures also contribute to depression.

14.6 Coping with the Problems

How does one cope with increasing age? Different people adopt different coping strategies to meet their life challenges. Some of the effective coping strategies may be summarized as follows:

i.   The elderly need to develop an attitude of flexibility so that they may adapt to life's pressures and problems of old age.

ii. They need to recognize that they have to explore new ways of coping with their life events.

iii. The elderly need to make greater use of information seeking and of problem solving rather than withdrawing or isolating.

iv. Increasing one's self-confidence, self reliance, developing healthy attitude about one's strengths and weaknesses, learning and maintaining effective coping skills and adopting an active approach toward the environment are some of the important ways of making healthy adjustments in old age.

v.   Enlarging social networks is another way of coping with life problems. Participating in various group activities such as joining clubs and certain organizations for informal social interaction is very helpful for the aged. Building a social network of people of their own age group in the neighbourhood or elsewhere provides them with greater opportunity to share their life circumstances and find emotional expression to their existing problems. Through such social networks, one can get an unconditional expression of approval, share secrets, provide new experiences to each other, and develop trusting relationships.

vi. Involvement in grand parenting helps elderly satisfy many of their personal and emotional needs. Grandparents can serve as important role models. Old people find these roles emotionally self fulfilling and tend to derive selfsatisfaction through achievement of their grandchildren.

14.7 Psychological Interventions for the Aged

All of us need to turn to others (friends, relatives, professionals) for help in times of severe stress. In this section we will examine what kinds of psychological interventions can be used for dealing with difficulties of elderly and enabling them to cope with life on a daily basis.

Our chief concern with elderly can be improving their quality of life. The attempt needs to be in the direction of building adaptive resources. The most important goals of psychological interventions are:

● Insight into one's behaviour

● Anxiety or depression relief

● Adaptation to a present situation

● Improving self-care skills

- Encouraging activity
- Facilitating independence
- Accepting one's weakness and difficulties
- Improving interpersonal relationships

Here are several psychological interventions which are needed for the aged and have proved to be very useful. Some of the important ones are described below:

i. Seeking Help through Mental Health Services

Old persons can be provided help from professionals or from family, friends or neighbors to solve their personal or social problems. Many of their problems may be solved by joint family members. Depending on their resources, elderly need to seek professional help for their personal and family matters. Counselling psychologists can help people prepare for and cope with potentially stressful life events like retirement, death of spouse and financial insecurity. They can be motivated to have an active orientation toward oneself and the world and to keep their options open.

ii. Cognitive Behavioural Interventions

Elderly persons seem to be lacking realistic feedback about themselves from others, and thus make 'thinking errors'. Feelings of inadequacy about one self can lead to fear, anger, frustration and depression. Cognitive therapy is very effective in substituting irrational thoughts with rational thoughts. Relaxation training helps reducing anxiety and tension. Cognitive-behavioural interventions have been found to be useful in treating depression, anxiety, memory loss, and response speed in the aged.

iii. Behavioural Interventions

Behavioural interventions are based on positive and negative reinforcing stimuli. Elderly persons for example can be given positive reinforcement such as verbal or material reward for the desired self-care behaviour and negative reinforcement (depriving of reward) for the undesirable aggressive behaviour. It is relatively brief and economical. However, it requires a great deal of expertise to use effectively.

iv. Family Therapy

Family therapy aids in adjustment to various life problems such as retirement, family care giving role, grandparenthood, family conflicts between young and the aged, coping with illness of elderly, and family decision about institutionalization of the elderly people. If properly handled, family therapy can strengthen the feelings of love, closeness and interdependence.

v. Societal Intervention

In addition to changing the individual, we might like to change the environment or the context in which a person functions. Attention needs to be paid to home environment, activity programmes, as well as to neighbourhood and community in which the person lives.

Societal intervention would involve altering attitudes towards the aged and increasing the older person's reliance on the community, family, and friends.

INTEXT QUESTIONS ❓

1. What factors cause depression in old age?

   _____

   _____

2. Name three psychological interventions.

   _____

   _____

WHAT YOU HAVE LEARNT 👍

❐ Age is one of the basic categories in which people are classified. At each sub stage of adulthood, there are certain special needs and demands which need to be fulfilled for healthy adjustment. During young age, need for an appropriate job and family security is very important. During middle-age, one is trying to derive satisfaction from a successful job and family life. In old age, concern is more towards physical and psychological health, and emotional and financial security.

❐ The patterns of physiological aging in the brain and the body are as varied as the individuals who age. Factors such as diet, smoking, excessive drinking, stress all affect the status of health. Many of our society's myths about aging are based on misinformation or prejudice. Though there is a systematic decrement and loss of reserve, it does not necessarily create physical or psychological incompetence and invalidism. Also, early studies on human aging were conducted on hospital or mental patients. Few studies were conducted on normally functioning elderly persons who led active lives. It is important to establish which physiological changes are due to the aging process itself and which are due to environmental factors like disease, diet, lack of activity or exercise. Most of the aged people have more than enough systematic capacities to meet the demands of everyday life. It is a mater of developing positive attitude towards their own health care from adulthood onwards.

❐ Sensory capacities decline with age. Because of decreased sensory efficiency, old persons are less able to participate in many social activities. As a result, they seem to be gradually losing interest in their personal hobbies and tend to experience loneliness.

❐ With advancing age, there may be decline in some of the mental functions, such as reaction time, complex decision making and difficulty in retrieving stored material. Intelligence remains fairly constant.

❐ Self-esteem, or how much one likes oneself, depends on one's concept of what one should be like.

- Women tend to derive their self-worth from family circumstances and men from job circumstances.

- Happiness or excitement seems to decrease with age. However, factors such as health, attitude towards one's self, life circumstances are important determiners of happiness.

- For most individuals, retirement is a difficult and stressful event. For some, retirement can be perceived positively as they can devote more time to their hobbies and leisure activities.

- In bereavement, elderly persons suffer from depression, loss of social support and physical problems. Loneliness is a chief problem for all bereaved.

- Aged persons tend to suffer from depression due to biochemical disturbances, personal inabilities, and social/cultural factors. They may represent their depression somatically.

- With increasing age, people seem to gradually build up a repertoire of coping skills which give them survival power during old age. Older people can endure greater stress than young ones.

- Psychological interventions at multi levels — individual, family and societal, prove to be effective in enabling the elderly cope with daily life events. They help the elderly in their personal growth and improving their quality of life. Elderly can deal more effectively with their stresses, conflicts, anxiety, depression and health-related problems of themselves and of the family members. Psychological interventions should be geared to the needs, interests, capabilities and life goals of the elderly.

✂ TERMINAL EXERCISE ✂

1. What are the major developmental tasks for the middle aged people?
2. Describe some of the external changes taking place with advancing age.
3. What happens to the cardiovascular system during old age?
4. What are the economical problems in old age?
5. What are the chief goals of psychological interventions?
6. Write short notes on

   (i) Bereavement   (ii) Societal interventions for the aged

   (iii) Depression in old age (iv) CNS changes with age

   (v) Family therapy

ANSWERS TO INTEXT QUESTIONS

UNDERSTANDING INDIVIDUAL DIFFERNCES: THE CASE OF INTELLIGNCE

15

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. 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.

OBJECTIVES

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.*

15.1 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 relatively more as a result of influence of external factors.

15.2 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.

15.2.1 Nature of Psychological Assessment

Psychological assessment refers to the use of specific procedures employed in evaluating the personal qualities, behaviours and abilities of individuals. These procedures describe people by specifying how they are different from or similar to other individuals. Such assessments are frequently done by most of us when we make judgments such as 'nice' 'good' 'bad' 'attractive', 'ugly', 'genius' and 'idiot'. Needless to say that such judgment is quite often found erroneous on many occasions. Scientific psychology tries to systematize

these procedures so that assessment can be made with a minimum error and maximum accuracy. Psychologists often call these procedures as 'tests'.

A psychological test is a structured technique used to generate a carefully selected sample of behaviour. In order to be useful for the purpose of drawing inferences about the person being tested or examined it is necessary that the test should be reliable, valid and standardized. Let us understand the meaning of these terms. A test is reliable if it measures something consistently. For instance if you assess something the scores obtained on separate occasions should be same. If a scale tells two different values while assessing the same object on two occasions, it will be called unreliable. A test of intelligence can be called reliable only when a person scores high on both the occasions. The validity of a test is the degree to which it measures what it intends to measure. A valid test of personality gives a measure of a person's personality and predicts behaviour in situations where that aspect of personality is found important.

In order to be useful an assessment tool should be standardized. Standardization involves establishing the procedure of administration of a test to all persons in the same way under the same condition. It also involves establishing norms so that an individual's score can be interpreted. Norms involve comparison of a score of a person with those of others in a defined group. Standardization ensures uniformity and objectivity in the process and conditions of administration. It makes the results of a test interpretable. Psychologists have developed a variety of tests to measure different human characteristics. In schools we use achievement tests which measure what pupils have learned. Psychologists frequently use tests of ability and personality. The tests of ability to tell what an individual can do when they are at his/her best. These tests measure capacity as potential rather than achievement. Tests of intelligence and aptitude come under this category. Aptitude refers to the ability of a person to learn a particular kind of skill required in a specific situation. Admission tests IIT or PMT is an aptitude test. Personality tests measure the characteristic ways of thinking, feeling and behaving.

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)

15.2.2   Assessment Methods

Several methods are used for psychological assessment. They are detailed as below.

i.   **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.

ii. **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.

iii. **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.

iv. **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.

v.   **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.

15.3 The Concept of 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. 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.

15.3.1 Theories of intelligence

i) Factorial view point on intelligence

The composition of intelligence whether it is unitary or multi componential has been a matter of curiosity. Using a correlational technique named factor analysis several researchers have tried to uncover the structure of intelligence. It expresses the individual's performance in terms of a single index of cognitive abilities. On the other hand, the informationprocessing 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.

It is 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.

Intelligence as a General (G) Factor

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.
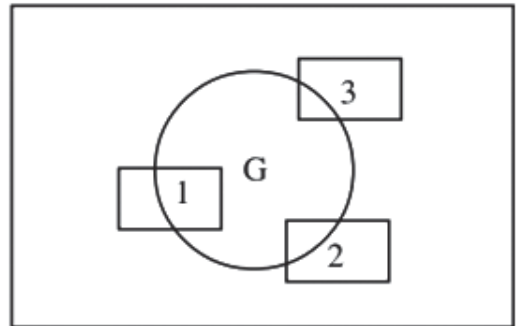
Fig. 15.1 : *Sperman's model of intelligence*

Spearman proposed that we possess one general intelligence factor (g) and many specific factors (s) which are specific to particular abilities. The g factor runs across all types of abilities. It is expressed in the ability to understand abstract relations. This view is depicted in Fig. 15.2.

ii) Multiple Factors of Intelligence

Louis Thurstone 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:

Fig. 15.2 : *Thurstone's model of intelligence*

1. Verbal Comprehension (grasping meaning of words, concepts, and ideas),

2. Numerical Abilities (speed and accuracy in numerical and computational skills),

3. Spatial Relations (visualising patterns and forms),

4. Perceptual Speed (speed in perceiving details),

5. Word Fluency (using words fluently and flexibly),

6. Memory (accuracy in recalling information), and

7. 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

15.4 The Structure of Intellect

With a view to provide a comprehensive measure of intelligence Guilford has proposed another view point. He terms it as the structure-of-intellect (SI) model. This model classifies intellectual traits along main three dimensions.

i. **Operations:** What a person does? Operations are what the respondent does. These include cognition, memory recording, memory retention, divergent production (creativity), convergent production, and evaluation

ii. **Contents:** 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.).

iii. **Products:** 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 6x5x6 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.

Thus it is clear that the factorial viewpoint presents a view of intelligence in terms of trait organisation. The variety of traits thus identified is perplexing. Here, the readers should remember that the traits identified through the technique of factor analysis are simply an expression of the degree of relationship among behavioural measures. They are descriptive categories. The trait organisation is influenced by the experiential background of the people who are performing the task. The differences found across groups, socio-economic levels and types of school curricula in trait organisation lend support to this view. Looking at the plethora of research using factor analysis Anastasi has rightly concluded that human intelligence consists of *"that combination of cognitive skills and knowledge demanded, fostered, and rewarded by the experiential context within which the individual functions."*

15.5 Int elligenceas A Process

This view point is related to cognitive science tradition. In particular the information processing model is very relevant to it. It traces the processes of acquisition, representation and use of information in undertaking intellectual activities. Let us learn about some of the models emphasising the process view of intelligence.

I) 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:

i. **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.

ii. **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.

iii. **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.

iv. **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.

v. **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.

vi. **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.

vii. **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.

viii. **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.

II) Triarchic Theory

After rejecting the factorial or psychometric approach Robert Sternberg analysed intelligence in three aspects i.e. componential, experiential and contextual. The componential

aspect includes those processes which are employed by a person taking a test in responding to the items of standardised intelligence tests. Its constituents include meta component or higher order control processes, performance component, acquisition component and transfer component. The second aspect namely experiential one refers to the way people's mental world and the outer or external world are related to each other. It adds creativity to the notion of intelligence. In reality a person's intelligence shapes his or her experiences. Also, the experience which one has influences intelligence. The third aspect of intelligence is contextual. It refers to the way individuals share their environments, adapt to them and try to get maximum from the available resources. It is also called practical intelligence.

15.6 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.

i. **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.

ii. **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.

iii. **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.

INTEXT QUESTIONS ?

Choose the correct alternative.

1. Scores of a large group of persons on intelligence test will show distribution in which majority will get:

   a) low scores   b) moderate scores   c) high scores   d) extremely high scores

---

2. The first test of intelligence is associated with:

    a) Binet   b) Spearman   c) Terman   d) Raven

3. Who has stated that intelligence consists of multiple factors?

    a) Thurstone   b) Guilford   c) Vernon   d) Sternberg

4. The view which conceptualizes intelligence in terms of operations, contents and products is known as:

    a) systems model   b) structure of intellect

    c) hierarchical model   d) G factor model

⬢ 15.7 ⬢ 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?

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 socioeconomic 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.

⬢ 15.8 ⬢ 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.

$$IQ = MA/CA \times 100$$

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 x 100), whereas the same child with an MA of 7 would have an IQ of 70 (7/10 X 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 bellshaped 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.
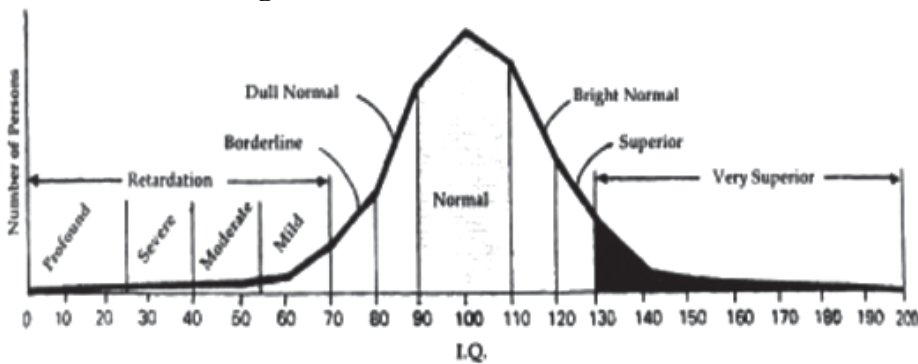
Fig. 15.3 : *Distribution of IQ scores as expected in a large sample*

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-15.1

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
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, 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.

15.8.1   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 culturefair or culture-biased. You can choose a test depending on the purpose of your use.

i)   **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.

ii)   **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 patter

Raven's Progressive Matrices (RPM)
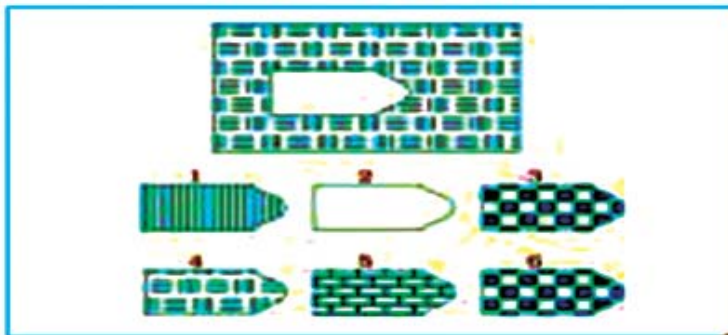
Fig. 15.4 : *An item from Raven's Progressive Matrices Test*

This is a performance test designed to measure g factor or general intelligence. The items consist of a set of matrices, or arrangement of design elements into rows and columns from each of which a part has been removed. The task is to choose the missing insert from given alternatives. The easier items require accuracy of discrimination; the more difficult items involve analogies, permutations and alternations of patterns, and other logical relations. It is available in three forms differing in the level of difficulty:

i. The Standard Progressive Matrices (SPM) is suitable for the ages of 6 and 80 years

ii. The Coloured Progressive Matrices (CPM) is for younger children and for special groups.

iii. The Advanced Progressive Matrices (APM) is for adolescents and adults,

Draw-A-Man Test

Developed initially by *Goodenough*, this nonverbal test requires the test taker to draw or make a picture of a man. Credit is given for the inclusion of individual body parts, clothing details, proportion, perspective, and similar features, Moderate reliability and validity have been reported for this test. In India *Pramila Phatak* has developed norms for this test.

iii. **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.

iv. **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 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.

15.9 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-2: Some Tests Developed in India

Verbal	Performance
• CIE Verbal Group Test of Intelligence by Uday Shankar	CIE Non-verbal Group Test of Intelligence
• Group Test of General Mental Ability by S. Jalota	• Bhatia's Battery of Performance Tests
• Group Test of Intelligence by Prayag Mehta	• Draw-a-Man Test by Pramila Pathak
• The Bihar Test of Intelligence by S.M. Mohsin	• Adaptation of Wechsler Adult Performance Intelligence Scale by R. Ramalingaswamy
• 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.	

15.10 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 nonwestern 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)

15.11 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.

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.

15.12 Uses of Intelligence Tests

Since tests are used as a tool in vital decision making about jobs, promotions, school or college admissions there emerge many problems of ethical and procedural kind which require that the use of tests should be controlled. It is recommended that the test is given or administered by a qualified examiner. Also, the scores should be properly used. The general familiarity with the test content should be prevented. This may invalidate the test results. The examiners are required to make advance preparations to maintain uniformity in the procedure. Testing conditions should be proper. The examiners are required to arouse

the test takers' interest in the test, elicit their co-operation, and encourage them to respond in an appropriate manner.

At present, intelligence tests are used in many settings to help in a number of activities like selection of people for various jobs, diagnosis of mental handicap, guidance and counselling, and research in the area of intellectual development. A brief description of these uses is as follows:

15.12.1   Personnel Selection

It's a matter of common experience that people differ in the degree of competencies, abilities and interests. Success in a job depends on the fact whether the person applying for a job possesses the qualities required in undertaking a particular job. In this way the process of selection becomes one of matching the characteristics of the applicants with job requirements. Intelligence is considered as something basic to success in all kinds of jobs. As a result in most of the procedures of personnel selection assessment of intelligence constitutes an important component. With the help of intelligence tests applicants' intelligence level is assessed and the results are used by the employer in the process of decision making about the applicants.

15.12.2   Diagnosis of mental Handicap

People differ in their intellectual abilities, Those who have a very low level of intelligence are known as mentally handicapped. Such persons experience difficulty in adjusting with the demands of their external environment. They need special care and training. Infact many of them cannot communicate or express their needs and have difficulty even in taking care of themselves. Intelligence test along with certain other indicators is commonly used to estimate the degree of mental handicap.

15.12.3   Guidance and Counseling

Career of vocational guidance is assuming an important role in the context of education. With the expansion and diversification in our country's educational scenario, selection of a course and career is becoming a tough task for the students, teachers and parents. In this context, psychologists use intelligence tests to assess the capability of the people and use this information in deciding about the choice of career options.

⬢15.13 Explaining Differences in Human Intelligence

While differences in intelligence are obvious the reasons of their differences are till matters of debate. In particular researchers have tried to examine the contributions of genetic or hereditary and environmental factors toward variation in IQ. Studies indicate that the scores of more closely related people are quite similar. In particular the evidence from the studies of adopted children and of identical twins separated early in life and raised in different homes show this trend.

The studies of environmental deprivation and enrichment have indicated the effects of environmental factors on IQ. Interestingly females are found to score higher than males with respect to verbal abilities while males tend to score higher in visual-spatial abilities.

Such differences may reflect the evolutionary history of human species. Another important issue about the group differences relates to the cultural bias of intelligence tests. It has been argued that many of the tests have been developed in western cultural context. As a result children familiar with western cultural context score higher than those who are not familiar with it. This is why some efforts have been made to develop culture fair test like Cattell's Culture Fair Test of Intelligence.

INTEXT QUESTIONS ❓

Choose the correct alternative:

1. Which one of the following does not deal with non-cognitive aspect of intelligence:

   a) practical intelligence   b) social intelligence

   c) emotional intelligence   d) process model of intelligence

2. Intelligence Quotient (IQ) is derived using the following formula:

   a) MA/ CA + 100   b) MA/ CA×100

   c) CA/ MA × 100   d) CA/ MA + 100

3. Wechsler test provides a measure of:

   a) specific abilities   b) verbal ability

   c) processes of intelligence   d) general ability

4. An intelligence test must have the following

   a) norms   b) validity   c) reliability   d) all of the above

5. Intelligence tests do not help in:

   a) guidance   b) personal selection

   c) measurement of learning   d) measurement of problem solving ability

15.14 Intelligence in the Non-Cognitive Domains

As can be seen from the preceding analysis the major concern of studying intelligence has been with the rational and cognitive domain. In recent years many other aspects have been explored. It would be interesting to briefly refer to some of them. One such concept is of wisdom. It comprises a unique blend of cognitive, interpersonal, social and personality attributes. It is achieved as a result of successfully negotiating the conflict between integrity and despair or as a result of transcendence of preoccupation with one's self. It is knowledge that effectively integrates emotional and cognitive components. Another related concept is that of prudence **of "practical wisdom"**. It emphasizes on the practical achievement of personal goals, plans and intentions. It is characterized by a flexible and applied concern for the practical contingencies, specially in the face of uncertainty.

Social intelligence has also received attention by the researchers. It represents the efforts of an individual to solve the problems of daily life and work toward the desired

goals. Finally, the most recent notion is that of emotional intelligence. It is defined as the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and action. People high on emotional intelligence show greater degree of emotional self awareness, manage emotions well, harness emotions productively, have empathy and handle relationships effectively. It has been observed that success in jobs and in the different walks of life depends more on emotional intelligence than IQ. While childhood is a critical time for its development, emotional intelligence is not something fixed at birth. It can be nurtured and enhanced throughout adulthood

WHAT YOU HAVE LEARNT 👍

- ❐ Psychological characteristics are normally distributed in the population. Thusmajority of the people are found moderately intelligent and a limited number is found to have very low or very high level of intelligence.

- ❐ The study of individual differences is practically important. Intelligence is viewed in many ways depending on the theoretical view point adopted. Some psychologists view it as a trait while others view it as a process

- ❐ The trait approach has also yielded different views. Thus we have single (general) factor, multiple factors, and hierarchical views. On the whole, intelligence appears to be a combination of cognitive skills and knowledge.

- ❐ The process view of intelligence considers it in terms of various cognitive processes. Also, there is realization that intelligence is of multiple kinds. The notion of social and emotional intelligence have opened new areas of research.

- ❐ Intelligence is assessed with the help of psychological tests which are reliable and valid measures of a sample of behaviour. The first test of intelligence was developed by Binet which was subsequently standardized at Stanford University. The tests may be verbal or performance and can be administered individually or on a group.

- ❐ Special tests have been developed for children and the handicapped people. These tests are often used in personnel selection, guidance, diagnosis of mental retardation and research.

- ❐ The Indian psychologists have adapted several tests are often used in personnel selection, guidance, diagnosis of mental retardation and research. The Indian psychologists have adapted several tests but much is still desired.

- ❐ Psychologists have also developed tests to assess achievement, aptitude and creativity.

INTEXT 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?

ANSWERS TO INTEXT QUESTIONS

WHAT IS SELF ?

16

INTRODUCTION

Self is set of perceptions and beliefs about ourselves. Self-concept motivations our behavior. We form and regulate oneself concept as we grow based on knowledge we have about ourselves. According to Roger's we want positive regard from others. We have a strong need of being loved and valued by other people. The study of self is a fascinating topic. In this lesson we are going to study the way how self-going to conceptualized and the different aspects of self are related to human behavior.

OBJECTIVES

After studying this lesson, you will be able to

- *Explain the concept of self*
- *Describe different aspects of self*
- *Appreciates the value of self-awareness*
- *Describes the concept of self*

16.1 Concept of Self

Who are you? What makes you?

You might answer with "I am a mother" or "I am a therapist", "I am a good friend".

May be your answer with "I am excellent at my job"

These responses come from your internal sense of who you are. This sense is developed early in life but it goes through constant evaluation and adjustment throughout the lifespan.

In psychology this sense of self has a specific term "Self-concept".

There are many theories about what exactly self-concept is and how it develops. Generally theorists agree on the following points.

- On the broadest level, self-concept is the overall idea we have about who we are and includes cognitive and affective judgment about ourselves.
- Self-concept is multi-dimensional incorporating our views of ourselves in terms of several different aspects.

   E.g. Social, Religious, Spiritual, Physical emotional.

- It is learned not inherent.

- It is influenced by biological and environmental factors but social interaction plays a big role as well.

- Self-concept develops through childhood and early adulthood when it is more easily changed or updated.

- It can be changed in later years.

- Self-concept does not always align with reality when it does our self-concept is congruent, when it doesn't our self-concept is incongruent.

Some researchers think that the idea of selfe merges and shaped in social interaction. In particular when a child is addressed by someone starts thinking about self. Thus, self originates in social experience. Gradually people internalize a particular view of self which becomes a powerful source that influences behavior. Some part of our self is private to us and only we know about that. Another part is public which is known to others. Also there is a part of self which comes from our membership of a group. This kind of self is called "collective self" or "social identity".

INTEXT QUESTIONS ?

Choose the correct alternative

1. Which of the following questions would best relate to self identity on a focused self-concept assessment.

   a. Who would you like to be?

   b. What do you like most about your body?

   c. What are your personal strengths?

   d. Do you like being a teacher?

2. Which of the following questions would provide the healthcare worker with the information needed first when assessing self-concept.

   a. How would you describe yourself to others?

   b. Do you like yourself?

   c. What do you see yourself doing in 5years from now?

   d. What are some of your personal strengths?

3. What is self-concept?

   a. Is a relatively stable set of perceptions you hold of yourself.

   b. Reliance on one's own capabilities, judgment or resources.

   c. Is the awareness of the self as separate from the thoughts that are occurring at any point in time.

   d. None of these

Aspects of Self

In the psychological studies of self the researchers have explored many aspects of self. They show that self is multi-faceted. In fact the ideas held by the people about self, shape and organize our personal lives and allow participation in group life.

16.2.1   Self Esteem

Self-esteem is how we value and perceive ourselves. It's based on our opinions and beliefs about ourselves which can feel difficult to change.

Key elements of self-esteem include:

- Self confidence
- Feeling of security
- Identity
- Sense of belonging
- Feeling of competence

Having healthy self-esteem can influence your motivation, your mental wellbeing and your overall quality of life. However having self-esteem that is either too high or too low is problematic. Research has shown that low self-esteem is related to depression and self-doubt.

16.2.2   Self Efficacy

Self-efficacy refers to our belief about what we are capable of achieving. It is perceived competencies of a person. High self-efficacy children solve problems more quickly than those who had low self-efficacy beliefs. Bandura self-efficacy beliefs have power of four major influences as given below.

Cognitive: Self efficacy influences evaluation of capability and preparation to make an attempt.

Affective: It deals with stress, anxiety and feeling of control.

Selection: It includes choosing challenging activities.

16.2.3   Consciousness

Human beings are conscious not only of the world around them but also of themselves their activities their bodies and their mental lives self-consciousness is a heightened sense of awareness of oneself.

Historically self-consciousness was synonymous with "self-awareness".

An unpleasant feeling of self-consciousness may occur when we realizes that one is being watched or observed. Unpleasant feelings of self-consciousness are sometimes with shyness.

Some researchers have distinguished between two varieties of self-consciousness.

16.2.4 Private Self Consciousness

The degree to which people think about private, internal aspects of themselves. E.g. Their thoughts, motives and feelings which are not directly observable by others.

16.2.5 Public Self Consciousness

The degree to which people think about public, external aspects of themselves E.g. their physical appearance, mannerisms that can be observed by others.

16.2.6 Self Monitoring

Self-monitoring means the extent to which external situation and the reaction of others help one to regulate behavior. The politician's sales persons and artists are self-monitoring persons. It has been found that high self-monitors pay attention to others and low self-monitors pay attention to themselves. From research studies body language help us to understand unique channels for self-monitoring.

For e.g., If I feel angry at my boss for not supporting me at a meeting. I have several different ways that I could express my feelings I could tell him that I am angry. I could pretend as I am happy with his actions. How I choose to use my self-monitoring depends largely on the context as well as the relationship I have with my boss.

16.2.7 Self Presentation

This deals with the behavioral expression of self. We are often concerned with the images we present to others. The growing importance of cosmetic and fashion industry clearly shows the degree to which we are pre-occupied with our physical appearance. The term self-presentation technically means the strategies people use to shape what others think of them researchers have tried to study what others think about us.

The process of self-presentation takes many forms. It can be conscious or unconscious accurate or misleading. In general two main motives have been identified for self-presentation. They include strategic self-presentation and self-verification.

Self-Presentation: Is our effort to shape other's impression to gain power, influence or sympathy.

Self-Verification: Help people to affirm their existing self-concept.

INTEXT QUESTIONS ❓

Match the following terms in column A with column B

	Column A		Column B
a.	Self-esteem	1.	Behavioral expression of self
b.	Self-efficac	2.	The extent to which external situation and the reactions of others help one to regulate behavior
c.	Self-presentation	3.	Evaluative component of self-concept

| d. | Self-monitoring | 4. Thinking about oneself |
| e. | Self-consciousness | 5. Belief about one's competency |

16.. Ideal Self, Self Actualization

16.3.1   Ideal Self

According to the humanistic psychologist Carl Rogers the personality is composed of the real self and the ideal self. Your real self is who you actually are while your ideal self is the person you want to be.

The ideal self is an idealized version of yourself created out of what you have learned from your life experiences the demands of social and what you admire in your role models.

If the way that I am (the real self) is aligned with the way that I want to be (the ideal self) then I will feel a sense of mental wellbeing or peace of mind. If the way that I am is not aligned with how I want to be the incongruence or lack of alignment, will result in mental distress or anxiety.

16.3.2   Self Actualization

The concept of self-actualization was introduced by Abraham Maslow when he introduced his hierarchy of needs.

Self-actualization is the process by which an individual researches his or her full potential.

Self-actualization is the highest level of human needs in Maslow needs hierarchy.

According to Maslow when physiological, Safety, love and esteem needs are met then the individual can met self-actualization.

Characteristics of self actualized people

- Self-actualized people have peak experience.
- They have continuous sense of appreciation.
- Self-actualized people are realistic
- They are problem centered
- People with self-actualization value privacy
- Spontaneity is a sign of self-actualization

INTEXT QUESTIONS ❓

Choose the correct alternative

1. The highest order in the classical model of Maslow's hierarchy of need theory is

   a. Safety needs

   b. Belongingness needs

c. Esteem needs

d. Self-actualization needs

2. Which of the following statement is correct

i) Real self and ideal self are same thing

ii) Real self means the person he/she actually is

a. Both (i) and (ii)

b. Only (ii)

c. Neither (i) nor (ii)

d. Only (i)

3. Research has shown that companies who have educated workforce and workers who have high self-esteem are likely to exhibit increased

a. Stress levels

b. Wages and Salary costs

c. Turnover and absenteeism

d. Behaviors that lead to a competitive advantage

4. Which best describes self-efficacy

a. Positive image of one's self

b. Belief in one's abilities

c. Negative approach to life

WHAT YOU HAVE LEARNT 👍

❏ Self-concept is an individual's knowledge of who he or she is

❏ Researchers have explored many aspects of self

❏ Self-esteem, Self-efficacy, Self-consciousness, Self-monitoring, Self-presentation are different aspects of self.

❏ Self-esteem is how we value and perceive ourselves

❏ Self-efficacy is our belief about what we are capable of achieving.

❏ Self-actualization is the process by which an individual researches his or her full potential.

ANSWERS TO INTEXT QUESTIONS ✍

16.1

1. c

2. a

3.   a

16.2

a.   (iii)

b.   (v)

c.   (i)

d.   (ii)

e.   (iv)

7.3

1.   d

2.   b

3.   d

4.   b

SELF AND PSYCHOLOGICAL PROCESS

INTRODUCTION

Self refers to the totality of an individual's conscious experiences, ideas, thoughts, feelings with regard to herself/himself. Self has two meanings in terms of psychology that is feelings and attitude of a person towards himself and it is the whole psychological process that controls behavior.

Self concept explains who we are in our minds, what we can do and what we become.

Self can be said as the perception of the relationship of "I as the subject" and "me as an object".

Self as a subject does something. For example: I am a lecturer. Self as an object gets observed. I am inspired by his talk.

Personal self is concerned with oneself and social self emerges in relation with others. For example: Initially, when we look ourselves in a mirror, we feel our face attractive or unattractive. Secondly, we imagine how others will judge our looks, as attractive or interesting or intelligent. Thirdly we then experience a feeling of disappointment or pride by assessing our judgment and judgment of others. Finally if the overall assessment is positive, we develop a positive self-concept. Otherwise we develop a negative self-concept.

Hence Self-concept is an overall sense of self and it includes one's final perception of self, beliefs, feelings and values associated with him.

But at the same time, self is evolved from the basic relationship of the person with other persons in the social process.

Society and self are two inseparable things and they result in sustainable development of the underlying behavior of the individual. Self is not the controlled behavior but it is a series of regular perceptions held by individuals.

OBJECTIVES

After studying this lesson, you will be able to:

- *Explain the development of self in a life span perspective;*
- *Understand the meaning of self control, its development and Self Instruction Training;*
- *Describe moral development;*
- *Explain the role of family in moral development; and*
- *Understand the pro and antisocial behavior.*

The concept of self evolves and develops over the course of an individual's lifespan. It is a multifaceted and dynamic construct that undergoes transformation as individuals experience different stages of their life. Here are some important considerations for comprehending the self in a lifespan perspective:

i.   **Early childhood:** In early childhood, children interact with the immediate environment and their caretakers. They develop attachment with them and that has influence over their self-esteem and self-worth.

ii. **Adolescence:** During this stage, individuals undergo significant cognitive, physical, social and emotional changes. They explore different identities and want to be independent. They maintain peer relationships and compare with friends, which definitely has impact on them.

iii. **Adulthood:** In adulthood individuals start a career, form romantic relationships, become parents and also experience many health disorders.They have multiple responsibilities which influence their identity. Their experiences of life whether good or bad and their accomplishments and failures also impact their self-concept.

iv. **Late adulthood:** In this stage individuals face issues as retirement, health challenges and others. They introspect and evaluate themselves which has impact on their self.

v.   **Cultural and contextual influences:** Cultural values and beliefs shape an individual's self-identity. Also the economic, social and political context in which they live has greater impact on their self-esteem and identity.

vi. **Continuity and change:** Though the self undergoes some transformations over the lifespan, some elements of self continue to be the same throughout. Some aspects like values and personality traits remain same across different stages of life. But few aspects change in response to social and environmental factors.

The self is always a dynamic and evolving construct that develops and changes across the lifespan. It undergoes transformations through different experiences. Understanding the self provides us greater insight into how individuals construct their identity and navigate their social world across various stages of life.

INTEXT QUESTIONS ?

1.   Explain the significant changes that occur in self during adolescence.

2.   Which aspects of self continue to be the same without changing?

17.2 **Self Control and Its Development**

Self-control can also be called as self-discipline or self-regulation. It is the ability to regulate one's emotions, behaviors and thoughts to achieve some long-term goals. It involves making conscious choices in alignment with one's ethics and is really a complex process. It also involves various emotional, cognitive and behavioral factors.

Some important aspects of self-control and its development:

i. **Cognitive development:** Children develop self-control right in the early childhood by acquiring cognitive skills like memory and attention. These abilities allow children to regulate their behaviors, emotions and thoughts and plan to achieve goals.

ii. **Emotional regulation:** Emotions play a significant role in self-control. For gaining self-control, emotions like anger and stress have to be managed. These emotion regulation skills develop over time through social interactions and experience.

iii. **Environmental factors:** The environment of a child will definitely influence the development of self-control. Some factors like family environment, parenting styles, influence of peer group and cultural norms shape children's self-control abilities. For example, caring and supportive parenting can contribute towards enhancing self-control, while inconsistent parenting can hinder self-control.

iv. **Practice and reinforcement:** Adolescents and children who are provided with opportunities to practice self-control will certainly improve their self-control. Reinforcement such as positive feedback or rewards will motivate and reinforce self-control behaviors.

v. **Socio-emotional skills:** Individuals should develop socio-emotional skills like understanding the perspective of others, learning to regulate their emotions, being empathetic etc in order to enhance self-control.

Hence self-control, a complex process develops through a combination of environment, experiential and biological influences.

17.2.1   Steps in Self Control

Some strategies or steps involved in developing self-control are:

i. **Set clear goals:** Setting clear, specific, measurable, relevant, achievable, and time-bound goals helps you to stay motivated and focused, and enhances your self-control.

ii. **Monitor your emotions, thoughts and behaviors:** Frequently monitoring your emotions, thoughts and behaviors helps you to make conscious choices and gain insight into your behavior.

iii. **Practice self-awareness:** Always being aware of your internal experiences can help you to manage your temptations that may challenge your self-control.

iv. **Develop coping strategies:** Practice some coping strategies like meditation, deep breathing, exercise, engaging in a relaxing activity or talking to a supportive friend can help you manage difficult emotions such as cravings, frustration or stress.

v. **Build will power:** Start with small challenges and later increase the difficulty level to build your will power. Also celebrate small victories to boost your motivation.

vi. **Create a supportive environment and practice patience:**   Surround yourself with a supporting environment and seek support from family and friends because it will promote self-control and help you to make healthier choices. Be compassionate to yourself, practice patience, avoid negative self-talk or self-blame and focus on learning to develop self-control.

So self-control is a skill that can be developed with consistent effort and practice.

17.2.2   Self Instructional Training (SIT)

Self-instructional training (SIT) is a psychological technique that involves teaching individuals to use positive self-talk to regulate their emotions and behavior. SIT is effective in reducing impulsive behavior and improving self-control.

The steps involved in SIT are:

1.   Teaching to identify the problem or the behavior you want to change. It could be anything like overreacting, overeating, procrastinating, smoking or consuming alcohol.

2.   Teaching interrogating self about your behavior.

3.   Teaching focus, attention and appropriate responding skills.

4.   Teaching self-reinforcement skills for evaluating one's own responses.

5.   Self correction enables one to continuously monitor his/her behavior and evaluate the alternatives to arrive at probable solutions for the problems.

Application of Self Instructional Training: An example

1.   **Identifying the problem:** Over eating

2.   **Interrogation skills:** When do you eat two often?

What makes you eat too much?

3.   **Attention:** If you want to stop overeating, yourself instructional script could include statements like: "I will eat slowly and mindfully."

"I can control my eating habits."

4.   Self Reinforcement:

a)   Reward yourself when you started controlling the habit of overeating. Also

b)   Punish yourself whenever you fail to control yourself from overeating.

c)   **Self correction and coping option:** Indulge in your favourite work (hobby) when you get any thought of eating something so that you can stop overeating.

Hence, self-instructional training (SIT) serves as an effective tool for improving self-control.

With strong determination, discipline and practice you can use this technique to control your behavior and accomplish your goals.

INTEXT QUESTIONS ❓

1.   Define self-control.

2.   How does the environment of a child influence his/her development?

3.   Mention some strategies involved in developing self-control.

17.3 Moral Development

Moral development and self are closely related and intertwined. It is a process in which individuals develop their understanding and make ethical decisions and behave properly. The concept of self, which includes identity and self-awareness, plays a crucial role in shaping an individual's moral development. Some ways in which how self is related to moral development are:

i. **Self-awareness:** It is an ability to introspect and reflect on one's own emotions, thoughts and actions. Self-awareness helps individuals to examine their behavior and values. It influences their moral decision-making.

ii. **Self-concept:** It can be said as perception of oneself and it can shape individual's moral judgments and behaviors.

iii. **Self-identity:** The sense of who one is as an individual and how they fit into their social and cultural situations can influence their moral development. Individuals who think they are global citizens adopt a universalistic approach to moral decision-making while some who identify with a particular religion or community adopt moral values of that group only.

iv. **Self-regulation:** It can be said as an ability to regulate or manage one's behavior and emotions. It controls individual's impulsive reactions and desires and helps them to make moral choices based on their internalized values.

v. **Empathy:** It is an ability to understand the feelings of others from their perspective and is very important for moral development. These emotional and cognitive abilities allow individuals to understand the impact of their behavior and actions on others and help them to always make ethical decisions for the well-being of others.

Hence, the self plays a significant role in moral development as it influences on individual's self-awareness, self-identity, self-regulation, perspective thinking and empathy.

INTEXT QUESTIONS ?

1. Explain self-awareness.
2. What is meant by empathy?

17.4 Role of Family in Moral Development

The family plays a crucial role in the moral development of individuals. Children right from their early age learn ethics and morality through their interactions with family members. Some ways in which the family influences moral development:

i. **Modelling:** Children observe the behaviors and actions of their parents at home and learn good qualities like honesty, respect, kindness etc. and develop similar moral behaviors.

ii. **Teaching:** Family members teach children some moral concepts using anecdotes, stories and real-life examples.

iii. **Moral socialization:** Family involves in the transmission of social and cultural values related to morality. These shape the child's understanding and help them to discriminate good and bad.

iv. **Emotional support:** The emotional support provided by the family can foster prosocial behaviors in children which will develop positive moral qualities like sympathy, empathy and moral concern for others.

v. **Discussions:** Discussions in family about moral and ethical issues will develop moral reasoning and critical thinking skills in children. Children should be involved in real life situations and should be encouraged to express their perspectives and opinions so as to understand different moral complexities.

vi. **Discipline:** Discipline taught by family will make children understand the value of responsibility.

vii. **Religious and cultural influence:** Religious and cultural practices, rituals emphasize certain beliefs, behaviors and moral values in children and contribute to their moral development.

In conclusion, it can be said that it is important for families to contribute to the moral development of children as it lays the foundation for their all-round and ethical development throughout their lives.

INTEXT QUESTIONS ?

1. What do children learn from family?

2. How does our religion and culture contribute to the moral development of children?

17.5 Pro and Antisocial Behaviour

Prosocial behavior refers to behaviors or actions that are intended to benefit society, while antisocial behavior refers to behaviors or actions that cause harm to the society. Some important points about pro and antisocial behavior are:

17.5.1 Prosocial behavior

i. **Voluntary acts:** Prosocial behavior is intentional and involves activities such as cooperating, helping and showing empathy for others.

ii. **Positive impact:** Prosocial behavior promotes social harmony, positive relationships and has positive impact on society.

iii. **Beneficial to others:** Prosocial behavior reflects a concern for the welfare of the society.

iv. **Examples:** Examples of prosocial behavior include donating for a charitable cause, sharing information and knowledge, volunteering, participating in group activities.

17.5.2   Antisocial Behavior

i.   Harmful acts; Antisocial behavior includes behaviors such as stealing, bullying, lying and engaging in unethical and illegal activities. Such acts are detrimental and harmful to the society.

ii.   Negative impact: Antisocial behavior can cause conflict, distress and can disrupt societal norms and the functioning of communities. It has negative impact on the society.

iii.   **Lack of concern for others:** Antisocial behavior is often characterized by lack of concern for the well-being of society. This type of behavior is because of greed, selfishness and disregard for societal norms.

iv.   **Examples:** Examples of antisocial behavior include verbal or physical aggression, cheating, engaging in illegal activities that violate societal rules.

   Sometimes prosocial and antisocial behaviors can be exhibited by individuals in a combination in different contexts. Various factors such as individual upbringing, environmental influences and personal values can influence the development and expression of pro and antisocial behaviors in individuals. Antisocial behavior should be addressed and prosocial behavior should be encouraged and promoted for the well-being of the society.

INTEXT QUESTIONS ❓

1.   Define Prosocial and Antisocial behavior.

2.   Give examples for prosocial and antisocial behavior.

WHAT YOU HAVE LEARNT 👍

❒   Self refers to the totality of an individual's conscious experiences, ideas, thoughts, feelings with regard to herself/himself.

❒   Self-concept is an overall sense of self considering the feelings and values associated with him/her.

❒   Self undergoes transformation as individual's experience different stages of their life.

❒   Self-control is the ability to regulate one's emotions, thoughts and behaviors to achieve some long-term goals.

❒   Self-concept which includes identity and self-awareness plays a crucial role in shaping an individual's moral development.

❒   Family teaches morality and ethics to children and plays a crucial role in their moral development.

❒   Prosocial behavior benefits the society while antisocial behavior causes harm to the society.

TERMINAL EXERCISE

1. Explain self

2. Describe the development of self in a lifespan perspective.

3. What are some important aspects of self-control and its development?

4. How are self and moral development related to each other?

5. Explain the role of family in moral development.

6. How does pro and antisocial behavior affect the society?

ANSWERS TO INTEXT QUESTIONS

17.1

1. Individual's undergo significant cognitive, physical, social and emotional changes during adolescence. They explore their identity, maintain peer relationships and compare with their friends.

2. Values and personality traits of self remain the same without changing through different stages of life.

17.2

1. Self-control is the ability to regulate one's emotions, behaviors and thoughts to achieve some long-term goals.

2. Some factors like family environment, parenting styles, influence of peer group and cultural norms shape children's self-control abilities.

3. a) Set clear goals b) monitor your emotions, thoughts and behavior c) practice self-awareness d) develop coping strategies e) build will power

2. Create a supportive environment and practice patience.

17.3

1. Self-awareness is an ability to introspect and reflect on one's own emotions, thoughts and actions.

2. Empathy is an ability to understand the feelings of others from their perspective.

17.4

1. Children learn ethics and morality through their interactions with family members.

2. Religious and cultural practices, rituals emphasize certain beliefs, behaviors and moral values in children and contribute to their moral development.

17.5

1. Prosocial behavior refers to behaviors or actions that are intended to benefit society, while antisocial behavior refers to behaviors or actions that cause harm to the society.

2. Example of prosocial behavior is donating for a charitable cause, volunteering etc. Example of antisocial behavior is stealing, lying or engaging in illegal activities.

PERSONALITY THEORIES

18

INTRODUCTION

The term 'personality' often appears in our day-to-day discussion. The literal meaning of personality is derived from the Latin word persona meaning a mask. The mask used by the actors in the Roman/ Greek dramas theatre for changing their facial make-up. After putting on the mask, audience expected the person to perform a role in a particular manner. For a layperson, personality generally refers to the physical or external appearance of an individual, if we observe the persons, we find many commonalities and also many differences in the way they appear and behave. The study of personality deals with the issue of human individuality.

As a human being each one of us shows certain specific patterns of thinking, feeling and acting. They represent who we are and provide the basis of our interaction with other individuals. In everyday life, we often find people who are called 'aggressive', 'jolly', 'happy' and so on. These are impressions of people which we carry with us and use while interacting with them. It is in this sense that we frequently employed the word 'personality'. The study of personality has also attracted the attention of psychologists and they have developed various theories of personality. Also they have developed certain tools to assess people's personality. The personality related information is used in selecting people for various jobs, giving guidance to people in the need of psychological help, and mapping their potential. Thus the study of personality contributes to different areas of human behaviour. This chapter will help you to learn about different aspects of personality.

OBJECTIVES

After studying this lesson, you will be able to

● *Describe the concept of personality.*

● *Explain the elements of personality.*

● *Describe the factors influencing personality development.*

● *Explain the psycho-analytic, trait, type, trait-type, social-cognitive, psycho-social and humanistic theories of personality.*

● *Explain the defence mechanism.*

● *Explain the concept of three gunas and familiarize with the ways of assessing personality.*

Concept of Personality

In psychological term, **personality** refers to our characteristic ways of responding to individuals and situations. People can easily describe the way in which they respond to various situations. People can easily describe the way in which they respond to various situations. Certain catch words (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 characterize an individual's behaviour across different situations over a period of time. However, psychologists use it to refer to the characteristic pattern of thinking, feeling and acting. By characteristic pattern we mean the consistent and distinctive ways our ideas, feelings and actions are organized. When we talk about personality we usually refer to the totality or whole of the person. Thus, the enduring pattern expressed by the person in various situations is the hallmark of personality.

Definitions of personality

According to G.W. Allport, "personality is the dynamic organization within the individual of those psycho-physical system that determine his unique adjustment to his environment."

The term personality means the configuration of individual characteristics and ways of behaving which determine an individual's unique adjustment to his environment. – Hillgard.

J.B. Watson, regards personality as "the sum of activities that can be discovered by actual observation over a long enough period of time to give reliable information."

Cattel R.B. "Personality is that which permits a prediction of what a person will do in a given situation."

Eysenk, Personality is the more or less stable and enduring organization of a person's character, temperament, intellect and physique, which determines his unique adjustment to the environment."

"Although no single definition is acceptable to all personality theorists, we can say that personality is a pattern of relatively permanent traits and unique characteristics that give both consistency and individuality to a person's behaviour." – Fiest and Fiest.

In brief, personality is characterized 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.

Elementsd of Personality

How the individual personality will be structured? His body/ physique, intellects, temperaments, abilities, interests, habits, skills and traits these all are to be called as elements of personality.

Peter Sandyford, identified the elements of personality as follows:

1. **Physical Traits:** The external characteristics which helps to estimate personality like height, colour of hair, skin, body structure, health, beauty etc.

2. **Physiological Traits:** Life activities of a person, blood group, minerals ratio in blood, endocrine balance, blood pressure etc. also determines the personality.

3. **Intellectual Abilities:** Intelligence, academic performance also helps to identify the individual personality.

4. **Aptitudes:** Aesthetic aptitudes like art, music and drawing and mathematical, linguistic abilities etc.

5. **Skills:** Games, sports, drawing, writing, related different specific physical performance activities also parts of personality.

6. **Habits:** Acquired responses of a person in his daily life. Habits are part of his personality.

7. **Abilities:** Individual sensations/senses, reasoning, decision making, retention, language ability, observation, memory, attention, etc. are also part of the personality.

8. **Traits:** Distinctive behavioural patterns- like equanimity, aggressiveness, simple, quick-tempered, bad-tempered, dull-tempered, etc. Temporarily, eternally acquired or ircumstancesly acquired, or acquired by virtue by a person – These are also elements of personality.

18.3 Determinants of Personality

An individual person is the by-product of constant interaction of hereditary and environmental factors.

Major determinants of personality are

   i. Biological factors

   ii. Physical factors

   iii. Mental factors

   iv. Social factors

   v. Cultural factors

I. **Biological factors** refers to physical structure, facial attractiveness, sex, temperament, muscles, composition and reflexes, energy level, and biological rhythms are characteristics that are considered to be inherent.

Biological and physical factors mainly influence on these aspects structure, development and functioning.

- Health
- Nervous system – Central, Peripheral and Autonomous nervous systems
- Glands – Exocrine glands, endocrine glands
- Intelligence

Psychological factors refers to:

- Inferiority
- Superiority
- Self concept

Social factors refers to:

- Caste
- Religion
- Creed
- Family
- School
- Media

Cultural factors refers to

- Customs, traditions
- Restrictions
- Religion
- Lifestyle
- Child rearing practices

Based on the above mentioned factors, constant interaction and influence, development of personality takes place while the child grows and develops; development involves the process of differentiation and integration.

18.4 Theories of Personality

Understanding personality has proved to be a difficult and challenging task. It is so complex that no single theory is able to cover the total personality. The different theories approach the structure and functioning of personality from different positions. There are many theories of personality each provides different answers about the way they treat the issues about personality functioning. In particular they provide different explanations about the role of conscious/ unconscious factors, determinism/ freedom in functioning, role of early experience, role of genetic factors, uniqueness/ universality etc. Now we will learn about major theoretical perspectives of personality.

The theories of personality in general can be classified into 4 major perspective/categories.

Personality theories

Type theories	Trait theories	Type-Trait Theories	Developmental theories
1. Hippocrats	1. Allport	1. Eysenck	1. Sigmund Freud
2. Kretschemer		2. Cattell	2. Erickson
3. Sheldon			
4. Jung			
5. Spranger			
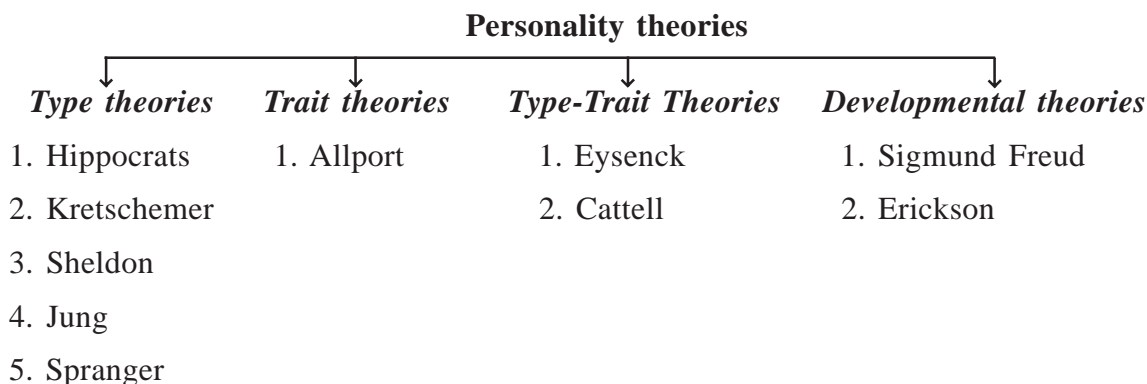
18.4.1 Type theories

Theories adopting the type approach advocate that human personalities can be classified into a few clearly defined types and each person, depending upon his behavioural characteristics, romantic structure, blood types, fluids in the body.

i) Hippocrates's classification:

According to Hippocrates, the human body consists of four types of humours or fluids-blood, yellow bile, phlegm (mucus) and black bile. The predominance of one of these four types of fluids in one's body gives him unique temperamental characteristics leading to a particular type of personality as summarized as follows in table.

Sl. No.	Dominance of fluid type in the body	Personality type	Temperamental characteristics
1	Blood	Sanguine	Light-hearted, optimistic, happy, hopeful and accommodating
2	Yellow bile	Choleric	Irritable, angry but passionate and strong with active imagination
3	Phlegm (mucus)	Phlegmatic	Cold, calm, slow or sluggish and indifferent
4	Black bile	Melancholic	Bad tempered, dejected, sad, depressed, pessimistic, deplorable and self-involved

ii) Krestchmer's classification:

Krestchmer classified all human beings into certain biological types according to their physical structure.

Sl. No.	Personality types	Personality characteristics
1	Pyknic (having fat bodies)	Sociable, jolly, easy-going and good natured
2	Athletic (balanced body)	Energetic, optimistic and adjustable
3	Leptosomatic (lean and thin)	Unsociable, reserved, shy, sensitive and pessimistic

iii) Sheldon's classification:

Sheldon classified person based on physical/bodily variations.

Sl. No.	Personality types	Somatic description	Personality characteristics
1	Endomorphic	Person having highly developed viscera but weak somatic structure	Easy-going, sociable and affectionable
2	Mesomorphic	Balanced development of viscera and somatic structure	Craving for muscular activity, self-assertive, loves risk and adventure
3	Ectomorphic	Weak somatic structure as well as undeveloped viscera	Pessimistic, unsociable and reserved

iv) C.G. Jung classification:

Jung classified persons based on their social participation and the interest which they take in social activities.

Sl. No.	Personality types	Personality characteristics
1	Introverts	Deeply involves in thoughts, moody, tend to be withdrawn and introspective, socially isolates, deeply involves in self aspects, philosophers, poets, writers, scientists belongs to this type.
2	.Extroverts	Sociable, fun-loving, outgoing, live life as fun, thinking ability is law, rude ones, political leaders, social workers, actors, business persons relates to this type.
3	Ambiverts	Introversion and extroversion traits are expressed according to the situation.

v) Spranger's classification

Spranger classified human beings on the basis of values they hold dear and whose objectives in life are the pursuit of those values.

Sl. No.	Personality types	Personality characteristics
1	Economical man	Every work is seen and done with profit, loss and money in mind. People are looked at according to their economic conditions and status.
2	Theoretical man	Establishes ideals, principles and follows, behave in a certain manner, intellectuals, writers, scientists belongs to this type.

Sl. No.	Personality types	Personality characteristics
3	Social man	People who support the community, they do things like leading movements, showing interest in community, services and leadership.
4	Religious man	More faith in religion matters, they live according to religious principles and bring others to live.
5	Political man	Interest in politics, they can convince those around him, can solve and create the problems.
6	Aesthetic man	Emphasis is placed on beauty, personal and home decoration. Sanitation is practiced, likes aesthetics and handicrafts.

18.4.2   Trait theories

In the trait approach the personality is viewed in terms of various traits. In our day-do-day conversation. We ascribe traits to our friends and near one's as being honest, shy, aggressive, lazy, dull, dependent etc. Traits may be defined as relatively permanent and relatively consistent general behaviour patterns that an individual exhibits in most situations. Some psychologists have tried to explain people's personality based on traits. Chief of them are 1. Allport, 2. Cattle.

i) Allport theory

According to Allport, traits are the basic units of personality. He divided the traits into 2 types. They are Personal dispositions and Common/ general dispositions.

● Special characteristics that distinguish a person from other people. They are called personal characteristics.

● A person also has characteristics that are seen in other people. They are called general/ common characteristics.

● These characteristics come in varying degrees. He explained that a person character is a combination of the above two characteristics.

ii) Cattell theory

He made a list of traits describing the characteristics and classified them into two types by using a statistical method of factor analysis.

1. Source Traits   2. Surface Traits

Based on the above, he designed a personality inventory. It is called 16PF (16 Personality Factor test).

● According to Cattell, every person has these two traits.

● Source traits are those traits that are constant and lifelong in every individual, and it reveals the inner personality of a person.

- Surface traits are the traits that are formed in the same person due to circumstances and these traits fade away when the circumstances are combined and they refers to outward appearance.

- The combination of the above two characteristics is said to be the personality of a person.

18.4.3   Type-Trait theories

By adopting factor analysis, Eysenck identified number of traits in between the two basic traits of extroversion-introversion and two basic dimensions of stable-unstable. Based on these, he explained the personalities.

18.5   Developmental Theories

Psycho-analytic theory of Freud and psycho-social development theory of Erickson, belong to this category.

18.5.1   Psycho-Analytic Theory

It is founded by Sigmund Freud, this theory emphasizes the influence of the unconsciousness, motivation the importance of sexual and aggressive instincts, and early childhood experience on a person. This theory has been very influential not only in psychology but also in literary circles, art, psychiatry and films. Many of Freud's ideas have become part and parcel of every day usage. Freud started his career as a neurologist. His theory developed in the course of his observations of his patients, as well as self analysis. He used free association to help his patients recover forgotten memories.

Freud discovered that mind is like an iceberg and we have limited conscious awareness.

Freud proposed that psychological forces operate at three levels of awareness.

i.   **Conscious level:** The thoughts, feelings and sensation that one is aware of at the present moment.

ii.   **Sub-conscious level:** It contain information of which one is not currently aware, however, they can easily enter conscious mind.

iii.   **Unconscious level:** It consists of thought, feelings, wishes, drives etc.; of which we are not aware. It, however, influences our conscious level of activity.

Freud thought that unconscious material often seeks to push through to the conscious level in a disguised manner. It may be in a distorted manner and or it may take a symbolic form. Interpretation of dreams and free associations were used for analysis of the three levels of awareness.

Personality structure

Freud believed that human personality emerges due to a conflict between our aggressive and pleasure seeking biological impulses and the internalized social restraints against them. Thus, personality arises in the course of our effort to resolve the conflicts. To this end he proposed three structures which interact with each other. Id, Ego and Super Ego. Let us learn about these structures.

Id: It is the unconscious, irrational part of personality. It is the primitive part immune to morality and demands of the external world. It operates on the **pleasure principle**. It seeks immediate satisfaction.

Ego: It is involved with the workings of the real world. It operates on the **reality principle**. It is the conscious and rational part of personality that regulates thoughts and behaviours. It teaches the person to balance demands of external world and needs of the person.

Super Ego: It is the internal representation of parental and social values. It works as the voice of conscience, that compels the ego to consider not only the real but also the ideal. It judges one's behaviours as right or wrong, good or bad. Failing upto moral ideals bring about the shame, guilt, inferiority and anxiety in the person. It operates on the **ideal principle**.

Personality Development

On the basis of case-history of patients, Freud reached at a conclusion that personality development occurs through a sequence of psychosexual stages. In these stages, the Id's pleasure seeking tendency focuses on different areas of body. The following table shows these stages.

Stages of psychosexual development

Sl. No.	Stages	Focus of activity
1	Oral (0 – 18 months)	Pleasure centres in the mouth and leads to activities of sucking and biting etc.
2	Anal (18 – 36 months)	Pleasure centres on bowel and bladder elimination
3	Phallic (4 – 6 years)	Pleasure centre is genitals. Touching and fondling of genitals give pleasure. In this stage, the boys love their mother and hate their father. It is called as Oedipus complex. And girls love their father and hate their mother. It is called as Electra Complex.
4	Latency (7 – 11 years)	Children repress their sexual impulses and channalise them into socially acceptable activities such as sports, arts.
5	Genital (from the onset of puberty)	Pleasure zone is genital Maturation of sexual interests.

18.5.2   Defense mechanisms

The Ego has to perform a difficult duty of mediating between the instinctual demands of Id and moral position of Super Ego. The Ego tries to solve the problem and if a realistic solution or compromise is not possible it indulges in distorting thoughts or perception of reality through certain process called defense mechanisms. To defend or safeguard ourselves, we use technique called defense mechanism. These are also called Adjust Mechanisms. Some of the key mechanisms are give below:

Sl. No.	Mechanism	Description
1	Denial	Failure to recognize or acknowledge the existence of unpleasant event/ information as I do not know, I have not seen etc.
2	Displacement	Emotional impulses are redirected toward one other i.e. substitute person/ object.
3	Projection	Attributing own unacceptable urges to others.
4	Rationalization	Justifying our actions or feelings through socially acceptable explanations.
5	Reaction formation	Thinking or acting in a way that is the extreme opposite of unacceptable urges.
6	Regression	Retreating to behaviour characteristic of an earlier stage of development
7	Repression	Exclusion of anxiety producing thoughts, feelings or impulses from consciousness.
8	Sublimation	Sexual urges are channalized into productive, non-sexual activities.

Conclusion

This theory is not about the types of personality, but rather about it explained the causes of those types of personality. It states that childhood experiences have lifelong effects. It has been said that if there is an opportunity to fulfil the desires arising in those stages, the development of personality will take place without any fluctuations.

INTEXT QUESTIONS ?

Fill in the blanks with suitable words.

1. The unconscious and irrational part of personality is _____

2. Super Ego follows this principle _____

3. Cold, calm, slow and sluggish type persons belongs to _____ personality type.

4. Athletic type people, personality characteristics are _____

5. Personality is the by-product of _____

18.6 Carl Jung - Collective Unconscious

Jung was opposed to the central role of sex and aggression in human life. Instead he proposed that people are motivated by more general psychological energy. He proposed that the deepest part of one's psyche comprises the collective unconscious. It is a set of influences inherited from our family and the human race. The collective unconscious contains archetypes

which are the mental images of a particular person, object or experience. Hero, powerful father, innocent child, nurturant mother are example of archetypes.

18.7 Alfred Adler - Feelings of Inferiority and Superiority

Adler proposed that the central human motive is that of striving for superiority. It arises from feelings of inferiority that are experienced during infancy and childhood. During this period, the child is helpless and depends on others for help and support.

The psychoanalytic ideas have been criticized on the ground that there is inadequate evidence to support the theory.

18.8 Karen Horney - Basic Anxiety

Horney emphasized on the importance of social relationships in personality development. Basic anxiety refers to the feeling of a child of being isolated and helpless in potentially hostile world.

18.9 Psycho-Social Development Theory (Erickson)

Erik Erickson, the famous psychoanalyst, is credited with developing the theory of psycho-social development which covers normal development over the entire life span of human beings.

Erickson postulated that the development of an individual is the result of his interaction with his social environment. Right from his birth, his social development puts him under specific pressures or conflicts (called crises) by making specific demands at different ages or developmental stages of his life. The individual tries to meet these specific demands or resolve the crises by reacting psychologically in his own way, depending upon his circumstances. The complexity of the demands from society or social environment goes on increasing as the child advances on the ladder of growth and development. So at each stage of his development, the child faces a new crises i.e. an issue that needs to be resolved at that particular stage of development. The way the **'crises'** of each stage is resolved has a major bearing on the development of one's behaviour. He discovered eight such issues or crises of life arising at different ages.

Sl. No.	Stage	Age	Psycho-social crises	Psycho-social virtue
1	Infancy	0 – 1 year	Trust Vs Mistrust	Hope
2	Babyhood	1 – 3 years	Autonomy Vs Doubt	Will power
3	Play-age	3 – 5 years	Initiative Vs Guilt	Purpose
4	School age	6 – 12 years	Industry Vs Inferiority	Competency
5	Adolescence	12 – 20 years	Role identify Vs Role confusion	Fidelity
6	Young adulthood	20 – 30 years	Intimacy Vs Isolation	Love
7	Middle Adulthood	30 – 60 years	Generativity Vs Stagnation	Care
8	Mature stage	60 and above	Integrativity Vs Despair	Wisdom

According to Erickson, the results of social interaction of the individual in the above stages contribute to personality.

18.10 Bandura's Social Learning Theory

The social learning/cognitive perspective was developed by Albert Bandura. It views behaviour as influenced by the interaction between persons and the social context. Bandura, advanced the view that what an individual presents to the world at large as his personality, is acquired through a continuous process of structuring and restructuring of experiences, gathered by means of social learning and later imitated in corresponding situations.

Social learning may involve real as well as symbolic models. Children, for example, pick up etiquette and attitudes by watching their parents and elders. The imitation of the model's behaviour is further reinforced in the viewer's mind by the recognition or reward the model receives as a result of his actions. An individual thus acquires numerous traits and modes of behaviour from many sources, and all these together contribute to the formation and development of his unique, distinctive personality.

The interrelationships of cognitive factors, behavioural factors and environmental (social) factors are shown as follows:
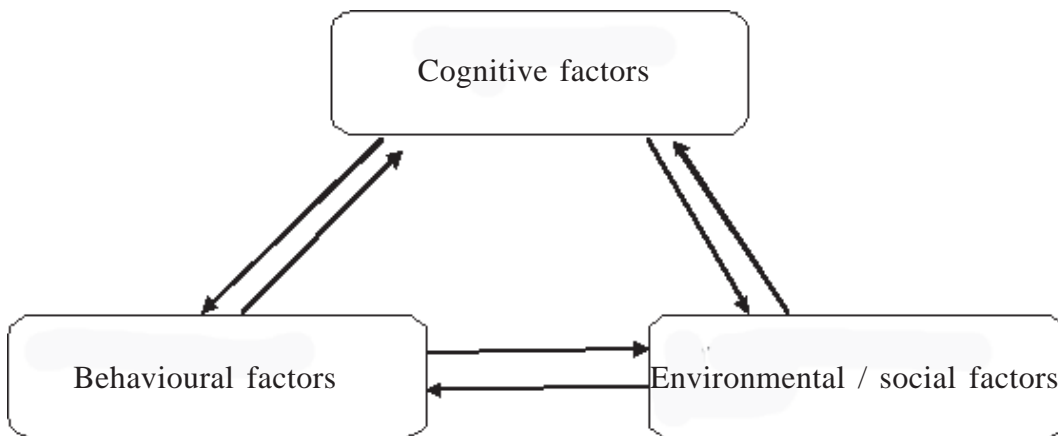
Bandura developed the concept of self efficacy which incorporates a person's cognitive skills, abilities and attitudes as represented in one's self-system.

18.11 Carl Rogers (Humanistic Perspective) Theory

Carl Ransom Rogers, propounded a new theory of personality called the self theory, quite distinct from the earlier theories of personality. He stressed the importance of an individual's self for determining the process of his growth, development and appropriate adjustment to his environment. There are two basic systems underlying his personality theory- the organism and the self. Rogers considers them as systems operating in one's phenomenological field (a world of subjective experience, the personal and separate reality of each individual). The organism is an individual's entire frame of reference. It represents the totality of his experience – both conscious and unconscious. The second system, the 'self' is the accepted, aware part of experience. The self as a system of one's phenomenal field can perhaps be best understood in terms of our concept of I, me or myself.

What we recognize as the personality of an individual is the product of interaction between the above mentioned systems of one's phenomenological field. The acquisition of the concept of self is a long and continuous process. Human beings have inherited the tendency to develop their self in the process of interpersonal and social experiences which they acquire in the environment. We can observe the two types of self. They are real self and ideal self; Real self, i.e. the what at present he is, and an ideal self i.e. the kind of person we would like to be. We can measure the gap between the real and ideal self through semantic differential technique.

INTEXT QUESTIONS ?

18.4 to 18.5

Match the names given in column A with the concept given in column B.

Column A		Column B	
a)	Bandura	i)	Dream analysis
b)	Rogers	ii)	Common traits
c)	Erickson	iii)	Psycho –Social environment
d)	Freud	iv)	Ideal self
e)	Allport	v)	Imitation

18.12 Indian Psychological Perspective - Concept of Gunas

The Indian approach to personality emphasizes on the combination of three qualities namely, Sattava, Rajas and Tamas. These qualities or Gunas have been discussed in detail in the Samkhya Theory. Bhagavadgita has provided an account of these gunas. These gunas are present in different degrees and at any point of time one or the other may dominate. The behaviours of a person depends on the guna that is dominating a person at any point of time. A brief description of these gunas is given below:

i. **Sattva Guna:** The main attributes which characterize Sattva Guna are truth, gravity, duty, discipline, detachment, cleanliness, mental balance, sense of control, determination and sharp intelligence.

ii. **Rajas Guna:** A person dominated by Rajas guna has attributes that include vigorous activity, desire for sense of gratification, dissatisfaction, envy and materialistic point of view.

iii. **Tamas Guna:** It involves anger, arrogance, mental imbalance, depression, laziness, procrastination and a feeling of helplessness.

Bhagavadgita viewsthe three gunas in a proto typical form and describes that the food which we eat, mentality (Budhi), Chartiy (Dan) etc. can also be categorized in the three types of gunas or qualities.

18.4 to 18.5

State whether the following statements are True or False

1.	Rogers has developed the concept of self efficacy.	True/ False
2.	Jung proposed that the concept of collective unconscious.	True/ False
3.	At babyhood, age, the child ego operates on ideal principle.	True/ False
4.	Cattell has proposed 16 core traits of personality.	True/ False
5.	Projection means, attributing own unacceptable urges to others.	True/ False

Answer the following Questions

1. Name the gunas mentioned in the Indian approach to personality.

2. Name three categories of Krestchmer's classification of personality.

3. Name two important characteristics of personality.

4. What are the factors that influence personality?

✂ TERMINAL EXERCISE ✂

1. Describe the concept of personality.

2. Write about the different perspectives of personality.

3. Describe the Psychosocial development theory of personality.

4. Name various stages of psychosexual development.

5. Write about the trait theories of Allport and Cattell.

ANSWERS TO INTEXT QUESTIONS 🖎

18.4

1. Id.

2. Ideal

3. Phlegmatic

4. Energetic, optimistic and adjustable

5. Heredity and Enrichment

18.4 to 18.10:   a-v,   b-iv   c, - iii d-I, e-ii

184, 18.5:   1 True   2. True   3. False   4. True   5. True

ANSWER THE FOLLOWING QUESTIONS

1. refer 18.11
2. refer 18.4.1
3. refer 18.1
4. refer 18.3

TERMINAL EXERCISE - HINTS

1. refer 18.1
2. refer 18.4
3. refer 18.9
4. refer 18.5.1
5. refer 18.4.2

PERSONALITY ASSESSMENT

INTRODUCTION

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 personnel 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 judgment and reduce objectivity. Hence we need to organize our efforts more formally to analyze personalities. A formal effort aimed at understanding personality of an individual is termed as personality assessment.

OBJECTIVES

After studying this lesson, you will be able

- *Describe the concept of personality assessment*

- *Explain the different assessment types.*

- *Explain the subjective methods of personality assessment*

- *Explain the objective methods of personality assessment*

- *Describe   about projective techniques/methods of personality assessment.*

- *Explain the assessment of GUNAS.*

19.1 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 behavior 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, counseling, and other purposes.

19.2 Personality Assessment Types / Methods

Psychologists have tried to asses personality in various ways. These methods/techniques are rooted in different theoretical orientations. Hence they through light on different aspects of personality. They classified the methods used for personality assessment into three categories.

1. Subjective Methods
2. Objective Methods
3. Projective Methods

19.3 ▶ Subjective Methods

In subjective methods of measuring the personality, the individual is asked to evaluate himself. Data is also collected with the help of his friends, & relatives and associates. The individual looks critically objectively. The following are some of the subjective methods of assessing personality.

1. Case study and case history method
2. Interview techniques
3. Autobiography
4. Questionnaire

19.3.1 Case study

Past developments and adjustments of the person are enquired Data is collected about the parents, forefathers, family traditions, family atmosphere, size of the family. The attitude of members of the family towards the subject, attitudes of parents towards the birth of the person, nature of delivery, health at birth, age of teething, walking, talking, history of physical diseases, mental shocks, death in family and reaction, transfers and migrations of family, relatives, friends, teachers and other association. This case study/history deals with subjective data and factual information about the subject. This is used to diagnose the cases for troubles of the students or persons with adjustment problems or branded clinical cases.

19.3.2. Interview

Interview is a technique of eliciting information directly from the subject about his personality in face-to-face contacts. It gives an opportunity for mutual exchange of ideas and information between the subject and the psychologists. For this purpose, the Psychologists tries to arrange a meeting with the person or persons under assessment. The face-to-face interaction in the interview is of two types i.e.1.Structured and 2.Unstructured.

An unstructured interview is an open interrogation. Here the interviewer asks the interviewee any question on any subject relevant to the situation. The interviewer here is not restricted to a particular set of predetermined questions but is free to drift along the paths opened up by the interviewee to explore any issue that may arise, and to clarify any doubt that may emerge in the broad assessment of his personality.

The structured interview on the other hand, adopts a systematic and predetermined approach instead of riding on the tides of the situation. Here the interviewer is definite about the personality traits or behaviour he has to assess and then plan accordingly. Usually, a list of questions is prepared for this purpose and after taking the subject into confidence, the psychologist tries to seek answers to these pre-planned questions. He does not attend

to only the content of the responses but also to the tone, behaviour and other similar factors, for the total evaluation in terms of the designated personality pattern of the individual.

19.3.3. Autobiography

Autobiography is the story of the subject narrated or written by him it is a faithful record of one's past and present. Psychologists supply the various headings of the story, if needed. The subject narrates or writes about various aims, ambitions, achievements, attitudes, adventures, events, experiences, interests and activities of his life. In this method, the subject has freedom to write according to his experience and manners. It is economical and very useful to explore the personality of the person.

19.3.4. Questionnaire

Meaning of questionnaire, Good and Hatt point out, "In general the word questionnaire refers to a device for securing answers to questions by using a form which the respondent fills in himself", this definition makes it clear that in collecting information from the subject himself about his personality characteristics a form consisting of a series of printed or written questions is used. The subject responds to these questions in the spaces provided in columns of yes, no or cannot say etc. These answers are then evaluated and used for personality assessment.

Questionnaire may be given in two forms i.e. 1. Closed form of questionnaire, in the subject has to select any one option to given. 2. Open-ended questionnaire, in this subject has choice to write answers freely. This is the most popular method and is quite useful in collecting both quantitative as well as qualitative information.

19.4 ▸ Objective Methods

In Objective methods, we do not depend upon subject's own statements or responses, but upon his overt behavior as revealed to others who serve as observers, examiners or judges. Objective methods are said to be scientific as they depend on the objective data. Some of the objective methods are:

1. Personality Inventories
2. Rating Scales
3. Observation
4. Situational Tests
5. Anecdotal Record/ Report
6. Sociogram
7. Check Lists

19.4.1 Personality Inventories

Personality inventory is nothing but a questionnaire standardized to get the objective data about subjects attitudes and other characteristics. In inventories, some questions are listed and the subject gives his answers thereby giving expression to his feelings.

Although personality inventory resembles with questionnaire in so many ways like administration, scoring, interpretation yet it differs from questionnaire in two ways.

- Questionnaire is the general device and can be used for collecting all kinds of information. But personality inventory is specially designed to seek answers about the person and his personality.

- In the questionnaire, the questions set are generally addressable, to the second person.

For example:

Do you often feel lonely? Yes, No.

In the personality inventory, the questions are generally addressed to the first person, such as

I often feel lonely. Yes, No.

The best known personality inventory is the Minnesota Multiphase Personality Inventory (MMPI) and some other examples for personality inventories are.

1. Bell's adjustment inventory

2. Eysenck's personality inventory

3. Cattell's sixteen personality factor inventory(16PF)

19.4.2 Rating Scale

Rating scale is used to know from others where an individual stands in terms of some personality traits. Usually with the help of this technique, we try to have some specific idea about some of the personality traits of an individual (whom we don't know well), from the person, who knows him very well. It reflects the impression the subject has made upon the person who rates him,

There are three basic things involved in this technique which are

i.   The specific trait or traits to be rated.

ii.   The scale by which degree of possession or absence of the trait has to be shown.

iii.   The appropriate person or judges for rating.

First of all, the traits or characteristics, which have to be evaluated by the judges are to be stated and defined clearly. The scale for rating work is to be constructed. Usually the degrees are indicated by numbers,1 to 3, 1 to 5, 1to 7, comprising three point, five point or seven point scales.

For example the seven-point scale is as follows for the quality, leadership,

Excellent   Very good   Good   Average   Below average   Poor   Very Poor

There are two types in rating scales i.e.

1. Self-rating scale and   2. Rating by others

Rating techniques suffer from some obvious drawbacks like the error of central tendency, subjective bias and halo effect, etc.

19.4.3 Observation

Observation is a popular method to study the behaviour pattern of an individual in an actual life situation. The observer decides what personality traits or characteristics he needs to know, and he then observers, the relevant activities of the subject in real life situation.

The observation can be done in four ways

1. Natural observation

2. Controlled observation

3. Participant observation and

4. Non–Participant observation

The observer may also use a tape-recorder, photographic cameras, a telescope etc. To ensure reliability of the observed results, the observer may repeat the observations in the same situation several times, or the subject may be observed by a number of observers and the results may be pooled together.

19.4.4. Situational Tests

A variety of situational tests have been devised for the assessment 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.

19.4.5. Anecdotal Record / Reports

Anecdotal reports are descriptions of a client's behaviour at a specific time or for a specific situation. These reports generally start out by noting the time, date, and place. These are followed by a general description of the event and the manner in which the client participated in it. The report ends with observer comments that may be evaluative in nature.

19.4.6 Sociogram

Sociogram was designed by J.L. Moreno and Helen Jennings in 1946. Though these tests we come to know what other members of the group feel about the subject whether they like him or not."The members of the group may be asked to name in order of preference one or two individuals with whom they would like to or play.

19.4.7 Check lists

Check lists have a predetermined structure that you can use to make your assessments. Begin by creating categories in your check list that you believe present the most important aspect for which you must watch out.

19.5 Projective Methods

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 (9/10) human behavior governed by unconscious motives. Direct methods of personality assessment cannot uncover the unconscious part of our behavior. 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 falls 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 his/her 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 completion, some require expressions 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 of them the following feature:

1.   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 any objective manner. They generally require qualitative analyses for which a rigorous training is needed.

Some Common Projective Techniques are briefly discussed

1.   The RorschachInkblot Test.

2.   Thematic Apperception Test (TAT)

3.   Children Apperception Test (CAT)

4.   Rosenzweig's Picture-Frustration Study (P-F study)

5.   Word Association Test

6.   Sentence Completion Test

7. Play technique

8. Draw-a-Man Text

9. Psychodrama

19.5.1. 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 card board of about 7"x 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 expensive training. Computer techniques too have been developed for analysis of data. An example of the Rorschach Ink blot is given below figure

Figure of Rorschach Inkblot

Fig. An example of the RorschachInkblet.

19.5.2. 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 below in figure.
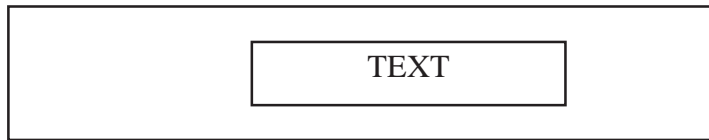
Fig: An Illustration Showing the drawing of card of TAT

19.5.3 Children Apperception Test (CAT)

The C.A.T was developed by Dr. Leopold Bellak, for children between 3 to 10 years age group.

It consists of 10 cards. The cards have pictures of animals instead of human characters, since it was thought that children could identify themselves with animals' figures more readily than with persons. These animals are shown in various life situations. For both sexes, all the 10 cards are needed. The pictures are designed to evoke fantasies relating to child's own experiences, reactions and feelings. Whatever story child makes, he projects himself. It is a colour free test but it demands some alterations according to the child's local conditions.

All the 10 cards are presented one by one and subject is asked to make up stories out of these. The child should be brought in confidence and he should take the story .making a pleasant game to play with, based on the responses, child's personality will be assessed.

19.5.4 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.

19.5.5 Word-association Test

To detect one's inner conflicts, attitudes, aversion etc; with reference to specific persons or situations, the list of stimulus words are presented to the subject to elicit a response for each one. If a particular word evokes an unusual response or a delayed response or repetition of the stimulus – word itself, it might indicate some deep seated motive or complex.

19.5.6. 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 subject reflect their attitudes, motivation and conflicts. The test provides subjects with several opportunities to reveal their under lying unconscious motivations. A few simple items of a sentence completion text are given below.

---

1. My father _____

2. My greatest fear is_____

3. The best thing about my mother is_____

4. I am proud of_____

19.5.7 Play technique

Through play, social and abnormal behavior of the children can be known because, the children try to describe their feelings of tension, aggression, fear and frustration to the objectives they use as play material, and these feelings and expression through play. Children are given every opportunity to play freely with toys. But the play situations should be planned and controlled in order to make some valid conclusions.

19.5.8. Draw-a-Man Test

It is a simple text in which the subject is asked to draw a person on a sheet of paper. A pencil and eraser is provided to facilitate 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 perm as if s/he was a character in a novel or play. Some examples of interpretations are as follows:

● Omission of facial features suggests that the person tries to evade a highly conflict-ridden inter-personnel relationship.

● Graphic emphasis on the neck suggests lack of control over impulses.

● Disproportionately large head suggests organic brain disease and pre-occupation with headaches.

19.5.9. Psychodrama

It is an interesting form of making the patient or problem person to act out problem in a theatre like situation. This technique frees the Individual to express his anxieties and hostilities or relive traumatic experiences in that stimulating situation, so that the patient is understood increasingly by the observer.

The analysis of personality with the help of projective techniques appear 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 specialized training. There are problems associated with the reliability of scoring and validity of interpretations. But, the practitioners have found these techniques quite useful.

19.6 Assessment of Gunas

In the previous lesson you studied about the Indian approach to personality which emphasizes the three Gunas: Sattva, Rajas and Tamas. In order to assess a person's nature based on this conception, we need to have an understanding of which Guna is predominant in a person's life, in thought, speech and action, and then which is less dominant, and finally which is the least. For example, a person who is extremely truthful, detached, and

helpful is likely to be high on Sattva. In order to assess which Guna is predominant in an individual's personality, we have to obtain combined information using questionnaires, observation etc. Some inventories have been developed which gives us some information about the way the Gunas are active in an individual's personality.

INTEXT QUESTIONS ?

19.3

1. A detailed study of the client is _____

2. Mutual intervention between two individuals is_____

3. Scope for objectivity is in this form of questionnaire _____

4. Observing the animals in the forest _____observation

5. Ball's adjustment inverting is the _____ assessment tool of partiality

INTEXT QUESTIONS ?

19.4, 19.5

Match the following list – A with List B

List A	List B
A. Rorschach Inkblot	i. The specific traits to be rated
B. I am proud of	ii Behavior at specific event
C. Anecdotal Resend	iii. Projective Technique
D. Rating Scale	iv. Subjective Technique
E. Questionnaire	v. Sentence completion

INTEXT QUESTIONS ?

19.5, 19.6

State when the following statements are True or False.

1. The thematic apperception tept was developed for above 10 years of age children ____ True/False

2. Children apperception test consists of 30 block and white picture cards

WHAT YOU HAVE LEARNT 👍

⚜ TERMINAL EXERCISE ⚜

ANSWERS TO INTEXT QUESTIONS ✍

19.3

1. Case study
2. Interview
3. Closed form
4. Natural
5. Objective type

19.4, 19.5

    A.iii.   B. V   C. ii   D. I   E. iv

19.5, 19.6

    1. False   2. False   3. True

INTEXT QUESTIONS

1. Refer 19..5
2. Refer 19.6
3. Refer 19.5.1

INTERNAL EXAMINATION

1. Refer 19..4.3
2. Refer 193.1
3. Refer 19.6

PSYCHOLOGICAL DISORDERS

20

INTRODUCTION

The concept of abnormality must be approached with care and cultural understanding. When determining abnormality, mental health experts utilise these criteria as a guide, but they also consider individual characteristics, cultural considerations, and the overall impact on a person's functioning and well-being. The conceptions of normality and abnormality are not very fixed. They are states of thought that exist on a continuum, and the majority of us encounter them at various points throughout our lives.

OBJECTIVES

- *To understand the concept of abnormality and how it is defined.*
- *To know the various classifications of psychological disorders*
- *To understand the various factors of the cause of Psychological disorders*
- *To learn about various types of psychological disorders and its management.*

20.1 What are Psychological Disorders

It might surprise you to hear that there is still no consensus regarding what constitutes abnormality. This is not to say that definitions are lacking; they exist. However, it is challenging to characterise it with a truly accurate definition. Why is it so challenging to define a mental disorder? Several factors contribute to someone's abnormality, which is a significant problem. However, there are certain obvious abnormality-related traits. No one sign can identify or describe abnormalities on its own. But the more problems a person has in the following areas, the more likely they are to have a Psychological disorder.

1. **Subjective distress:** When someone feels personally distressed or uncomfortable as a result of their thoughts, feelings, or behaviours, it may be a sign of abnormality. This criterion acknowledges that a person's own distress can play a significant role in assessing whether or not something is abnormal.

2. **Maladaptiveness or Impaired functioning:** engaged in behaviours or mental patterns that make living a life more challenging. An individual's capacity for successful daily functioning may be hampered by abnormal behaviour or traits. This may involve shortcomings in the areas of employment, education, relationships, or self-care.

3. **Statistical deviancy:** An abnormal behaviour or set of qualities is one that is uncommon or unusual in the population. For instance, a behaviour might be classified as abnormal

if it differs greatly from what is generally seen in that group.

4. **Violation of the standards of society:** If certain actions or traits dramatically depart from accepted social or cultural norms, they may be seen as abnormal. But it's vital to remember that cultural norms can change significantly between cultures and environments.

5. **Social discomfort:** acting in embarrassing ways to others.

6. **Irrationality and unpredictability:** unable to interact with others in a rational way and people with abnormality are hard to predict.

7. **Dangerousness:** sometimes people with psychological disorders could be dangerous to themselves and others.

20.2 Causes of Psychological Disorders

It's crucial to recognise that psychological disorders, often known as mental disorders, can have a variety of root causes. These causes are frequently intricate and intertwined. Most often, a mix of biological, psychological, and environmental variables result in psychological disorders. The following list includes some typical causes of psychological disorders:

Biological Factors: Biological variables can have a big impact on how psychological disorders develop. This includes genetics, as some diseases have a propensity to run in families and may have a hereditary component. Inconsistencies in brain chemistry and neurotransmitter activity can also play a role in the development of mental disorders. Hormonal imbalances and structural abnormalities in the brain can also play a role.

Psychological Factors: Individual experiences, thoughts, and emotions that may be linked psychological disorders are referred to as psychological factors. The chance of acquiring specific illnesses, such as post-traumatic stress disorder (PTSD), might increase as a result of stressful experiences including physical or emotional abuse, neglect, or witnessing violent behaviour. Furthermore, unhealthy thought patterns, false beliefs, low self-esteem, and inadequate coping mechanisms might support the emergence or aggravation of psychiatric diseases.

Environmental factors : Aspects of the environment, such as social and cultural influences, can have an effect on mental health. The onset of psychological disorders can be influenced by a variety of factors, including adverse childhood experiences, stressful life events (including the death of a loved one, a divorce, or financial troubles), dysfunctional family dynamics, poverty, prejudice, and social isolation. Living in a hostile or abusive environment can be harmful to one's mental health.

It's critical to remember that there are a variety of interrelated aspects that can affect the causes of psychological disorders. They frequently result from a complex interaction of genetic predispositions, environmental stressors, and personal experiences. Accurate diagnosis, effective treatment planning, and care for people suffering from psychological problems all depend on understanding these intricate relationships.

Classification of Psychological Disorders

Psychological disorders are divided into various categories to make understanding, diagnosing, and treating them. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and the International Classification of Diseases (ICD) are the two most widely used classification schemes in the world.

The American Psychiatric Association (APA) released the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) in 2013. It offers a set of uniform diagnostic standards and classifications for mental disorders. Clinicians, researchers, and other mental health professionals can benefit greatly from the DSM-5.

It's crucial to remember that the DSM-5 is a live document that is always being updated. Although it is not without criticism or controversies, it reflects the understanding of mental disorders at the time of its release. To improve the classification of mental disorders and to improve the diagnostic criteria, mental health professionals are still having conversations and conducting research.

The World Health Organisation (WHO) has issued the International Classification of Diseases, 10th Revision (ICD-10), a widely used diagnostic guide. It offers a thorough framework for categorising illnesses and disorders, encompassing problems with both physical and mental health.

A list of specific psychological disorders is divided into several classes according to some similar criteria to create a categorization of these disorders. The ability to communicate about the condition with other users, such as psychologists, psychiatrists, and social workers, is one reason why classifications are useful. They also aid in understanding the causes of psychological disorders as well as the factors involved in their growth and maintenance.

Till now we have studied about the classification of psychological disorders. The following sections elaborate in detail about the following types of psychological disorders.

1. Anxiety disorders

2. Mood disorders

3. Schizophrenic disorders

4. Personality disorders

5. Substance related disorders

20.3.1 Anxiety Disorders

It's common to worry and become fearful every now and then. Many worry about things like their health, finances, or family issues. However, anxiety disorders go beyond momentary apprehension or fear. For those suffering from an anxiety disorder, the anxiety persists and may worsen over time. The symptoms might affect daily tasks like work performance, academic progress, and interpersonal connections.

Anxiety is a typical response to stress and in some circumstances, it can be helpful. It can warn us about potential threats and assist with planning and attention. When anxiety

disorders are present, there is excessive dread or worry as opposed to the normal feelings of apprehension or fear. Nearly 30% of adults experience an anxiety disorder at some point in their lives, making it the most prevalent of all mental disorders. However, there are a variety of efficient therapies for anxiety disorders. Most persons who receive treatment can live regular, fulfilling lives. Generalised anxiety disorder, panic disorder, social anxiety disorder, and various phobia-related disorders are some of the several types of anxiety disorders.

Generalised Anxiety Disorder (GAD): GAD is characterised by persistent, excessive concern or anxiety about a variety of life facets, including work, relationships, health, or everyday life issues. GAD sufferers frequently struggle to manage their worry, and physical symptoms like irritation, exhaustion, restlessness, and muscle strain frequently accompany the anxiety.

GAD symptoms include

- Feeling tense, anxious, or restless
- being susceptible to fatiguness and having trouble focusing
- Having a bad mood
- Experiencing headaches, muscular aches, stomachaches, or other ailments without apparent cause
- Controlling worries is difficult.
- experiencing issues with sleep, such as trouble falling or staying asleep

Panic Disorder: An intense bout of great fear or discomfort that reaches its height in a matter of minutes is known as a panic attack. Recurrent and unanticipated panic attacks characterise panic disorder. Physical symptoms such a racing heartbeat, shortness of breath, chest pain, dizziness, and a feeling of impending doom are frequently present during panic attacks. People who suffer from panic disorder frequently worry about upcoming panic episodes and could start becoming avoidant.

When having a panic attack, a person might:

- rapid or pounding heart
- Sweating
- shaken or tingling
- chest discomfort
- a sense of impending disaster
- a sense of being out of control

social anxiety: Intense fear and anxiety in social circumstances, especially while facing potential scrutiny or judgement from others, are characteristics of social anxiety disorder. People who have social anxiety disorder may be overly self-conscious, fearful of being embarrassed, and avoid social situations. It may significantly affect their capacity to partake in social or professional activities.

Indicators of social anxiety disorder include

- Blushing, sweating or trembling
- rapid or pounding heart
- Stomachaches
- Rigid body posture or speaking in a low voice
- having trouble looking someone in the eye or being around strangers
- Feelings of insecurity or worry that others would evaluate them poorly

Phobia: An extreme aversion to or fear of particular things or circumstances is referred to as a phobia. The fear that persons with phobias experience is excessive compared to the actual risk that the situation or object poses, even if it can be reasonable to feel worried in some situations.

Those that have phobias:

- Possibility of having an excessive or illogical anxiety of coming across the feared object or circumstance
- Actively avoid the thing or circumstance you are afraid of
- confront the dreaded thing or circumstance and immediately feel extremely anxious
- endure inescapable things and circumstances with great dread

Common phobias include fear of heights, animals, blood, flying, or enclosed spaces. The fear is often intense and can lead to avoidance of the phobic stimulus, causing interference in daily life.

20.3.2 Mood disorders

A collection of mental health illnesses known as mood disorders, often called affective disorders, are characterised by serious disruptions in a person's mood or emotional state. Extreme or aberrant mood swings, such as persistent feeling of sadness and low mood or spikes in irritability, are hallmarks of these diseases. Here are a few examples of typical mood disorders:

- **severe depression**: Depression may be indicated by decreased interest in routine tasks, sadness or hopelessness, and other symptoms for at least two weeks.
- **Dysthymia:** This type of low-grade, chronic low mood or irritability lasts for at least two years.
- **Bipolar Disorder:** A person with this illness experiences alternating episodes of mania or heightened mood and episodes of depression.
- **mood disorder connected to another medical issue:** Depression symptoms can be brought on by a variety of medical conditions, such as cancer, wounds, infections, and chronic illnesses.

- **Substance-related mood disturbance:** depressive symptoms brought on by medication side effects, substance misuse, alcoholism, toxic exposure, or other treatments.

Mood disorders, especially Depression is one of the most pervasive and well-known mental diseases. A number of negative emotions and behavioural changes are included in depression. Depression can be a disorder or a symptom. Some of the symptoms of depression are:

- Persistent Sadness
- Loss of Interest or Pleasure
- Significant Weight or Appetite Changes
- Sleep Disturbances
- Fatigue and Lack of Energy
- Feelings of Worthlessness or Guilt
- Difficulty Concentrating
- Restlessness or Slowed Movement
- Recurrent Thoughts of Death or Suicide
- Physical Symptoms: Experiencing physical symptoms such as headaches, digestive problems, or persistent aches and pains that do not have a clear medical cause.

20.3.3 Schizophrenia related disorders

Schizophrenia is a severe mental condition that has an impact on a person's thoughts, feelings, and actions. Schizophrenia sufferers may appear to have lost all sense of reality, which can be upsetting to both them and their loved ones. Participating in regular, everyday activities may be challenging for someone with schizophrenia, but there are effective therapies available. Many persons who receive treatment are able to participate in school or the workforce, become independent, and value their connections with others. Although the symptoms of schizophrenia might vary from person to person, they can be broadly divided into three groups: **psychotic, negative, and cognitive.**

Changes in a person's thoughts, behaviours, and worldview are examples of psychotic symptoms. People who are experiencing psychotic symptoms may become estranged from others and have distorted perceptions of reality. These symptoms may come and go for some people. Others get symptoms that gradually stabilise. Psychotic symptoms include:

Hallucinations: hallucinations are when someone perceives sounds, tastes, smells, or sensations that are not actually present. Schizophrenia sufferers frequently hear voices. Before family or friends become aware of a problem, those who hear voices may continue to do so for some time.

Delusions: Delusions are strong convictions that are false and may appear unreasonable to others. Delusional people, for instance, can think that people on the radio and television are communicating important messages that call for a specific action, or they might think they are in danger or that others are attempting to harm them.

Thought disorder: When a person has strange or irrational methods of thinking. Thought disorders can make it difficult for people to organise their words and ideas. Sometimes a speaker would cut off in the middle of a thought, switch topics abruptly, or use meaningless phrases.

Movement disorder: When someone makes strange movements with their body. People with movement disorders may repeatedly perform some movements.

Negative symptoms: lack of motivation, lack of interest in or enjoyment from daily tasks, withdrawal from social life, difficulty expressing feelings, and difficulties functioning regularly are examples of negative symptoms.

Cognitive symptoms: Among the cognitive symptoms are:

● having issues with information processing in order to make decisions

● having problems using information right away after learning it

● unable to concentrate or pay attention

20.3.4 Personality Disorders

Personality disorders represent "an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture" per the Diagnostic and Statistical Manual on Mental Disorders, Fifth Edition (DSM-5). These patterns of behaviour frequently persist and are constant regardless of the circumstance, which causes distress or impairment. When compared to the average individual, a person with a personality disorder thinks, feels, behaves, and interacts with others quite differently.

There are various types of Personality disorders. The DSM-5-TR lists ten distinct categories of personality disorders. The following are the 10 types of personality disorders:

Paranoid personality disorder: People with paranoid personality disorder have a deep mistrust and suspicion of others and believe that they are out to get them.

Schizoid Personality Disorder: Characterised by a pattern of emotional restraint and social detachment.

Schizotypal personality disorder: Characterised by weird behaviour, strange ideas or magical thinking, and problems interacting with others.

Antisocial Personality Disorder: Characterised by a pattern of transgressing social norms, a lack of empathy, and a disrespect for the rights of others.

Borderline personality disorder is characterised by impulsive behaviours, a severe fear of abandonment, and volatility in mood, self-image, and relationships.

Histrionic personality disorder: An excessive urge to be the centre of attention, dramatic and emotional behavior

Narcissistic personality disorder: A grandiose sense of self-importance, a desire for praise, and a lack of empathy for others are characteristics of narcissistic personality disorder.

Avoidant personality disorder: A persistent pattern of social restraint, feelings of inadequacy, and hypersensitivity to criticism or rejection characterise avoidant personality disorder.

Dependent Personality Disorder: This condition involves an overwhelming desire for attention, which manifests as clingy, submissive behaviour, and a dream of being alone.

Obsessive-Compulsive Personality Disorder is characterised by a fixation with control, perfection, and orderliness, which results in rigid and unyielding behavioural patterns.

It's crucial to remember that personality disorders are complicated illnesses, and people might display symptoms from various types of personality disorders. A skilled mental health practitioner who can diagnose and evaluate the patient's symptoms and functioning should do the diagnosis and provide treatment.

20.3.5 Substance Use Disorder (SUD)

Uncontrolled substance usage despite negative effects is a complex condition known as substance use disorder (SUD). People with SUD have an intense focus on using a particular substance or substances, such as alcohol, cigarettes, or illegal narcotics, to the point where it interferes with their capacity to function in daily life. Even when they are aware that the substance is causing or will cause issues, people continue to use it. The most severe SUDs are sometimes called addictions.

Distorted thinking and behaviours are common among people with substance use disorders. Intense cravings, personality changes, strange motions, and other behaviours are all brought on by modifications in the structure and function of the brain. The parts of the brain related to judgement, decision-making, learning, memory, and behavioural control are altered, according to research using brain imaging.

Four categories of substance use disorder symptoms are distinguished:

- **Impaired control:** a strong urge or hunger for the substance; a desire for or attempts to reduce or control substance use that were unsuccessful.

- **Social issues:** drug use results in failure to fulfil important tasks at work, school, or home; social, professional, or leisure activities are abandoned or reduced as a result of drug use.

- **Risky use:** Using the substance in hazardous circumstances and continuing despite known issues.

- The consequences of drugs include tolerance (the requirement for higher doses to have the same effect) and withdrawal symptoms (which vary depending on the drug).

20.4 Management of Psychological Disorders

Psychotherapy, medicine, and lifestyle changes are frequently used in combination to treat psychological disorders. The kind and severity of the condition determine the specific treatment strategy. It's crucial to remember that the material below offers a general overview and could not apply to every person or illness. A mental health expert should be consulted for individualised advice and treatment suggestions. Here are a few typical methods for treating psychological disorders:

i. **Medication:** Medication is sometimes used to assist treat the signs and symptoms of psychological illnesses. Depending on the particular disorder and symptoms, antipsychotics, mood stabilisers, antidepressants, or anti-anxiety drugs may be utilised. Typically, a psychiatrist or another healthcare professional with knowledge of psychopharmacology will prescribe and oversee medication.

ii. **Psychotherapy:** Working with a qualified therapist to examine thoughts, feelings, and behaviours is psychotherapy, commonly referred to as talk therapy. Depending on the individual illness, various methods of therapy may be employed, including cognitive-behavioral therapy (CBT), dialectical behaviour therapy (DBT), psychodynamic therapy, or interpersonal therapy. In addition to identifying and addressing the disorder's underlying causes and triggers, psychotherapy also tries to foster resilience and personal growth by helping patients learn coping mechanisms and problem-solving techniques.

iii. **Changes in Lifestyle**: A healthy lifestyle can have a favourable effect on mental health. This entails obtaining regular exercise, eating a healthy diet, getting enough sleep, and abstaining from things like alcohol and narcotics that might make symptoms worse. Additionally, using stress-reduction strategies like mindfulness meditation, relaxation techniques, or breathing exercises can lessen anxiety and enhance general wellbeing.

iv. **Supportive relationships:** Creating and preserving connections of support with family, friends, or support groups can be helpful in treating psychological problems. In trying circumstances, social support can give a person a sense of community, compassion, and inspiration.

v. **Education and psychoeducation** can enable people to take an active role in their own rehabilitation by providing them with knowledge about the specific disorder, its causes, symptoms, and available treatments. To increase support and understanding, psycho education may also involve teaching family members and close friends about the disease.

It's crucial to keep in mind that each person's experience with a psychological disorder is distinct, and the approach to treatment may change. A thorough evaluation by a licensed mental health expert is necessary to create an individualised treatment plan.

INTEXT QUESTIONS ❓

1.

1. What are the characteristics of abnormality?

2. What are the 2 classification systems of Psychological disorders ?

3. What are the causes of psychological disorders?

2.

1. What are the different types of anxiety disorders ?

2. What are the symptoms of depression?

3. Mention the types of personality disorders?

3.

1. Explain various methods of management of psychological disorders

ACTIVITY

Talk to a psychiatrist or clinical psychologist to understand more about psychological disorders.

WHAT YOU HAVE LEARNT

TERMINAL EXERCISE

ANSWERS TO INTEXT QUESTIONS

GROUP PROCESSES

INTRODUCTION

Consider your daily life and the different social encounters you experience. You communicate with your family members in the morning before going to school; you debate themes and issues with your teachers and classmates; and after school, you call, visit, or play with your friends. In each of these cases, you are a member of a group that not only offers you the necessary support and comfort but also supports your growth and development. Have you ever travelled somewhere without your family, school, or friends? What were your thoughts? Did you ever felt that something was lacking in your life? The nature of our group members has an impact on our life.

As a result, it is critical to be a part of organisations that will positively affect us and assist us in becoming decent citizens. In this chapter, we'll look at what groups are and how they influence our behaviour. At this stage, it is equally crucial to recognise that not only do people impact us, but that we, as individuals, can change others and society. The advantages of cooperation and competition and how they affect our personal and social life will be investigated. We'll also look at how identity evolves or how we come to know ourselves. Similarly, we would endeavour to understand why group disputes occur, investigate the dangers of group conflict, and educate ourselves on various conflict resolution procedures to contribute to creating a harmonious and cohesive community.

OBJECTIVES

After studying this lesson, you will be able to:

- *describe the concept of group,*
- *understand the nature and types of groups and know how they are formed,*
- *understand the functioning of groups,*
- *explain the nature of group processes,*
- *discuss various stages in group formation,*
- *describe types of group,*
- *discuss effect of group on individual's behaviour,*
- *examine the influence of group on individual behaviour,*
- *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 inter group conflict and examine conflict resolution strategies.*
- *understand the Impression formation of the people.*
- *understand the prosocial behaviour and altruistic nature of individuals in society.*

21.1 Nature of Group

20.1.1 What is a Group?

The introduction emphasises the significance of groups in our lives. "How are groups (e.g., your family, class, and the group with which you play) different from other collections of people?" is one question that comes to mind. People gathered to watch a cricket match or a school function, for example, are in the same place but are not depending on one another. They do not have clear duties, statuses, or expectations of one another. You will notice that there is mutual interdependence in your family, class, and the group with which you play, that each member has roles, that there are status differentials, and that there are expectations from each other.

Thus, your family, class, and playgroup are all instances of groupings that are distinct from other groups of individuals. A group is an organised system of two or more individuals that interact and are interdependent, who share shared goals, have a set of role connections among its members, and have rules that govern their behaviour.

21.1.2 The salient characteristics of groups

- A social unit comprises two or more people who are group members. This group trait distinguishes one group from another and provides the group its own identity.

- A group of people who have common motivations and aims. Groups function by working towards a specific purpose or avoiding certain hazards.

- A group of interconnected people means that what one person does may have consequences for others. Assume one of a cricket team's fielders drops an important catch during a match; this will impact the entire team. Individuals who are trying to satisfy a need through their joint association also influence each other.

- A group of people who interact with one another, either directly or indirectly.

A group of people whose interactions are governed by a set of roles and conventions. This means that group members execute the same functions every time the group meets, and they follow group norms. Norms outline the behaviour required of group members and teach us how to behave in the group. Groups can be distinguished from other groups of individuals.

A **crowd**, for example, is a group of people who happen to be in the same place/situation. Assume you're driving down the road when an accident occurs. Eventually, a considerable number of people tend to congregate. This is an illustration of a crowd. In a

crowd, there is no organisation and no sense of belonging. Crowd behaviour is illogical, and there is no interdependence among members.

Teams are distinct types of groups. Team members frequently have complementary abilities and are dedicated to the same goal or purpose. Members are held accountable for their actions. Positive synergy is achieved in teams through the coordinated activities of the members.

21.1.3 The main differences between groups and teams are:

● In groups, individual members' contributions determine performance. Individual contributions and teamwork are important in teams.

● In groups, the leader or whoever is in charge of the group is responsible for the task. In teams, however, even when there is a leader, members hold themselves accountable.

An audience is also a group of individuals gathered for a specific reason, such as to watch a cricket match or a movie. Audiences are usually passive, although they can become enraged and form mobs. There is a distinct sense of purpose with mobs. Attention is polarised, and people's behaviours point in the same direction. Mob behaviour is distinguished by cognitive and behaviour homogeneity and impulsivity.
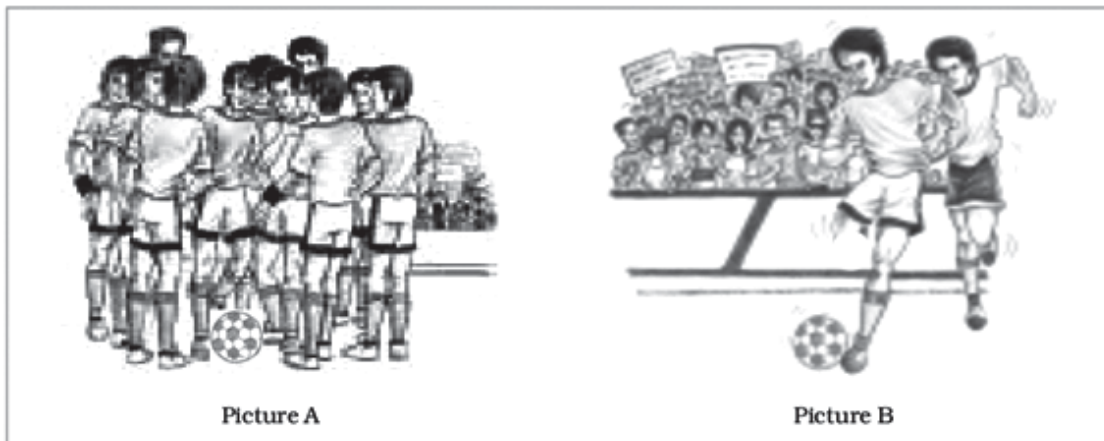
Fig. 21.1 : *Look at these two pictures*

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

21.1.4 Why Do People Join Groups?

You are all members of your family, class, and other groups with whom you engage or play. Likewise, other people are members of various groups at any given time. Because different groups meet different requirements, we are members of multiple groups simultaneously. This can put us under pressure because competing needs and expectations may exist. Most of the time, we can manage these opposing demands and expectations. People join clubs because they meet a variety of requirements.

In general, people join groups for the following reasons:

i. **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.

ii. **Status:** When we are members of a group that others believe to be important, we feel noticed and have a sense of authority. If your school triumphs in a dispute between academic institutions, you might feel proud of yourself and believe you are superior to other schools.

iii. **Self-esteem:** Groups give people a sense of self-worth and help them form a healthy social identity. Being a member of prominent organisations improves one's self-esteem.

iv. **Satisfaction of one's psychological and social needs:** Groups serve one's social and psychological requirements, such as a sense of belonging, giving and receiving attention, love, and power.

v. **Goal achievement:** Groups assist in reaching goals that would be impossible to achieve individually. The majority wields authority.

vi. **Provide knowledge and information:** Group membership brings knowledge and information, broadening our perspective. We may not have all of the necessary information as individuals. This information and wisdom is supplemented by groups.

21.1.5 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:

i. **Proximity:** Consider your circle of friends. Would you have been friends if you hadn't shared a colony, gone to the same school, or played on the same playground? 'No,' you would most likely say. Interactions with the same group of people allow us to get to know them and their interests and views. Common interests, attitudes, and backgrounds influence your liking for your group members.

ii. **Similarity:** Being exposed to someone over time allows us to assess our similarities and set the ground for group development. Why do we like people that are similar to us? Several psychological explanations have been proposed. One explanation is that people want constancy and prefer consistent connections. There is consistency when two persons are similar and begin to like each other. For example, your interests are compatible if you enjoy playing football and another student in your class also enjoys playing football.

iii. You have a better possibility of becoming buddies. Another argument psychologists offer is that when we encounter others who share our beliefs and values, we feel validated and begin to like them. Assume you believe that excessive television viewing is harmful because it depicts excessive violence. You meet someone who shares your beliefs. This supports your viewpoint, and you begin to like the individual who was crucial in validating your perspective.

Common motives and goals: People who share common motives or goals establish a group that may help them achieve their goals. Assume you wish to teach youngsters who cannot attend school in a slum. You can only do this with academics and assignments. As a result, you join a group of like-minded friends and begin teaching these children. So, you've accomplished something you couldn't have done on your own.

21.2 Stages of Group Formation

The formation of group follows four stages. These are: (a) orientation (b) focus (c) regulation and (d) formalization. Let us learn more about the important features of these stages:

Stage 1 – Orientation

During the early stages of group formation, potential or would-be members strive to analyse their gains and losses from working together and interacting over time. At this point, people assess their potential and the group's aims. They become more anxious about their gains or losses when they join a specific group. People spend a lot of time asking and answering questions about one another's interests, abilities, and knowledge, among other things.

Stage 2 – Focus

When individuals determine that it is in their best interests to establish a group to accomplish a specific goal, they are drawn to the means (or method) to achieve it. At this point, the members are clear about their contribution to achieving the group goal, the other available resources, and the expected rewards that the group members will enjoy.

Stage 3 – Regulation

A pattern in the social exchange of group members evolves due to interaction over a longer time. Each member's tasks and functions are well-defined. At this point, one member becomes the group's leader and plays a significant influence in determining the group's activities. Other members look to the leader for direction.

Stage 4 – Formalization

The norms and duties that arise during the third stage are formalised at this level. Members of the group acknowledge the existence of these rules and express their desire to follow them, either in writing or verbally.

INTEXT QUESTIONS ?

1. Why do people join groups?

_____

2. Name the four stages in formation of a group

_____

Groups differ in many ways; some are large (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 at a sporting event). People can be classified into various groups.

The major types of groups are enumerated below:

1.   Primary and secondary groups.
2.   Formal and informal groups.
3.   In group and out group.

21.3.1   Primary and Secondary Groups

Existing formations are those that are normally assigned to the individual, whereas secondary groupings are those that the individual chooses to join. Thus, family, caste, and religion are primary groups, whereas political party membership is an example of a secondary group. A main group has face-to-face interaction, members are physically near, and they share warm emotional relationships. Primary groups are crucial to an individual's functioning and play a significant part in the development of the individual's values and ideals during the early stages of development. Secondary groups, on the other hand, have more impersonal, indirect, and infrequent contact among members. The limits of the primary group are less permeable, i.e. members do not have the choice to choose its membership, as opposed to secondary groups where members can easily quit and join another group.

21.3.2   Formal and Informal Groups

The degree to which these subgroups' functions are expressed publicly and formally varies. As in the case of an official organisation, the functions of a formal group are openly outlined. The roles that group members must play are defined explicitly. The organisation of official and informal groupings differs. Formal groups are formed according to specific rules or laws, and members have defined roles. There are a set of rules that aid in the establishment of order. A formal group would be a university. Informal groups, on the other hand, are formed without regard for norms or laws, and members have intimate relationships.

21.3.3   Ingroup and Outgroup

Individuals compare themselves to others in terms of similarities and differences in what they have and what others have, and they also compare the group to which they belong to groups to which they do not belong. The terms 'ingroup' and 'outgroup' relate to one's own group and another group, respectively. We employ the word 'we' for ingroup members and the word 'they' for outgroup members. By employing the phrases they and we, one can classify persons as similar or dissimilar. It has been discovered that people in the ingroup are often thought to be similar, to be liked, and to possess desirable characteristics. 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 the below Box

Ingroup and Outgroup Distinctions Think of any inter institutional 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

Although these classifications are prevalent, it is important to remember that they are not genuine and are made up by us. Pluralism is embraced in various cultures, such as in India. We have a distinct composite culture that is represented not only in our daily lives but also in our art, architecture, and music.

INTEXT QUESTIONS ❓

1. What are the two types of groups?

   _____

   _____

2. Give an example of a secondary group

   _____

   _____

21.4 Influence of Group on Individual Behaviour

We have shown that groups are powerful because they can influence individual behaviour. What is the nature of this sway? How does the presence of others affect our performance? We will look at two scenarios: (i) an individual doing an activity alone in the company of others (social facilitation), and (ii) an individual doing an activity with others as part of a bigger group (social loafing).

21.4.1 Social Facilitation

The success or failure of an individual's task completion within a group can be influenced by social influence. The perceived difficulty of the work influences the specific effect of the presence of others: When work is simple, the presence of other individuals increases performance. When a task is thought to be complex, the presence of others degrades performance. Social facilitation refers to the beneficial influence of others on performance, while social impairment refers to the negative impact. The presence of other people increases arousal in both social facilitation and social impairment. Social facilitation happens when the presence of others increases arousal just enough to boost performance. However, the presence of others when performing a challenging activity causes excessive excitement, resulting in poor performance.

21.4.2 Social Loafing

According to social facilitation studies, the presence of others causes arousal and can push people to improve their performance if they are already adept at solving problems. This improvement occurs when a person's efforts are evaluated individually. What happens if the efforts of an individual in a group are combined such that the performance of the group as a whole is evaluated? Do you know what frequently occurs? Individuals work less hard in groups than they do alone, according to research. This alludes to a tendency known as "social loafing." Individual effort is reduced when working on a collective task, i.e. when outputs are pooled with those of other group members.

The game of tug-of-war is an example of such a task. You are unable to determine how much force each member of the team has applied. Such circumstances allow group members to unwind and become free riders. This tendency has been proved in numerous tests by Latane and his colleagues, who invited a group of male students to clap or cheer as loudly as they could because the experimenters were curious about how much noise people produce in social circumstances. The group size was varied; people were either alone or in groups of two, four, or six. The study's findings revealed that, while the total amount of noise increased, the amount of noise created by each participant decreased as size increased. In other words, as the group size increased, each individual exerted less effort.

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.

21.4.3 Group Polarisation

Group polarisation, also known as the "risky shift" phenomenon, is the tendency for members of a group debate to hold slightly more extreme opinions and recommend riskier

activities compared to persons who have not participated in a group discussion. When a jury tries to decide on punitive damages during a civil trial, a good example of group polarisation can occur: studies have found that if jury members individually favoured a relatively low amount of punitive damages before deliberation, the amount usually lessened further after consideration.

The discussion process resulted in higher fines if individual jurors favoured more severe punishments. Group polarisation can become even more prominent when information is supplied in an online forum, such as a social networking group because group members are only exposed to information that supports their perspective. Group polarisation is assumed to be caused by normative and informational social impact.

What causes group polarisation? Consider whether or not the death penalty should be used. Assume you support the death penalty for severe crimes; what would happen if you interacted with and discussed this matter with others who share your views? Your opinions may change as a result of this conversation. This firm conviction is because of the following three reasons:

- In the company of like-minded people, you are more likely to hear newer arguments in your favour. This will make you more sympathetic to the death penalty.

- When you find people who support the death penalty, you have the impression that your point of view has been supported by the public. This is an example of the bandwagon effect.

- When you come across others who hold similar beliefs, you are more likely to label them as ingroup. You begin to identify with the group, begin to conform, and as a result, your beliefs become stronger.

INTEXT QUESTIONS ❓

1. Why does a group take greater risk than an individual?
2. What is social facilitation effect?

21.4.3 Impression Formation

We must be able to perceive other individuals in our daily lives. When you first meet someone, you frequently create an opinion. A glance and a few spoken words are sufficient for this. When we view someone else, we don't just add new details. Instead, we judge different characteristics in light of others. As a unit, we move and change. We have a general impression of a person. The characteristics don't stand alone. They work together to create a new whole through interaction. When formulating opinions, we rely on and give more weight to the sources we respect or trust. In a similar vein, we frequently emphasize negative information more. Additionally, we value unexpected information more. Finally, initial perceptions are taken into consideration more so than later facts. It has been discovered that when we judge someone else, we recall instances of that person's actions and base our decision on them. We also make decisions and form perceptions based on previously developed abstractions or representations.

21.4.4 Helping Others

i.   **Pro-social behaviour** is defined as behaviour that benefits another person or has an excellent social impact. This definition is frequently regarded as excessively broad since, while it examines the consequence of the behaviour, it needs to address the motivation of the behaviour.

ii. **Helping behaviour:** Behaviour that intentionally benefits or enables another person is called helping behaviour. It is therefore planned to make a difference. Assisting in a children's clinic or hospital is an example of helping behaviour. Helping another person without expecting anything in return or at a great personal expense is ***altruism.***

INTEXT QUESTIONS ❓

State whether True or False.

1.   In the beginning, the child cannot differentiate between themself and others.

    (True/False)

2.   As the child grows older, his self-concept becomes fixed.   (True/False)

3.   People in the environment provide the necessary context and
     guidance to the developing person.   (True/False)

4.   While forming impressions, we rely on sources we trust.   (True/False)

5.   Children are sensitive to other people's feelings from an early age. (True/False)

6.   Humans generally help others.   (True/False)

WHAT YOU HAVE LEARNT 👉

❑   Groups are distinct from other types of people gatherings. The basic characteristics of groups include mutual dependency, roles, status, and expectations. Groups are structured systems of two or more people.

❑   People join groups because they provide security, status, self-esteem, psychological and social needs satisfaction, goal achievement, and knowledge and information.

❑   Proximity, similarity, and common motives and goals facilitate group formation.

❑   In general, group effort yields positive results. However, groupthink can emerge in cohesive and homogeneous groups on occasion.

❑   There are numerous types of groups, such as primary and secondary, formal and informal, and ingroup and outgroup.

❑   Individual behaviour is influenced by groups. Groups have two major influences: social facilitation and social loafing.

❑   Impression formation helps in influencing behaviour of the people.

❑   Prosocial behaviour and altruism influence social behaviour.

◆⟐ TERMINAL EXERCISE ⟐◆

1. Define a group.

2. List down the characteristics of a group.

3. Describe briefly the four stages in the evolution of groups?

4. Compare and contrast formal and informal groups, and ingroups and outgroups.

5. Are you a member of a certain group?

6. Discuss what motivated you to join that group.

7. How does Tuckman's stage model help you to understand the formation of groups?

8. How do groups influence our behaviour?

9. How can you reduce social loafing in groups? Think of any two incidents of social

10. Loafing in school. How did you overcome it?

ANSWERS TO INTEXT QUESTIONS

REFERENCES:

- Ciccarelli, S. K., Misra, G., & White, J. N. (2009). *Psychology*. Pearson Education India.

- Hilgard, E. R., & Atkinson, R. L. (2009). *Atkinson and Hilgard's Introduction to Psychology*. Harcourt Brace College Publ.

- Kalat, J. W. (2016). *Introduction to psychology*. Cengage Learning.

- Morgan, C. T., King, R. A., & Robinson, N. M. (1956). Introduction to psychology. New York.

- http://www.mapnp.org/library/grp_skill/theory/theory.htm

- http://www.socialpsychology.org/social.htm

PERSON PERCEPTION AND INTERPERSONAL ATTRACTION

22

INTRODUCTION

As mentioned, developing a sense of oneself is a significant accomplishment. Neonates could not be able to tell themselves from other people. Our understanding of ourselves is unusual because we are conscious of our existence. This level of self-awareness is a significant accomplishment. Social knowledge is necessary for the development of self-knowledge. The child cannot first distinguish between his world and her universe, which includes other people. The social setting surrounds the child. The infant gradually develops a sense of self from there. The humanistic psychologist Abraham Maslow claims that there is a basic human need to belong and be accepted by others. People live in groups and families, defining themselves in terms or important to others. Relationships are one of the significant sources of happiness and unhappiness in people's lives. Close relationships- with a family member, partner, or friend- influence our emotional state and our health.

OBJECTIVES

After studying this lesson, you will be able to:

- *Understand the salience of the social environment for self-growth and development;*

- *Identify the factors that determine interpersonal attraction; and*

- *Understand the role of interaction with significant others in self-perception.*

- *Understand the role of helping behaviours.*

- *Understand **why relationships change or end.***

- *Understand the **Gottman's four characteristics of relationships.***

22.1 Perceptions of Others

Children begin to create a representation of the self as an objective entity around the end of infancy. Interaction with others is made more accessible by the development of language and cognition. Others contribute to the definition of our traits. According to their expectations, we modify our behaviours. Children that have some linguistic proficiency organise their knowledge about themselves.

It should be noted that declaring something "mine" assumes some separation of "me" from everything else. By their third year, kids usually start to exhibit various traits. They suggest the presence of internal mechanisms, outward manifestations, opinions, and free will. Children's self-ideas diversify more and more as they get older.

Forming one's sense of self is essentially a social process. They receive context and direction from the other people in the environment. For instance, it is typical to see parents endorsing or criticising their children's behaviour. They offer objectives and promote aspirations. They discuss a variety of things that happen in the child's environment. All of these circumstances aid in teaching the youngster about the "self." Children, in particular, learn how to control their emotions. It would be incorrect to think of oneself as solely something that others may mould, though. It is sophisticated social product where the child's life experiences are also significant.

Children learn how persons vary from other things, have certain traits, and have autonomous psychological existence as they learn about themselves. Infants show a great deal of interest in other people. They are conscious of the variations in individuals and other things. It has been discovered that self-awareness and understanding others go hand in hand. Children are aware of other people's internal workings early on, including feelings, ideas, and intentions. With age, consciousness develops and becomes more nuanced. The school-aged kids give detailed and intricate descriptions of other people. The kids actively work on developing their social awareness. This entails identifying patterns between a child's psychological processes and those of others.

22.2 Dealing with the Social World

22.2.1 How Do Others Influence Us?

People generally follow group standards, are affected by other people's beliefs, and obey authority. Most people underestimate the strength of these effects or do not believe they are influenced by social factors. Nonetheless, the evidence is strong that in many cases, people will engage in behaviour that are completely contradictory with their own values. People in a deindividuation state, for example, may lose knowledge of their values and beliefs. Those who understand the power of social influence frequently employ specific strategies to affect the conduct of others, such as foot-in-the-door, door-in-the-face, and low-balling approaches. The more aware each of us is of our own values and ideas, the better equipped we are to uphold our own standards.

22.2.2 When Do We Harm or Help Others?

Humans across all cultures indulge in aggressive behaviour. Frustration, as well as different situations that create destructive emotions, can contribute to aggressiveness. This effect could develop as a result of unpleasant feelings priming aggressive ideas. Beliefs and cultural standards can influence how aggressive behaviour is expressed. People are often inclined to assist others, especially if the person in need is a relative. However, people are less likely to offer assistance when personal dangers are involved, or responsibility is spread.

22.3 Interpersonal Attraction

22.3.1 Close Friendship

A close connection involves significant and regular *interdependence* in many areas of life. Interdependence implies that each partner's thoughts, emotions, and conduct impact the other's.

Friendships develop into close relationships when they communicate frequently, spend a lot of time together, and support one another emotionally. During childhood, kids want to engage in enjoyable activities with friends. As mentioned above, attachment affects how kids connect, changing the nature of relationships. The intimacy of friendship tends to increase between adolescence and the early years of adulthood. According to studies, women report having more close friends than males. Self-disclosing behaviour, emotional expression, offering and receiving assistance, developing trust, and feeling at ease in each other's company are just a few of the behaviours characterising intimate partnerships. Some people struggle to make lasting friendships and end up feeling lonely.

INTEXT QUESTIONS ?

Choose the correct alternative:

1. When we consider similarity and interpersonal attraction:

   (a) We like people who are different from us in attitudes and ideas.

   (b) We like people similar to us in attitudes and ideas.

   (c) We like attractive people.

2. We like long-term relationships:

   (a) Because we value relationships

   (b) Because interdependence is a common element in relationships.

   (c) Because we are attached to our loved ones.

   (d) All of the above

22.3.2 Interpersonal Attraction

Relationships with the individuals around us are essential to one's social existence. Any given interaction is characterised by a certain level of intensity conveyed by individual and interpersonal behaviour, including the more subtle nonverbal behavioural information of interpersonal attraction. The words "like", "love," "dislike", and "hate" are among the most frequently used in the English language. Everyone knows what is meant by these terms. Therefore, when we state that we feel "attracted" to a particular person, it is unlikely that we will be asked to define our use of the verb "attracted." Interpersonal attraction is the attraction between people, which leads to friendships and romantic relationships.

We live in a social world where other people are present. We frequently engage with them in our homes, schools, markets, and virtually everywhere else. While interacting with other people, the self comes to a realisation. In this way, interpersonal processes, as they are officially referred to, take on a prominent role in our daily lives. Social psychologists have thoroughly studied these distinct processes. Here, we will explore two processes: long-term relationships and attraction.

People frequently experience attraction toward one another. It exists not only between intimate partners like a wife and husband but also between friends and coworkers. One of

the most significant things we observe is that we try to spend time with those we like while avoiding those we don't. You might be curious to know how attraction works and what affects it. Let's attempt to comprehend these factors.

Physical Attractiveness: It's generally been observed that our reactions are more favourable when we encounter someone who is considered physically appealing. When someone is appealing, we frequently behave more favourably.

Similarity and Complementarity: We like people who are similar to ourselves. It is said that birds of a feather flock together. In other words, we favour and enjoy the company of those who have similar attitudes and beliefs. The concept of complementarity describes the tendency of persons who are different from one another but complement one another to interact more. This could be why wealthy and impoverished people are attracted to one another.

Familiarity and Propinquity: Propinquity, the opposite of familiarity, refers to proximity or closeness. Friendships have been proven to grow with those we see more regularly frequently. Therefore, proximity and familiarity influence our attraction to others. Interpersonal attraction is often the result of frequent interactions.

Reciprocal Liking: It depends on the other person whether or not they like you to determine whether or not we like them. We frequently avoid people with unfavourable opinions of us and seek out people who share our preferences.

Affect: Affect refers to feelings and emotions which vary in intensity and direction. Thus our feelings can be very intense or less intense and positive or negative. Studies indicate that a person who does something which triggers or arouses positive or negative affect is liked or disliked by us. Also, if someone is merely linked with positive or negative affect, is liked or disliked by us.

Need for Affiliation: We spend a lot of our free time interacting with other people because affiliation improves our chances of survival. This has led to the idea of stable affiliative traits or needs. Also, situational characteristics may arouse this need.

Enduring Relationships: Many of our relationships continue for long periods oftime. They may be lifelong, like friendship, marriage etc. The relationships vary in many ways. For example, they may vary in intimacy, commitment, and quality. It's common to see relationships as a type of social contract. Based on the advantages we experience from connections, we place a high value on them. In the areas where we fall short, the rewards are more significant. Interdependence, however, is the most common element in practically all close partnerships. Mothers use a specific type of connection to treat their kids like individuals. It could be secure, avoidant, or ambivalent. According to psychologists, children either learn to love and trust, fear and avoid, or a combination of the two depending on the type of connection they are exposed to. It has been found that the mother's contact with the infant (tactile, visual and verbal) and her awareness of and responsivity to the infant's needs leads to secure attachment.

The interaction pattern of children with parents and siblings plays an important role in shaping the quality of love and affection in children. Their parental love is determined by attraction towards parents and personal virtues. Some of the virtues which are emphasized in Indian society are given below.

Charity: Helping, forgiving and tolerating parents.

Justice: Fulfilling obligations to parents and respecting their rights.

Prudence: Using reason for their benefit.

Fortitude: undergoing hardships for their benefit.

Temperance: Controlling disruptive emotions and practising self-discipline.

22.3.3 Explanation of why relationships change or end

Communication is critical for a strong and healthy relationship and should always be addressed. As a result, there is a significant conceptual overlap between the communication section above and this one. Numerous communication styles and relationship frameworks are specifically designed to deal with transition and ending.

Gottman's four characteristics of relationship

The Gottman Institute is led by a husband-and-wife pair that provide relationship guidance based on research. In their Love Lab, John Gottman and Julie Schwartz Gottman have studied thousands of relationships. The Gottman's claim to be able to predict relationship outcomes after observation, surveys, and scientific analysis of interviews over decades and through longitudinal examination of thousands of couples.

According to Gottman, these negative characteristics help predict divorce and often enter marriage in the following order.

1. **Criticism:** A comment that harms a person's character—is more than a simple complaint about a specific topic. For example, it could attribute undesirable behaviour to the character rather than the situation, resulting in a negative attributional bias.

2. **Contempt:** It is defined as treating someone with disapproval or mocking sarcasm. According to Gottman, this is the worst of the Four Horsemen and the greatest predictor of divorce. This especially horrible practice usually stems from long-term negative emotions about a partner. It could include, for example, belittling the spouse, eye-rolling, or criticising behaviours.

3. **Defensiveness:** A self-defence technique expressed as claimed innocent assault, in which the subject of criticism claims to be being attacked for no cause. This could include transferring blame to others to conceal guilt or complicity.

4. **Stonewalling:** occurs when a listener withdraws from a conversation by refusing to acknowledge the other person; the listener goes silent and refuses to engage with the partner.

For example, one person may be tuning out, looking away, or engaging in compulsive activities during a one-sided conversation.

22.3.4 What Determines the Quality of Relationships?

Friendships are formed based on proximity, familiarity, similarity, and unique features such as personality traits and attractiveness. Love is an essential component of all romantic partnerships. Relationships founded purely on sexual desire may collapse when that desire

fades, as it frequently does. How a couple handles conflict is significant in determining whether the relationship will last. Happy couples prefer to attribute positive behaviours to their partners, whilst unhappy couples tend to attribute bad behaviours to their relationships.

INTEXT QUESTIONS ?

1. A divorce prediction rate of 90% is a surprising claim. Do you believe it is possible to forecast human behaviour?

2. Do you see any ethical issues with Gottman's work?

3. Explain **four skills of Gottman's relationship?**

4. What are your objections to his methods?

5. Explain Quality of Relationships?

WHAT YOU HAVE LEARNT

❐ Self-perception is a complex social process where both the child's own

❐ Experience and society play an important role.

❐ Child learns to differentiate from others and has an independent psychological existence.

❐ We form impressions about others by considering all the information.

❐ Interpersonal attraction is determined by several factors - physical attraction, familiarity, similarity etc.

❐ Significant others - parents, siblings, friends etc. play a role in self-perception.

❐ Long-term relationships provide psychological and emotional support to the couple

TERMINAL EXERCISE

1. Discuss the role of the perception of others in self-development.

2. Explain the role of different factors in interpersonal attraction.

3. Identify the factors you think are essential for long-term relationships.

4. Discuss the four skills of Gottman's relationship.

ANSWERS TO INTEXT QUESTIONS

REFERENCES

- Gazzaniga, M. S., Heatherton, T. F., Halpern, D. F., & Heine, S. J. (2012). Psychological Science, 3rd Canadian Edn.

- Gottman, J. M., & Gottman, J. S. (2015). Gottman couple therapy.

- Kalat, J. W. (2016). *Introduction to psychology*. Cengage Learning.

- Popov, A., Parker, L., & Seath, D. (2018). *Oxford IB Diploma Programme: Psychology Course Companion*. Oxford University Press-Children.

- Uleman, J. S., & Kressel, L. M. (2013). A brief history of theory and research on impression formation.

MAN - ENVIRONMENT INTERACTION

23

INTRODUCTION

The environment is a broad concept. Everything that impacts us during our lifetime is referred to as the environment. Social interactions are influenced not just by the persons involved but also by the locations in which they take place. Humans are frequently concerned about environmental circumstances that influence people and other organisms. Our thoughts, feelings, and behaviours are influenced by the environment in which we live and work. The link between man and the environment, on the other hand, is bidirectional. The environment influences humans, and humans influence the environment. Many things are happening in today's environment that are causing problems for today and the future. There is growing concern about the deteriorating state of the environment worldwide, and attempts are being made to stop widespread environmental abuse and improve its quality.

Environmental pollution (air, water, noise, crowding, etc.), partly caused by human action, harms our performance. We feel agitated and exhausted in such situations, and our reactions become abnormal. Similarly, connecting with others and working in congested environments harm our performance. All of this suggests that some surroundings are more nourishing than others. As a result, we must make every effort to preserve a helpful and constructive environment. In 1992, Rio de Janeiro hosted the first global Earth Summit, formally known as the United Nations Conference on Environment and Development (UNCED). This meeting highlights global concern about environmental quality. The 1992 conference resulted in the International Environment Education Programme, and efforts are being undertaken globally to educate people at all levels of society about environmental concerns. Environmental psychology promotes this relationship. We will study several facets of the man-environment connection in this class.

OBJECTIVES

After studying this lesson, you will be able to:

- *Explain the concept of environment;*
- *Describe the various facets of human- environment interaction;*
- *Explain the environmental effects of human behaviours;*
- *Indicate the effects of human behavior on environment; and*
- *Describe the future threats to environment.*

We all know that our physical environment impacts our behaviour directly or indirectly. People, for example, become more angry and hostile when the temperature is hot and humid, as opposed to cold weather. You've probably read in the daily papers about an uptick in "road rage" incidents over the summer months. Our curiosity about such environmental variables has led us to study *Environmental Psychology.*

This branch of psychology is concerned with investigating the reciprocal links between psychological processes and physical surroundings, both natural and artificial. The reciprocal relationship is a two-way process in which the environment influences human behaviour, and humans influence the environment. Understanding the many types of domains we face will help us comprehend various parts of this interaction. A summary of the major sorts of environments is provided below.

Physical Environment: The physical environment encompasses both physical reality and social-cultural phenomena that surround us. The physical world around us is made up of noise, temperature, air and water quality, and various objects and things.

The social and cultural environment: It encompasses all aspects of social interaction, including its outcomes, beliefs, attitudes, stereotypes, etc. It includes both the material and non-material elements of the environment.

Environmental Orientations: It relates to people's beliefs about their surroundings. For example, some people regard the environment as being similar to God. Thus they regard all elements of it with respect and reverence, and they strive to keep it in pristine condition by not degrading it.

Environmental Behaviour: It relates to how people engage with their surroundings during social encounters. Consider the environment as a personal space in which the individual identifies himself.

Products of Behaviour: These include the results of people's deeds, such as houses, cities, dams, and schools. In other words, these are environmental products or outcomes.

The above five environmental factors interact and influence the following critical psychosocial and environmental effects, which comprise the science of environmental psychology.

1. Perspectives on the human-environment interaction.

2. Environmental cognitions and perceptions.

3. Personal experiences with **privacy, personal space, territory, traffic jams, and environmental pressures.**

INTEXT QUESTIONS ?

Give one term for the following

1. Use of environment by people in the course of social interaction   .

2. Outcomes of people's actions like dams, schools, houses   .

3. Beliefs that people hold about the environment .

4. All aspects of culture .

5. Aspects of natural environment .

23.2 Physical Spsy Vs Psychological Environment

It is critical to comprehend the distinction between the physical and psychological environments. Physical environment refers to things like a house, a tree, a mountain, and so on. On the other hand, the psychological environment comprises everything that exists in one's head. It may or may not be related to or coincide with the physical environment. For example, you could be sitting on the beach, where ships, boats, seagulls, and ripples are in the water (all of which compose the physical environment). However, you may be sitting there with everything in front of you but be unaware of it because you are thinking about something else. The current physical environment does not affect the individual. It is what makes up one's psychological environment.

In Indian culture, the human-environment interaction is symbiotic, with humans being a part of the overall existence. Its primary characteristics are as follows:

● Humans are not considered superior to nature and have no right to exploit it.

● The emphasis is on relationships and the entirety of existence.

● Concern for everything in the universe can be seen in Indian thinking.

● There is a lot of emphasis on the correlation between macrocosm and microcosm.

● The basic sharing of all life forms and their connectivity is acknowledged.

● A dynamic cosmic order surrounds human life.

● It provides a holistic vision of man, nature, and the universe.

● Humans and the rest of creation are co-creators.

23.3 Effects of Environment on Human Behaviour

We have already covered how the environment influences human behaviour and how human behaviour impacts the environment; the two interact. The environment has both nourishing and harmful effects on humans. Floods, earthquakes, and other natural disasters have threatened humanity throughout history. Despite tremendous scientific progress, we have not been able to regulate the effects of natural calamities, nor have we been able to control natural disasters.

The environment has both nourishing and depleting effects on human life. Floods, earthquakes, and other natural disasters have threatened humanity throughout history. Technological advancements have recently brought us new possible environmental concerns that are man-made. People must discover ways to cope with environmental stresses because they are physically destructive and distressing. There are numerous environmental stresses. We will concentrate on four here: Air pollution, noise pollution, overcrowding, and natural and man-made disaster are all examples of pollution.

In India, there are numerous environmental challenges. Global warming, toxic waste, water and air pollution, acid rain, diminishing energy supply, garbage, domestically restricted commodities, and pollution are all alarming challenges that could threaten our future if we do not confront them. Nature is also having a significant impact on India. Between 1947 and 1995, the situation was far worse. According to data collected and environmental evaluations analysed by World Bank experts, India made some of the world's quickest progress in resolving ecological concerns and increasing environmental quality between 1995 and 2010.

In recent years, technological developments and advances have brought us new potential environmental concerns that are man-made. These threats are both physically and psychologically destructive. People must deal with these stressors. There are numerous man-made environmental stresses. These stressors are called pollutants, and there are four: air pollution, water pollution, noise pollution and Crowding.

23.4 Effects of Human Behaviour on Environment

The environment influences human conduct, and activities impact the environment; the two are inextricably linked. Floods, earthquakes, and other natural disasters have threatened human existence. Technological advancements have brought us new man-made potential risks.

Rapid modernisation and industrialisation have resulted in a deterioration of air quality, which is critical for human, animal, and plant life. Harmful and toxic gases created by vehicular and industrial emissions, such as carbon monoxide, nitrogen dioxide, sulphur dioxide, and others, have resulted in major physical and mental health concerns.

Noise levels have risen dramatically as a result of industrial and technological progress. Noise is any unwanted sound or sounds that a person finds unpleasant. Noise's evasiveness is mainly determined by its intensity, regularity, and perceived control. Adults exposed to high-intensity sounds daily suffer from memory loss, hearing loss, hypertension, and an increased risk of deadly strokes.

Another area for improvement in the quality of life is overcrowding. It is a subjective impression of crampedness caused by the presence of a high number of individuals. Crowding harms task performance, personality, interpersonal connections, and overall mental and physical health.

23.5 Promoting Pro-Environmental Behaviours

It is critical to recognise that environmental issues are highly complex. Because the problem is not primarily technical, more assistance from fields such as engineering, physics, and chemistry will be required. Because the problem is man-made, social scientists must play a critical role in changing human conduct.

Since the 1970s, social psychologists, environmental psychologists, and sociologists have attempted to identify strategies to encourage pro-environmental conduct to prevent further environmental degradation. Massive adjustments in lifestyle and cultural practices are required to reach this goal. Attempts are being made in this direction. Efforts to conserve energy, recycle garbage (e.g., paper, plastic, food, etc.), reduce detergent usage, and avoid

littering are insufficient to impact the environment substantially. To attain the goal, residents must recognise the nature and scope of the current crisis and modify their attitudes and behaviours to be more environmentally friendly.

The most important priority for environmentalists is to stop environmental abuse and reverse the process. The indiscriminate use of CFC (chlorofluorocarbons) for refrigeration has gradually reduced the ozone layer in the atmosphere, which protects humanity from the sun's harmful UV radiation. Humans are increasingly at risk of skin cancer due to losing much of the earth's protective ozone layer. Fifty countries have stopped using CFCs owing to international collaboration. However, the situation is so severe that it is projected that the ozone layer will take fifty to hundred years to restore to its usual thickness. We must use dependent measurements such as CO_2 emissions for CO_2 management; the impact-oriented approach typically generates more meaningful and, consequently, more practically relevant information for citizens and policymakers.

23.6 Planning for the Future

As previously said, the United Nations is working hard to limit the negative behaviours of individuals impacting our environment worldwide. The environment is a naturally provided capital with specific boundaries, and we must learn to use the resources wisely. Air, water, food, fuel, and so on are all gifts from the environment to humanity, and we must learn to use and conserve them wisely. We must pay more attention to water and air conservation. Disposing of the material we generate, ranging from sewage to rubbish, requires specific consideration.

Water: We use natural resources that are not replenished, and one such resource is water. At least 80 countries are currently experiencing severe water scarcity, posing a huge threat to agriculture. India is one of these countries where water scarcity is wreaking havoc on agriculture. Water scarcity is an example in Karnataka and Tamil Nadu. Water scarcity is posing a serious threat to major cities as well. For example, during the summer, the Delhi region suffers from a severe water deficit exacerbated by a population influx from adjacent towns. Rainwater harvesting is the solution, and efforts are being undertaken to utilise rainwater to supplement the water supply.

Air: Automobile and industrial emissions have harmed the quality of the air. Large amounts of emissions from such sources have increased the presence of dangerous and toxic chemicals in the air we breathe, such as carbon monoxide, nitrogen dioxide, sulphur dioxide, and others. Serious measures are needed to stop the deterioration and save public health. In this regard, the Delhi administration has taken major steps to introduce CNG (Compressed Natural Gas) as a public transport fuel, significantly improving Delhi's air quality. Such novel action is required to enhance the quality of air.

Waste Material: Waste material is the most evident by product of human activity. Our activity's waste products range from sewage to rubbish. Managing them is a major issue for towns, corporations, and local governments. So far, much of our sewage has been discharged untreated into rivers. This has resulted in a significant problem with water pollution. As a result, our river water is unsafe for human consumption. There is now greater awareness of this major problem, and attempts are being made to pre-treat sewage disposal before it is dumped into rivers and the sea.

Another big issue stems from the enormous amount of garbage we generate. Garbage disposal, particularly of non-biodegradable materials (e.g., plastic bags), is a severe issue. We must refrain from using such materials as plastic bags daily. Recycling rubbish is necessary to protect the environment from the harmful impacts of such garbage.

INTEXT QUESTIONS ?

23.2

1. Give any one suggestion for reducing water shortage.

2. What should be done to reduce air pollution?

3. Give suggestions for treatment of was tematerials?

WHAT YOU HAVE LEARNT

❑ The environment is divided into two parts: physical (such as noise, temperature, air, and water) and psychological (an individual's perspective and experiences of the environment).

❑ Human conduct is the outcome of interactions between people and their surroundings.

❑ Environmental changes, whether natural (earthquake, tsunami, etc.) or artificial (e.g., Bhopal MIC disaster), influence human conduct.

❑ Humans also impact the environment through activities such as driving a car, cooking meals, etc.

❑ There is a need to build efficient environmental protection procedures.

TERMINAL EXERCISE

1. What are the various facts of human-environment interaction? Explain environmental effects on human behaviour.

2. What are future threats to environment? What we should dot remove these threats?

ANSWERS TO TERMINAL PROBLEMS

23.1

1. Environmental behaviour

2. Products of behaviour

3. Environmental orientations

4. Social cultural environment

5. Physical environment

23.2

1. Harvesting rain water

2. Introduction of CNG

3. pretreating sewage and recycling the waste

HINTS TO TERMINAL EXERCISE

1. Refer section 23.1 and 23.3

2. Refer section 23.4 and 23.5

PSYCHOTHERAPY

24

INTRODUCTION

You learned about psychological disorders in the previous lesson. Psychologists have attempted to comprehend the origins of abnormal behaviour and the best strategy to cure it. Four major models deal with psychological problems and how they are treated. These are medical, psychodynamic, behavioural, and humanistic. This lesson describes some important ways for treating abnormal conduct, known as psychotherapy. Psychotherapy is now a qualified psychologist who assists a disturbed person in returning to normal behaviour. In most cases, the psychologist will employ one of the abovementioned approaches.

Therapy is a broad term that refers to any endeavour by a mental health practitioner to assist a client in adjusting to or overcoming certain dysfunctions. While the therapeutic approaches vary, they are all intended to be remedial and beneficial. They are all based on interpersonal contact between the therapist and the client. Both have the same goal: to improve the patient's adaptive and autonomous functioning. You must have realised that psychological disorders encompass a variety of issues. These problems can manifest themselves in thought processes (e.g., delusions and hallucinations in people with schizophrenia), emotions or mood states (e.g., in manic and depressive patients), activities (e.g., phobic patients' avoidance behaviour or compulsive patients' ritualistic behaviour), or sometimes emotional problems manifest themselves as physical symptoms (as in anxiety disorders and psychosomatic disorders).

OBJECTIVES

After studying this lesson, you will be able to:

- *Explain the purpose of psychotherapy;*
- **understand the psychotherapy goals and purposes;**
- *describe the **four** major models for psycho therapy; and*
- *explain the relative merits and demerits of each of these models for psychotherapy.*

24.1 Characteristics of Psychotherapy Approaches

The following features are shared by all psychotherapy approaches are (i) There is a systematic application of the concepts underlying the various theories of treatment, (ii) only those who have obtained practical training under supervision can do psychotherapy and not everyone. The therapeutic situation involves a therapist and a client who seeks and receives help for their emotional problems (this person is the focus of attention in the therapeutic

processes), and (iv) the interaction of these two people - the therapists and the client - results in the consolidation/formation of the therapeutic relationship. This is a private, intimate, and dynamic relationship. This human contact is the driver for transformation in any psychiatric therapy.

Psychotherapies attempt to change maladaptive behaviours, reduce emotional discomfort, and assist the client in better adapting to his environment. Insufficient marital, occupational, or social adjustment sometimes requires considerable adjustments in an individual's personal surroundings.

24.2 Psychotherapy Goals and Purpose

All psychotherapies strive to achieve some or all of the following objectives.

i.   Strengthening the patient's determination to improve.

ii.   Reducing emotional stress.

iii. Unveiling the possibility of constructive growth.

iv.   Changing habits.

v.   Altering thought processes.

vi.   Developing self-awareness.

vii. Improving interpersonal and communication skills.

viii. Making decision-making easier.

ix.   Becoming conscious of one's own life choices.

x.   Responding more creative ideas and self-awareness to one's social environment.

24.3 Relationship Between Aetiology and Treatment

Throughout history, numerous perspectives on the aetiology of psychological diseases have emerged, each informed by current knowledge and beliefs. Some argue that biological factors cause psychological illnesses. Others claimed they were anchored in mind, while others took an interactionist perspective, claiming they were a combination of biological and mental components. Whatever approach to abnormal psychology one takes, treating psychiatric problems has generally been tied to what was assumed to be the aetiology - which means the disorder's origin.

24.4 Medical Model

According to the medical model, abnormality occurs due to a physical cause, and is a kind of illness, which can be treated with the help of medicines. Medical professionals treat mental illnesses in the same way they treat physical illnesses, using a medical model. They wish to alleviate the symptoms of psychiatric problems. It is considered that psychological problems are caused in part by biological factors. This approach examines the role of genetics and imbalance sinneuro transmitters. The therapeutic approaches used in the medical model

are referred to assomatic therapy. Three somatic the rapies which are currently used are drug therapy, Electro Convulsive Therapy (ECT) and psychosurgery.

Drug Therapy: Drug treatment has been chiefly used to treat four categories of disorders: schizophrenia, mania, depression, and anxiety. These medications are psychotropic drugs since they primarily affect the patients' psychological conduct. These medications are also known as antipsychotics. These are used to treat severe psychotic diseases such as schizophrenia.

They have a soothing impact on patients and lower the severity of psychotic symptoms such as delusions and hallucinations.

Socially isolated patients become more sensitive to their surroundings. However, chronic usage at high doses results in serious negative effects. The medication strategy has yet to yield a 'cure' for schizophrenia. Antimanic medicines are used to treat patients who are extremely agitated, enthusiastic, and sometimes uncontrollable. Antidepressant medications are prescribed to people who are depressed and at risk of suicide. Minor tranquillisers are anti-anxiety medications.

ECT (Electro Convulsive Therapy): Although widely used, it has been prohibited or severely limited in some nations. Convulsive therapy was developed in response to two distinct observations: (1) mental hospital physicians had long observed that patients would suddenly lose their symptoms after a spontaneous convulsion, and (2) epilepsy and schizophrenia hardly ever occurred concurrently in them. As a result, it was believed that inducing artificial convulsions could cure schizophrenia and other mental diseases.

How ECT Functioning Occurs: ECT involves passing a brief electric current through electrodes to the head of a person suffering from a psychological condition. In unilateral ECT, two electrodes are placed in the temple region. A current of approximately 200 milliamps at 110 volts is transferred from one electrode to the other for 0.5 to 4 seconds. ECT treats depression, bipolar disorder (mania), and obsessive-compulsive disorder.

Psychosurgery: Moniz's introduction of prefrontal lobotomy in 1935 in search of an effective treatment for psychosis earned him the Nobel Prize in medicine in 1949. Later, it was discovered that the unfavourable side effects of such psychosurgery were disastrous. Such surgeries are now extremely rare and are only undertaken as a last resort.

INTEXT QUESTIONS ❓

24.1

Fill in the blanks below

1. The therapeutic approaches used in the medical model are called _____therapy.

2. The three major somatic therapies currently used are ,_____and_____.

3. Who introduced prefrontal lobo to my_____ when _____

4. Are mainly used to treat schizophrenia.

5. For treatment of depression, are used.

24.5 Psycho Dynamic Therapy

In the 1880s, Sigmund Freud pioneered modern psychotherapy. In the years that followed, Freud constructed a refined, revolutionary, and systematic theory of psychoanalysis. The contributions of Freud's collaborators, disciples, and followers enriched psychoanalysis. The psychodynamic approach underpins psychodynamic treatment. The underlying idea of this therapy is that psychological issues arise from childhood events. Often, the youngster is subjected to psychic traumas or is placed in conditions that trigger inappropriate urges. These impulses are repressed into the unconscious, where they remain, but they constantly threaten to emerge. Patients expend much psychic energy, maintaining repression, leaving little energy for living more effectively. It is claimed that obtaining insight into such suppressed material can liberate people from their pain and the shame that comes with it.

The following are the various techniques employed by the psychoanalytically oriented therapist:

- Free Association
- Analysis of Dreams
- Analysis of Resistance
- Analysis of Transference

24.6 Behavioural Model

It is founded on learning principles, mainly classical and Operant Conditioning approaches. During the 1920s, J.B. Watson in the United States reported on various applications of conditioning methods for treating behavioural disorders. Behavioural approaches as a clinical problem-solving strategy emerged later. In their quest to modify psychotic behaviour, Lindsley and Skinner developed the phrase "behaviour therapy" in the early 1950s.

In the endeavour to solve the challenges of psychiatric diseases, experimental psychologists have joined doctors. Many psychiatric illnesses are the result of poor learning. As a result, their alteration necessitates relearning or fresh learning. The concept in behaviour therapy is that if maladaptive conduct can be learned by classical conditioning, it can also be unlearned using the same principles. Several approaches based on behaviour therapy are as follows:

Techniques of Behaviour Therapy

1. **Systematic Desensitisation:** This is the most well-known behavioural therapy strategy used to treat phobias and other anxiety-related disorders. Wolpe developed it on the premise that one cannot be both relaxed and nervous simultaneously. When more anxiety-inducing stimuli are offered to a deeply relaxed patient, the relaxation state overpowers the anxiety state, and the patient becomes desensitised to the anxiety-inducing stimuli. In systematic desensitisation, the individual is instructed to create a series of situations or experiences that eventually lead the individual to confront the object/situation that produces the fear. For example, a person afraid of spiders may be asked to imagine a spider and then get close to it and afterwards, the person

may be asked to come close to a spider while focusing on relaxation. Following such little actions tends to lessen anxiety.

2. **Implosive Therapy:** As opposed to systematic desensitisation implosive therapy works precisely in the opposite direction. The therapist describes the terrifying experience, or the client is asked to picture the most stressful circumstance.

3. **Flooding:** Flooding, however, includes putting the customer in a stressful event. The approach works effectively, but prudence is needed when using it. Flooding forces the individual to confront the problem, which may cause fear or worry. For example, a person who is scared of boats may be compelled to sit on one. This method is efficient in removing fear from the circumstance. Flooding and implosive therapy are less successful than systematic desensitization.

4. **Aversion Therapy:** If a response is accompanied by pain or punishment, the response's power should be reduced. This approach has been used to treat chronic alcoholics. A nausea-inducing medication is put into an alcoholic drink, causing sickness and vomiting. After a series of such trials, the sight of the drink alone may cause nausea over time. The approach has been used to treat a wide range of issues, including binge eating, heavy smoking, sexual perversions, and drug and alcohol abuse.

5. **Assertive Therapy:** Wolpe's concept of training assertive replies is another use of the reciprocal inhibition principle. It is impossible to be forceful and graceless at the same time. The patient is asked to experiment with new behaviours, first gently and then more forcefully. Behaviour rehearsal, role-playing, or social modelling have all been employed to improve such skills. Roles can be altered.

6. **Token Economy:** This strategy has generated adaptive behaviours from children's eating habits to institutionalised schizophrenic patients. Instead of money, a token is used to pay for the job, and the token may subsequently be swapped for the desired products or activities. This approach consists of three steps.

   (i) Identify the ideal behaviour that should be reinforced.

   (ii) The establishment of a medium of exchange. A token can be either a card or a clip.

   (iii) Back-up reinforcers have been selected. They may be a movie, some special meals, or a picnic. A set number of tokens can be accumulated and traded for any of these. A token program's goals are to promote desired behaviour that will lead to social approbation from significant others and develop necessary abilities in the individual. The individual discovers that he can exert control over his environment to generate positive feedback from others.

7. **Modelling Technique:** For children, watching and mimicking others is vital to learning. Bandura has put forth a lot of effort to perfect the modelling approach. Modelling has the potential to impact behaviour since it can:

   i. Provide a foundation for acquiring new abilities.

   ii. Eliminate fears and inhibitions.

   iii. Enhance socially existing conduct patterns.

8. **Biofeedback:** The Autonomic Nervous System's role in developing aberrant behaviour has been recognised. A person is trained to affect their physiological processes in this treatment. The procedures required are as follows: (a) monitoring the physiological response to be modified, (b) converting the information to a visual or aural signal, and (c) providing timely feedback, indicating to a subject as quickly as feasible when the intended change is occurring. Thus, biofeedback aims to reduce the reactivity of an organ system innervated by the ANS by putting it under voluntary control.

24.7 Cognitive Therapies

Because of its success, cognitive therapies have seen a major increase in use over the last two decades, particularly in treating depression and anxiety. Albert Ellis and Aaron Beck were the forefathers of cognitive therapy. Cognition refers to functions such as attention, judgment, learning, thought, memory, and consciousness that are utilised to comprehend our experience's environment. Cognitive therapy focuses on recognising and correcting problematic thoughts and attitudes. Cognitive therapists believe that cognitive processes and structures such as beliefs, attitudes, long-term memories, and so on substantially influence behaviour.

The negative or self-defeating contents or schemata towards the self, the world, and the future; the so-called cognitive triad - make the self unhappy, the environment dangerous, and the future terrifying. These are crucial components in many mental diseases, particularly sadness and anxiety. The basic goal of cognitive therapy is to change these processes and structures at realistic levels. Irrational expectations, such as "Everyone should love me," are a major source of stress for many people. Some will adore you, others will be indifferent, and some will detest you. If the client recognises their beliefs and attitudes are unrealistic and self-defeating, they will want to modify them. This is how cognitive therapy functions.

A social learning approach to psychotherapy emerged in recent years. This approach connects the behavioural and cognitive models of personality. According to cognitive methods, mental problems are produced by "irrational beliefs" or flawed thinking. Cognitive restructuring, or changing one's thinking style, is part of therapy. For example, suppose a person believes a black cat crossing in front of them would cause issues. In that case, they may be forced to experience it several times until (s)he realises there is no link between the cat and unpleasant events, changing their thinking.

INTEXT QUESTIONS ❓

24.2

Fill in the blanks below:

i. Theapproachmostwidelyusedinpsychoanalysisisisatechniquecalledfree_____.

ii. The purpose of psychoanalysis to understand the conflicts which are responsible for a person's abnormal behaviour.

iii. Other approaches used in psychoanalysis are and interpretation.

iv. Thebehaviouralmodeloftherapyusesclassicalconditioningprinciplesiscalled,

24.8 Humanistic Psycho Therapy

According to the humanistic perspective of personality, people are basically good and desire improvement and better ways of living. Everyone desires self-esteem and the ability to live as they see fit. Humans are unique because they have free choice and a natural desire to achieve their full potential. The underlying human drive towards self-actualisation is the desire to realise one's full potential. According to the humanistic viewpoint, psychological diseases develop because our external environment prevents us from progressing towards personal growth. People around us put us under strain by having high expectations of us; they do not accept us for who we are. If everyone around us gives us unconditional positive esteem, there will be little difference between who we are and who we want to be. This indicates that there would be minimal difference between the real and ideal selves. This results in more harmony in our functioning, which is unity.

The purpose of humanistic therapy is for the therapist to allow the client to connect with their actual feelings and inner self by providing an environment of unconditional positive regard. The client must then accept responsibility and live more by their desires. This finally leads to development and increased life pleasure. These therapies arose as a reaction to the authoritarian and mechanical characteristics of psychoanalytic and behaviouristic approaches to therapy. Humanistic-experiential therapists think that humans face existential challenges yet must be able to make choices. People might find their routes by becoming more aware of the various options and possibilities. The therapist's job is confined to assisting, leading, and counselling the client. The three major therapeutic approaches are briefly discussed below.

The Client-centred Therapy of Carl Rogers

This therapy fosters a psychological environment where clients can feel completely accepted, understood, and respected. Clients explore their feelings and thoughts for the first time here and accept negative emotions like hatred, wrath, and nasty sensations as natural parts of themselves. As their self-concept becomes more in sync with their real experiences, they are more receptive to new experiences and perspectives. They eventually become more integrated. Because the therapist does not steer the course of therapy, this technique is also known as nondirective therapy. They do not respond to, interpret, or pass judgement on what the client says. The therapist accepts or restates the client's statements and urges them to look at them and investigate further. Rogers was regarded as one of the most important psychotherapists, and his method significantly impacted counselling techniques.

Gestalt Therapy: Fritz Perls established Gestalt Therapy to identify physical processes and emotional modes impeding awareness. Gestalt means "whole," and the therapy focuses on mind-body unification and the integration of cognition, feeling, and action.

Logo Therapy: This therapy arose from Viktor Frankl's three-year experience in Nazi concentration camps. His father, mother, brothers, and first wife died in the camps or were gassed. Frankl noticed that prisoners who gave their lives meaning' survived. Those who

had lost all hope in the future were bound to depression. Many people committed suicide in the camps.

As a result, Frankl and others of like mind attempted to prevent suicide by giving meaning to the lives of individuals who had fallen into depression. Logos is an abbreviation for "meaning." As a result, this therapy seeks to assist the client in discovering or creating purpose and meaning in their life.

INTEXT QUESTIONS ❓

Write the answers to the following questions:

1. Describe the basic goal and process of psychoanalysis.

2. Outline the differences in the approach used in implosion therapy, flooding and systematic desensitization.

3. Briefly describe the three current somatic therapies – chemotherapy, electroconvulsive therapy and psychosurgery.

4. What is the basic approach used in humanistic psychotherapy?

5. Explain briefly about three types of humanistic psychotherapy.

WHAT YOU HAVE LEARNT 👍

❑ The medical model relies mainly on medicines and sometimes uses electric shock and surgery to treat psychological disorders.

❑ Psychoanalysis is psychotherapy which uncovers unconscious conflicts in a person's mind from earlier life experiences and helps the person consciously accept them.

❑ Behaviour therapy is based on the principles of classical and operant conditioning.

❑ Humanistic therapy helps a person to get in touch with their deeper needs and desires and then take responsibility to live more under one's inner or true nature

ANSWERS TO INTEXT QUESTIONS ☝

HEALTH PSYCHOLOGY

One must be healthy to enjoy life. Sick people are those who are not in good health. They are unable to perform adequately and meet life's many expectations. A person's health is vital both individually and socially. We need an attentive mind and an active body to be productive members of society. Health psychology is concerned with psychological aspects crucial in preserving and promoting health and well-being. It also investigates the elements that contribute to the sickness condition. This field has grown in importance in recent years. It has become increasingly evident that our way of life, or our methods of thinking and behaving, contribute to people's health. Experts believe that the causes that cause sickness and death can be avoided via exercise, correct nutrient intake, and changes in harmful behaviours such as smoking. This course will assist you in comprehending the challenges associated with learning how to live a healthy life and feeling well-being.

OBJECTIVES

After studying this lesson, you will be able to:

- *Understand the concept to health and well-being;*

- *understand the Indian perspective of health;*

- *understand the determinants of health;*

- *understand the health risks and protective factors;*

- *describe health promoting behaviours;*

- *understand the models of health behaviour: decision-making and health choices;*

- *understand the legislation and health promotion;*

- *learn about the threats to health; and*

- *familiarize yourself with life-style interventions necessary for fostering health and well being.*

- *Explain coping and self-management skills to safeguard from unwanted sexual advances and other forms of abuse.*

- *Differentiate between safe and unsafe sex.*

- *List the risks like RTI, STD, HIV/AIDS due to unsafe sex and other modes of transmission.*

25.1 Concept of Health and Well Being

Health is a state of physical, mental, and spiritual well-being. Health is in good condition with the absence of illness or infirmity. Aside from the absence of illness, it also includes thriving and coping. People's personal and social lives are centred on their health. People's quality of life in today's society is under attack from various sources, including bad health.

On the one hand, the external environment is rapidly changing. It necessitates dealing with a variety of environmental pressures. Furthermore, changes in the social structure (e.g., dissolution of family and other social institutions), increased competition, and consumerism contribute to dissatisfaction, loneliness, conflict, and loss of support.

In today's fast-paced world, we are dealing with various tensions and anxieties. Stress is increasingly known as the "silent killer." It harms both physical and psychological well-being. Stress is defined as our reaction to events perceived as threatening and interrupting psychological functioning. Stressors are conditions or environmental variables that create stress.

While the list of stressors can be lengthy, they can be divided into four categories:

● Stressful life events (e.g., divorce, retirement, pregnancy, death of a close relative, unemployment).

● Everyday life hassles (e.g., shopping, too many commitments, commuting to work in difficult location).

● Work-related stress (e.g., role ambiguity, unpleasant work environment, conflict with colleagues meeting targets).

● Catastrophic events such as disasters.

Stress is a possible source of health risk for everyone, but its impact is determined by the degree of fit between the person and the environment. Furthermore, persons differ in key dispositions such as optimism, a feeling of control, health beliefs, emotional state, and personality patterns, which may aid or impede stress management.

25.2 The Indian Perspective of Helath

The term swasth (healthy) refers to the state of 'being in oneself' in Indian thinking. In other terms, swastha refers to an auto-locus individual. The science of life, Ayurveda, frequently refers to a condition of balance or appropriateness (Sama) as a critical component of well-being and health.

INTEXT QUESTIONS ?

25.1

1. List the main challenges that create threat to quality of life in modern life.

2. Give three examples each of (a) stressful life events, (b) daily hassles and (c) work related stresses.

3. Define the Indian perspective of Health.

25.3 Determinants of Health

The determinants of health are the various social, economic, environmental, and human elements that influence health and well-being. Governments and policymakers use these measurements to plan solutions in places where health inequities negatively influence a group of people's health and wellness. There are two types of health determinants: societal determinants of health and personal determinants of health. The latter comprises individual conduct and genetics, whereas the former covers all other health variables, such as the social and physical environment and access to health care.

Scientists typically recognise five factors of population health:

● Social environment,

● Physical environment,

● Health services

● Biology/genetics, and

● Human conduct.

25.4 Health Risks and Protective Factors

Healthcare professionals often divide wellness and illness-related factors into risk factors and protective factors. Any property, characteristic, or exposure of an individual that enhances the possibility of getting a condition, disease, or damage is a risk factor. For example, exposure to inexpensive, easily accessible junk food and a permissive atmosphere may increase an individual's propensity of becoming fat, which in turn increases an individual's chances of acquiring type 2 diabetes, cardiovascular disease, and other illnesses. Obesity, being underweight, unsafe sex, high blood pressure, cigarette and alcohol usage, poor water, sanitation, and hygiene are some of the more serious risk factors. Regular exercise, a balanced diet, and access to clean water are protective factors.

25.5 Health Promoting Behaviours

Achieving health requires following specific patterns of behaviour. The critical behaviours are described below:

i) Relaxation Techniques

Relaxation is beneficial for stress reduction. Meditation, which focuses on an object, word, or phrase, is relaxing. Progressive muscular relaxation is another type of relaxation. It includes systematically tensing and relaxing the muscles while lying down or pleasantly sitting. Yoga Nidra is another technique used for this. Pranayama and deep breathing techniques are frequently used in relaxation.

ii) Physical Exercise

Regular exercise promotes the maintenance of both physical and mental health. It strengthens the heart and lungs and promotes the body's utilisation of oxygen. Jogging,

bicycling, and aerobic activity are all beneficial in this regard. Cardiovascular fitness and endurance are increased, as are physical work capacity, body weight optimisation, muscle tone and strength improvement, hypertension control, stress tolerance, and attention and concentration concentrating. Exercise should be done regularly to reap the benefits.

iii) Weight Management

A complicated system governs the regulation of food intake. In actuality, it is controlled by a series of metabolic processes. Poor eating regulation leads to an increase in body fat. Obesity, as a result, acts as a risk factor by raising blood pressure and cholesterol levels. Obesity has been identified as a risk factor for premature death. Both genetic and environmental causes cause obesity. Weight management is quite challenging. Dietary intervention is necessary but frequently insufficient to produce long-term weight loss. Fasting, yoga, surgery, and appetite-suppressing medicines are all employed to achieve this goal. Various weight control approaches have been demonstrated to be more effective. Eating habit analysis is used to make people aware of their eating behaviours. The analysis of eating stimuli provides insights into how to manage to eat. People are taught to change the stimuli in their surroundings that previously provoked and sustained overeating. Patients are instructed to control the eating process. They were developing a sense of self-control over eating aids with weight loss.

iv) Healthy Diet

Every one of us should strive for a healthy diet. According to research, dietary choices play a significant role in developing diseases such as cancer, hypertension, and cardiovascular disease. A low-fat, low-cholesterol diet lowers the risk of cardiovascular disease. Meal planning, cooking methods, and eating habits are all part of dietary control. Intervention with the family is effective in promoting and maintaining dietary change.

v) Attending to Health Problems

It is essential to address your health issues as soon as possible. The most crucial aspect of any health issue is that it be addressed as soon as possible, as a disease can progress quickly. When a complaint or symptom, whether physical or mental, is noticed in the body. It should be reported to a trained medical professional. Based on his consultation and guidance, you should take the appropriate corrective actions as soon as possible.

vi) Nurturing Positive Emotions

A smiling face is generally associated with happiness and mental wellness. True, but it overlooks an essential point: good feelings such as love, affection, interest, empathy, forgiveness, and appreciation all contribute to one's overall health and well-being. Recent research shows that experiencing diverse emotions improves one's health status. As a result, seeking out, organising, and creating opportunities to experience good feelings in regular interactions is critical.

INTEXT QUESTIONS ?

25.5

1. Fill in the blanks:

(a) Relaxation involves _____ breath, holding and Slowly while relaxing the muscles.

(b) Developing a sense of   over eating   to weight control.

(c) The dietary control involves   planning,   ___methods, and habits.

25.6 Models of Health Behaviour : Decision Making and Health Choices

Have you ever found yourself on the couch after a heavy lunch, wondering, "What was I thinking? Why did I eat so much?" We can't always explain our rationale, so imagine how difficult it must be for health officials. Trying to figure out what is happening in another person's head is difficult. To explain complicated decision-making processes surrounding health behaviour, health psychologists have developed tools known as models of health behaviour.

There are three important health models in health psychology, those are as follows: the theory of planned behaviour, the health belief model, and the protective motive theory is all decision-making models. Each model tries to explain the mental process between an observable input and an associated behaviour (Abraham, 2008). In other words, these models attempt to describe what happens in a person's thinking when deciding how to act in a specific situation. What motivates someone to smoke, drink alcohol, or engage in dangerous sexual behaviour? Health behaviour models try to anticipate and influence harmful health behaviours and decisions by first understanding how those decisions are made.

INTEXT QUESTIONS ?

25.6

1. Name the three important types of health models?

25.7 Legislation and Health Promotion

Government legislation frequently encourages healthy practises. This extends beyond taxation or subsidies, such as food labels, consumption age limits, and geographic sales restrictions. Food labelling is becoming an increasingly important engagement area for many governments and authorities. The objective is to apply the concept of cognitive dissonance to the product level. Every time consumers look at a product, they are reminded of the possibly harmful health ramifications. The success of nutrition and food labelling depends on consumer education and interest.

25.8 Threats to Health

i. **Alcohol and Drug Use:** These are the most common health-harming behaviours in the modern day. When taken in an overdose, they can instantly kill humans. Addiction to alcohol and drugs frequently causes harm to the respiratory system, intestine, liver, and other body systems in general. Thinking ability and decision-making are also impacted. Alcohol, in particular, harms the liver and can lead to cirrhosis.

ii. **Smoking:** Studies clearly reveal that smokers have a higher risk of lung cancer and heart disease. Smoking causes chronic bronchitis and other respiratory problems. Interestingly, the risks of smoking are not limited to smokers. Smokers' spouses, family members, and coworkers are all at risk for a variety of health problems. Smoking becomes more hazardous when combined with obesity and stress.

iii. **Use of Tobacco:** Tobacco is used in a variety of ways in India. Raw tobacco is eaten, smelled, and chewed with paan leaves. Tobacco usage is linked to oral cancer, according to studies. It harms oral hygiene and may involve gums and teeth.

iv. **Poor Nutritional Habits:** There has been an increase in bad dietary practices in recent years. The consumption of junk food (fast food!) and foods with unbalanced cholesterol, fats, calories, and so on has become the norm. Raising public awareness about the benefits of consuming raw foods and various fruits is necessary. Meals should be planned to promote healthy living. People frequently choose nutritionally deficient foods to experiment with novel tastes. Obesity may result from uncontrolled eating.

v. **Lack of Exercise:** Modern life values and white-collar jobs are increasingly leading to sedentary behaviour. They lack the time and ability to exercise. A healthy physique necessitates sufficient activity for the entire body. Many people avoid exercising due to laziness, time constraints, and a lack of knowledge about the body system. As a result, the body weakens and becomes ill, and premature ageing occurs.

vi. **Unsafe Sex:** HIV (Human Immunodeficiency Virus) and AIDS (Acquired Immune Deficiency Syndrome) are deadly diseases that affect drug users (through needle sharing), homosexuals, and those who have several sexual partners. It is estimated that 6.5 million individuals have died due to AIDS. The virus multiplies rapidly after transmission and travels throughout the body. This virus causes a variety of problems, including neuroendocrine and cardiovascular dysfunction.

INTEXT QUESTIONS ❓

25.8

Match the two lists of fact or causing illness and nature of illness:

1. Alcohol   (a) respiratory disease

2. Smoking   (b) intestinal illness

3. Junk food   (c) HIV/AIDS

4. Unsafe sex   (d) obesity

25.9 Interventions for Promoting Wellbeing

Everyone wishes to live a long, fruitful life that is also productive and healthy life. We can learn about it from others who have succeeded in achieving this great aim. When we look at persons who have aged well, we see that they differ from the rest in three ways: diet, physical activity, and involvement in community life. These people, in particular, enjoyed the leafy green and root vegetables, fresh milk, and fresh fruits, and they ate a low to moderate amount of food. They consume low to moderate amounts of calories every day. They also maintain their commitment to family and community issues while engaging in physical activity and walking daily. Based on researches of a wide variety, it is being felt that ensuring health and wellness is possible with the help of adopting certain preventive strategies. A brief description of these strategies is given below:

1. **Primary prevention:** It is concerned with reducing or eliminating the occurrence of preventable sickness and injury. It entails assisting people in learning about behaviour and health, encouraging motivation and the skills required to practise good behaviour, and altering poor health practises. It also entails raising awareness about immunisation.

2. **Secondary preventive:** The primary purpose of this type of preventive is to reduce the severity of an individual's sickness. Steps towards cure may be performed with the support of early detection, employing diagnostic tests that screen the disease. People can learn ways to self-examine body parts and the functioning of various organs, which may aid in preventing illness.

3. **Changing the Life Style:** When a person's lifestyle is unhealthy, medicine alone will not treat the ailment. It is critical to recognise that our thoughts and actions are inextricably linked. Both the mind and the body are intertwined. Our ideas and practises are frequently the root causes of numerous ailments. It is critical to creating body-mind balance to obtain optimal health. With this in mind, Ayurveda, the Indian school of medicine, says that healthy Ahara (food), Vihar (recreation), Achara (behaviour), and Vichara (thinking) are necessary for good health and well-being. The following are the essential principles that require our attention in these domains.

Ahara (Diet)

- Vegetarian food is both healthy and energising for the body.
- Fresh fruit and green vegetables high in fibre, honey, and curd contain vitamins, antioxidants, iron, and other essential nutrients.
- Avoid foods with opposing effects (for example, hot milk and ice cream).

Achar (Conduct)

- Organise your daily routine according to the season.
- Drinking enough water, getting frequent massages, exercising, and practising yoga asanas all help to keep the body fit and energetic.
- Improve your time management skills.

Vihar and Vichar (Recreation and Thought)

- Develop an accommodating intellect, accept criticism, and understand others' emotional needs.

- Exercise self-control and avoid being lured by lust and greed.

- Negative emotions such as fear, anger, jealousy, and concern should not dominate.

- Creating long-lasting friendships and social relationships; • Increasing self-awareness, connection with others, and spiritual inclination.

INTEXT QUESTIONS ?

25.9

1. What are the important factors found in the people who show successful ageing?

2. Enumerate steps for primary prevention.

3. Describe the components of Ayurvedic view of life-style.

WHAT YOU HAVE LEARNT 👍

- Health is important for a person individually as well as socially. It consists of a state of physical, mental and spiritual well-being. Indian perspective of health

- Contemporary life is full of stressful experiences in the context of family, economy, work and environment.

- Major stresses are categorized as stressful life events, hassles of everyday life, work related stress and catastrophic events.

- Health promoting behaviours include relaxation techniques, physical exercise, weight management, and healthy diet. One must attend to health problems by proper diagnosis. Positive thinking has a positive effect on health.

- The models of health behaviour: decision-making and health choices and the legislation and health promotion.

- Threats to health include alcohol and drug use, smoking, tobacco, poor nutrition, lack of physical exercise and unsafe sex.

- Successful ageing is related to moderate eating habits, physical activity and community work.

- Prevention can occur at primary and secondary levels. However, changing the lifestyle plays a key role.

- According to Ayurveda, attention must be paid to diet, recreation, conduct and thought.

◆ TERMINAL EXERCISE ◆

1.   Discuss the concepts of health and well-being.

2.   What are the factors that should be considered for promoting health?

3.   Mention some of the threats to health.

4.   Suggest some information for promoting health.

ANSWERS TO INTEXT QUESTIONS

25.1

1.   Changes in environment, disintegration of family, competition, loneliness.

2.   (a) death of spouse, unemployment, loan

     (b) commuting to work place, collecting water, sending children to school.

     (c) work overload, role ambiguity, time pressure

3.   being swasth (healthy) in oneself

25.5

a)   deep, breath, exhaling

b)   control, contributes

c)   meal, cooking, eating

25.6

The theory of planned behaviour; the health belief model; and the protective motive theory

25.8

(1) b;

(2) a;

(3) d; and

(4) c

25.9

1.   deit, physical activity, involvement in community life.

2.   Learning about health, promoting motivation, skills to practice health behaviour, modification of poor health practices.

3.   Ahar (diet), Achar (conduct) and Vihar and Vichar (recreation and thought).

26 EDUCATION AND OCCUPATION

INTRODUCTION

The evolution of education has diversified to a great extent and hence, Education has become one of the prominent parts of an individual's life. Therefore, it becomes important to understand various aspects of to importance of education**. 'Roti, Kapda, Makaan'** has been modified to **'Roti, Kapda, Makaan, aur Vidya'** in the new age. The importance of education, can change the future and opportunities for generations to come. Education enhances the lifestyle of the ones who pursue it.

Seetha wanted to become a doctor. After Class X, but, she had opted for Commerce stream for Class XI. She was a bright student and passed Class XII with 85 percent marks. When she tried for medical entrance and obtained the forms, she discovered to her dismay that she is not qualified even to appear for the entrance examination for the medical course despite her high percentage of marks. She was told that- the Physics, Chemistry, Biology combination is a must for the medical stream. So, Seetha is not the only such student to realize the mistake she made while choosing her subjects for the Class XI.

This example makes us aware that there is a relationship between school subjects and profession or work (occupation) to be taken up later. How and what should be kept in mind while deciding about the subjects? This lesson will help in analyzing the relationship between education and occupation or profession one has to follow later.

You must have often come across statements like "Education is necessary to get job" or "I want to work in this particular field but I don't have the necessary qualification for it". Have you ever thought about how education and occupation are related?

In this lesson we are going to learn about education and its relationship with occupation as well as the important features of the education and occupation.

OBJECTIVES

After studying this lesson, you will be able to:

- *explain the relationship between education and occupation;*
- *describe the process of educational choices; and*
- *describe the nature of the world of work in terms of job profiles and job opportunities.*

26.1 Education and Occupation

We often come across advertisements for vacant jobs in which qualifications expected from the candidates are given in terms of essential and desirable. Why is it that these qualifications are expected from a person who wishes to take up a given job?

When the qualifications are advertised for a job, they are specified so that the person can use those skills which he/she has acquired over a period of time. The skills learnt and the work to be done are interrelated. For example, a person who has gone through the medical training becomes a medical practitioner. Learning of skills can take place both formally and informally. If you go in for a vocational course like "poultry farming" from NIOS, you can start your own poultry farm or get employment.

Thus, you can see that choosing a vocational course helps you in gaining work or employment. Similarly, learning can take place in a non-formal setting also. If your father runs a farm and does farming and you help him, then you come to know about the technical aspects of farming without taking a formal course in it. In this setting also, education does take place. However, you can further enrich yourself with latest technologies by going in for further courses of studies. This implies that education and occupation are closely related to each other.

26.2 The Process of Educational Choice

After knowing that education and occupation are related, you might be interested in the process of educational choices. Let's examine it in some detail.

When you go to the market, you see a wide variety of things available but it neither happens, nor is it possible that you pick up all the things. Even when you go to the vegetable market, you only choose those vegetables which you would like to have or which you can afford. Doing so is a process. You find the vegetable of your choice and then about its price. In the same way, choosing education is also a process. You don't just go and get yourself admitted in any school or choose thesubjects without thinking. Infact, entry into the educational system itself starts with the process of choice making. Basically when one starts the choice it is from a general pattern of education to specified training. Let us study in some detail aboutthese two aspects.

26.3 General Education

General education is the education which aims at providing the students-elementary skills in reading, writing, knowledge of physical, social and cultural environment, desirable attitudes, values and motivation. From primary to degree level and above,the main stream education is often considered general (except-professional, technical, and vocational). For example, the minimum general education required for entry into occupations or for admission to various courses or special training is high school (secondary) level.

26.4 Special Training

Students undergo special training for entry into their chosen occupation. You would also like to know the institutions offering the required special training. Some of these are listed below to give you an idea about the types of institutions in our country.

i. **Professional Institutions:** These institutions provide higher education at the graduate and post graduate levels to prepare students for specialized fields such as medicine, law, technology etc. Their graduates become doctors, lawyers, engineers, etc.

ii. **Industrial Training Institutions:** These institutions offer courses which prepare the students as technicians and other similar professions like draftsman, junior engineer, medical laboratory technicians, etc.

iii. **Institutes of Distance Education:** Also known as Institutes of Open Learning, these institutions provide education to students through distance mode while they can stay at their homes. Indira Gandhi National Open University (IGNOU) is one such institution which provides education through distance mode. Presently, you are studying this material in distance mode which is provided to you by NIOS.

Some of these institutes also provide online courses where you can do the course sitting before the computers or with a smart mobile phone and study. This mode has become very popular and useful now-a-days, especially after covid-19.

iv. **Commercial Institutions:** Courses like typing, shorthand; desktop publishing, photo designing, video editing, animation, gaming etc. are offered by these Institutions.

v. **Craft Training Schools:** These schools offer training in simple crafts like tailoring, weaving, embroidery, etc.

vi. **Specialized Institutions:** Certain institutions are closely linked to the employment system. Film and Television Institute of India, Training Institutions for Merchant Navy, Institutes of Hotel Management and Fashion Technology etc., are some of well-known institutions of this type.

INTEXT QUESTIONS ❓

26.1

A. State whether the following statements are true or false:

1. Education and Occupation are not related.   True/False
2. People educate themselves only for the sake of getting jobs.   True/False
3. Educating oneself in any field primarily involves developing skills.   True/False
4. The skills learned and the work are not interrelated.   True/False
5. Education can take place formally as well as non formally.   True/False
6. Choice of education is a process.   True/False

B. What is general education? Explain.

26.5 The World of Work

The expression "world of work" itself explains its meaning. It comprises a very large number of occupations and industries. We call any person, who is engaged

in teaching, a teacher. Do you know how big the teaching occupation is? It comprises teachers teaching at various levels of education such as Nursery Teacher, Primary Teacher, Trained Graduate Teacher (TGT), Post Graduate Teacher (PGT), Lecturers, Readers, Professors, etc. Then, there are teachers for different subjects at school, college and university level. You also find special teachers for physically and mentally challenged etc. So is the case with all the other occupations. Looking into the wide range of the occupations, the Govt. of India has brought out a publication which is known as the "National Classification of Occupations (NCO)". The NCO has divided the world of work into the following 9 major areas:

1.   Legislators, senior officials and managers.

2.   Professionals.

3.   Technicians and associate professionals.

4.   Clerks

5.   Service workers and sales workers.

6.   Skilled agricultural and fishery workers.

7.   Craft and related trade workers.

8.   Plant and machine operators and assemblers.

9.   Elementary occupations.

26.6 Job Opportunities

When moving in the world of work, we come across innumerable occupations and jobs. Some jobs are challenging and some are fascinating. Some jobs can give you extra monetary benefits. Like education, choosing a job is also a process. Each job has certain requirements related to age, education, citizenship etc. Let's look into some of the main requirements in details.

(i)   **Age requirements:** When you look into requirements for some jobs in the advertisements, you will find that age range is mentioned. For example, to get into any police/army service you should not be more than 25 years. The age requirement is specified in the jobs keeping in view the job profile and the future prospects in the job. The career promotion chances become good if the entry is made into the job at the correct time. Also, some jobs demand more physical activity, which is related to age of the worker. With the aging process the energy as well as the strength decreases, so an old person cannot meet the demands of many jobs and becomes a misfit.

(ii) Gender Requirements: These days you find women equally participating in almost all the fields of work. Women have entered even the defense services as well and have become pilots also. There are very few jobs open to men only or women only. In some jobs, however, the gender requirement is kept in view of the job profile, the area and place of work. One example is that of the recruitment for Special Protection Group (SPG).

(iii) Citizenship Requirements: Generally, the government jobs in any country are open to its citizens. For example, if you want to appear for the Civil Services Examination, held by Union Public Service Commission (UPSC), you need to be a citizen of India.

(iv) Physical Requirements: All the occupations require good general health. But some of the jobs demand heavy physical activity and stamina such as police, armed services etc. The physical requirements for such jobs are specified. Physical requirements are made in term of (a) height, (b) weight, (c) chest, (d) vision etc.

(v) Personality Requirements: You may have come acrossadvertisements like "Wanted smart young men and women with pleasing personality for the job of receptionist". These advertisements are especially for the jobs in the non-governmental sector (NGO) as they require staff for concept selling. They need to sell their product for which they recruit staff who have the flair for marketing. In some advertisements, the jobs requirements are not given but the worker is expected to meet the job demands. For example, a Public Relations Officer (PRO) should be an extrovert, with the skills of meeting and talking to people but the advertisement may not mention this aspect.

If a person, who does not like to go to places or cannot talk and express properly, is put onto the job of sales man, the person may find himself in a total frenzy and that may sometimes result in serious problems.

INTEXT QUESTIONS ?

26.2

Give one line answers to the following questions:

1. Who has brought out the National Classification of Occupations?

2. List two essential requirements for recruitment into Armed Forces.

3. What do you understand by citizenship requirements?

Try it Yourself

What do you think of the personality requirements for the following jobs:

(a) Doctor _____

(b) PRO _____

(c) Salesman _____

(d) Teacher   _____

(vi) **Educational and Training Requirements:** Can you become a computer programmer without a course in computers? No, You cannot. Educational requirements for different jobs are different. You often find that those who want to become engineers study science subjects and those who want to go in the line of accounts study commerce. The choice of subjects should be done keeping in mind the field in which one wants to go.

The same is true for the training requirements for different jobs. The training is given so that a person can apply what he/she has studied theoretically. The training requirements are different from job to job. In some Institutes, "On Job Training" is given after finishing the theoretical course. This is also called apprenticeship. The student is provided supervised practical training in almost all the professional courses which is termed as 'Internship'. Many companies recruit students as "trainees" and after providing them training place them on the regular job.

"Choose a job you love, and you will never have to work a day in your life." —Confucius
"Make your passion your profession, and then work becomes play."
Try it Yourself
Find out the training *which is required for the following jobs:*
(i)   Doctor
(ii) Software Engineer
(iii) Pilot
(iv) Accountant

(vii) **Experience requirements:** "Experience counts…" is a common saying. Some jobs require experience because with experience, one can work better and is also in a position to guide and supervise others. Usually experience requirement is mentioned for the senior positions. However, for entry jobs, fresh candidates are taken.

(viii) **Legal Requirements:** It means that the candidate who is chosen for a prestigious job, has a clean character and has not been convicted by the legal authorities for any crime.

(ix) **Licensing:** If you have a vehicle, then you must be having a license to drive it. Have you ever thought what is the use of a license?

Think of a situation when a person who does not know how to drive is made to drive a motorcycle. The person will definitely meet with an accident which will cause injury to his life as well as the life of others and will also damage the vehicle. So what do you think is the use of license or licensing. License in jobs means legalized authority. Some of the jobs which are directly related to human life need license. For example, a pharmacist needs licensing because he deals with drugs. In some jobs, one needs to be registered with the relevant council such as doctors who get registered with the Medical Council of India (MCI).

INTEXT QUESTIONS ❓

26.3
1. What is meant by apprenticeship?
2. Why is licensing necessary?

WHAT YOU HAVE LEARNT 👍

There is a relationship between school subjects and profession or occupation to be taken up later. You must have often come across statements like "Education is necessary to get job" or "I want to work in this particular field but I don't have the necessary qualification for it". We will understand the relation between education and work here.

❒ Education and work are interrelated because you need specific skills for carrying out specific work and education helps in developing those skills.

❒ Choosing any field of education is done through a process. The educational choice depends upon the field of work in which you are interested.

❒ The process starts through the general education (which is up to the degree level) and moves to special training.

❒ Special training can be taken from professional bodies, Industrial Training Institutions, commercial institutions, etc.

❒ The world of work comprises of a large number of occupations and industries. The National Classification of Occupations has divided the world of work into 9 major areas.

❒ While looking in for a job, one has to meet the various requirements like age, gender, citizenship, physical requirements, and personality requirements. Some other requirements are education and training, experience, legal and licensing.

✑ TERMINAL EXERCISE ✑

1. Describe the process of educational choice.

2. Write short notes on the following:

   (a) World of work

   (b) Online courses

   (c) Education and training requirements

   (d) Personality requirements

   (e) Licensing

ANSWERS TO INTEXT QUESTIONS ✍

26.1 (A)

(1) False   (2) False   (3) True

(4) False   (5) True   (6) True

(B)

It provides elementary skills in reading, writing, knowledge of environment, desirable attitudes, values and motivation.

26.2

1. Government of India
2. Physical, educational
3. The candidate must be a citizen of the country.

26.3

1. It is, on the job training required in a profession.
2. Licensing provides legal authority to undertake the practices involved in a job.

TERMINAL TEST

1. What are the different the institutions available for special training?
2. Discuss the categories of work given by "National Classification of Occupations (NCO)".
3. What is general education?

CAREER DEVELOPMENT & LIFE SKILLS

27

INTRODUCTION

Put your career in top gear for those who want to add a new dimension to their career, join...............

NIIT offers you excellent career opportunities.

Attention Students: The Times of India presents a comprehensive section on *educational and career opportunities.*

You might have come across many such advertisements in news papers, magazines, handbills etc. Does the word 'career' ring a bell in your mind? What exactly is career or career building? Reading this lesson will help you understand the concept of career. It will also help you in developing your career in a more systematic way.

OBJECTIVES

After studying this lesson, you will be able to:

- *state the meaning and stages of career development;*
- *explain various aspects of career development;*
- *describe how one can plan one's career;*
- *explain the concept of continuing education and in-service training;*
- *describe the conditions under which career adjustment becomes necessary; and*
- *describe the concept of self employment.*

27.1 Meaning of Career Development

The term 'career' in career development refers to all the activities which a person does in his/her lifetime. These activities includes personal, occupational and social life of the person. Thus, career refers to the life pattern of a person.

Development is the modification of behaviour as a result of growth and learning. It normally involves a progressive change. Thus, career development means the overall development in the life style of a person. It involves person's experiences that contribute to the formation of his/her identity including life experiences, education, career choice, on the job training, level of professional achievement and degree of satisfaction.

Now, the question arises, how the life style of a person develops. Obviously,

occupation plays an important role in the life style of a person and occupational development is the basis of career development. For example if a person gets promoted to executive cadre from non-executive, he will get more facilities from the organization, like higher salary, bigger accommodation etc, and his life style will automatically change. Promotion is part of occupational development, but it also brings about a change in person's social and personal life also.

> **ACTIVITY**
>
> Ramu began his career as a clerk in a small company immediately after his graduation in commerce. While working he improved his qualification from B. Com. to M. Com. and ICWA. An offer from a multinational company as a Financial Manager changes his life style to a great extent. Now he is the owner of a flat, car and many other amenities. He enjoys a happy married life with two lovely kids. Moving in high society, providing the best education to his children which he could never dream of earlier, are now at his easy accessibility. This is the reward of career development. Career development is a dynamic, ongoing and gradual process.
>
> On the basis of this case can you list some more characteristics of career development?

27.2 Life Stages and Vocational Development

Concept of life stages and stages of vocational development will give greater insight in to the understanding of career development. Generally, there are five life stages: Growth, Exploratory, Establishment, Maintenance and Decline.

Table 27.1: *Life stages and Stages of Vocational Development*

Name of Stage	Age Range	Characteristics
1. Growth	0 – 14 yrs	• Development of basic skills
2. Exploratory	15 – 25 yrs	• Thinking and understanding about self. • Becoming an adult • Finding a life partner • Finding an occupation • Finding place in community
3. Establishment	25 – 45 yrs	• Establishing oneself in the Chosen occupation • Establishing identity as a person and a professional
4. Maintenance	45 – 60 yrs	• Maintaining and furthering The occupational and social status.
5. Decline After	60yrs	• May retire from active service but act as consultants and providing experience at the higher level of proficiency.

The given age categories in the Table 27.1 are not rigid and exclusive. They are flexible and overlap each other

Let us understand each of these stages in detail:

1. **Growth Stage:** From conception to about the age of fourteen, it is a preparatory stage during which a child develops basic skills.

2. **Exploratory Stage:** It is between 15 to 25 yrs. During this stage, a person tends to think and understand about self, his role in becoming an adult, finding a life partner, occupation and place in community.

3. **Establishment Stage:** It ranges between 25 to 45 years. During this, stage one establishes himself or herself and gains some occupational identity. (e.g. He / She is a plumber/ doctor/ bank officer).

4. **Maintenance Stage:** This stage covers 45 to 58 yrs. During this stage, a person maintains his establishment.

5. **Decline:** This is after 58 yrs. of age. In this stage, a person not only declines in physical strength but also his or her role lessens in the vocation, family responsibilities and community.

After knowing the life stages, let's see the stages of vocational development.

27.3 Stages of Vocational Development

The stages of vocational development may be described as follows:

1. **Early Exploration:** This involves first job. It can be a part time or a temporary job.

2. **Exploration and Trial:** In this stage a person explores more avenues and in the end tries to settle in a job of his or her liking. This stage is also called floundering stage.

3. **Establishment and Maintenance:** During this stage, a person establishes himself or herself in one field of work and then continues to maintain in it.

4. **Retirement:** Here the person tends to narrow down his or her responsibilities. Depending upon the capability of the person, he/she may either leave the job or shift to a job with lesser responsibility.

The stages of career development are, in fact, the life stages combined with the stages of vocational development.

INTEXT QUESTIONS ?

27.1

1. List the stages of vocational development relevant to early adulthood.

   _____

2. What is the important aspect of retirement?

   _____

ACTIVITY

Take the case of Dr. Naveen, a famous surgeon. He is enjoying his pension now. While studying in VIII class, a lesson on doctors

fascinated him and he was attracted towards medical profession. He resolved to become a doctor. For this he worked hard, secured good marks in biological science, qualified pre-medical test and subsequently became a Doctor. He joined as an Assistant Surgeon in a big Government hospital at the age of 25 and grew as a great surgeon by the age of 45. He retired at the age of 60. Now at the age of 65, though not in his active surgical practice, he still wishes to extend his valuable contribution in the service of mankind.

Activity: *Explain the life stages and stages of vocational development of Dr. Mohan.*

Try it Yourself

Talk to a person of 65-70 yrs. of age and write down the stages of his/her career development.

Mr. Sudhakar is an Engineer because his parents wanted him to become a engineer. He is working in a small factory. He does not like his work and his income is also not adequate. He is frustrated with his job and life. On the other hand, Mr. Ganesh is a taxi driver, he is happy with his job and earns quite well. He is enthusiastic about his job and likes it very much.

Write three probable reasons for Mr. Naveen's frustration and Mr. Ganesh's satisfaction according to the life stages.

27.4 Career Planning

Modern age is an age of planning. Even for small things like going to a movie or picnic, we have to plan. Career building is a crucial task in one's life. So one is ought to prepare a good career plan. As you have already learnt, career is the overall life style of a person. Career plan includes, planning of personal life, planning of social life and planning of vocational life. These three aspects of career planning are interlinked and influence each other. Let us understand these concepts one by one.

a) **Planning of Personal Life:** It involves planning about when to get married, what type of person would you like to get married to, when to have children, what sort of life you want to give to your spouse and children and many other things, specifically important to you. Personal life is influenced by occupational and social life of a person.

b) **Planning of Social Life:** It involves planning of life style you want, the society in which you want to move in, and the assets which you want to acquire etc. Social life of a person is influenced by personal and occupational life of a person.

c) **Planning of occupational Life:** It is a lifelong process of getting ready to choose or continue to make choices from among the many occupations available in our society. Occupational life of a person matches the self with the world of work. After knowing the self and the world of work, you need to match your qualities with the qualities required for each of the occupations you know. Finally, select a occupation with which your qualities match to the maximum. It has great impact on the personal and social life of a person. In brief career planning can be understood with the help of following diagram.
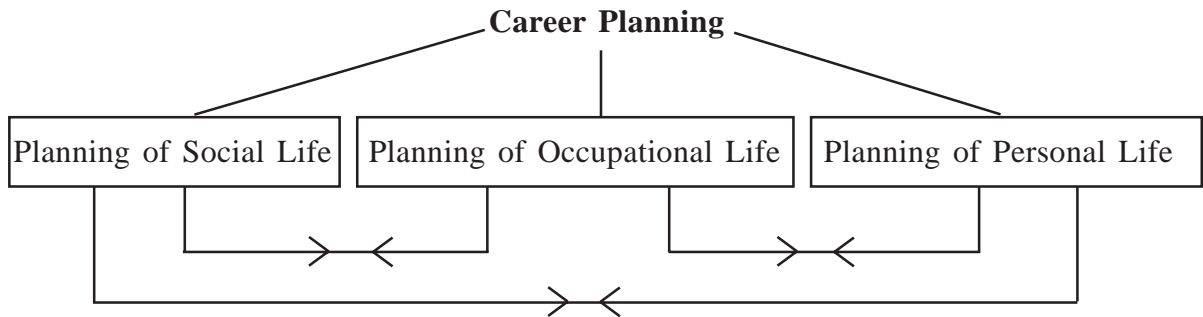
Fig. 27.1: *Career planning*

In a wise vocational planning, there are three key features, namely, know thyself, know the world of work and match the self with the world of work.

(i) **Know thyself (Self appraisal):** A clear understanding of one's own self, one's aptitudes, abilities, interests, ambitions, resources and limitations.

(ii) **Know the world of work (Appraisal of the occupations):** Knowledge of various occupations, qualifications and entry requirements for each occupation, earnings, conditions of success, advantages, promotional prospects and compensation etc. Before proceeding further, let us take the case of Mr. Ganesh, a happy taxi driver and Mr. Naveen who is a frustrated engineer. Mr. Ganesh is happy because he opted to be a taxi driver due to his interest in driving and interaction with people. Mr. Naveen is frustrated because he is forced to become an engineer by the parents to fulfill their aspirations.

Let us deal with these key points one by one to have better understanding.

27.4.1 Know Thyself (Self Appraisal)

Know thyself is the key word for success in career development. It sounds very simple but in real practice it is quite a difficult goal. Some people feel frustrated in life because they could not understand themselves in the early stages of career development. People are not able to understand about themselves mainly because of the following reasons:

i. *Lack of courage to be one's own self:* We simply try to be like somebody else. For instance, young boys and girls try to imitate the hairstyle of hero's or heroines. Or we always try to be what others expect us to be. In the case of Mr. Naveen, his father wanted him to be an engineer. So, he became an engineer without thinking what he wants to be.

ii.   ***We do not take time to know ourselves:*** If we have time, we prefer doing some other work than to think about the self. We misinterpret our experiences. For example just because one gets less marks in science one may interpret that she/he is weak in that subject, though there can be other reasons also.

Sometimes we do not know our desires and run after a mirage. When asked what do you want, most people say that they want money or anything that money can buy. If provided with a lot of money, one would look forward for something else. Most people move from one immediate desire to another, apparently without even realizing that what they really want that is something which is much more basic. The most fundamental and lasting desire is to follow one's interest. So first thing one tries to realize is that:

- There is self,

- Each one of us is an entity,

- No two persons are exactly alike, and

- Everyone has the latent ability in one direction or the other.

Each person has basic abilities which make it possible for him/her to choose from a wide variety of occupations. But selection of vocations is purely a matter of personal taste. Before concluding about one's interest, abilities and strong points one should do thorough self analysis or introspection.

27.4.2   Know the World of Work (Appraisal of the Occupations)

To know the world of work is equally important for occupational planning. For different jobs, there are different types of job requirements. For example, Engineers may be required to work in mines or factories, indulge in shift duties, and work in hazardous conditions. They may be required to manage the subordinate staff, deal with the staff unions etc. Similarly journalists may be required to be on their toes always to capture the news. They should be skillful in differentiating the important and unimportant news. They should also be ready to take risk. You have to collect information about the working conditions and job requirements of all the jobs. After a thorough study of jobs you should select some Occupations with which your qualities match.

27.4.3 Match Personal Qualities with the Qualities for Selected Occupations

If you choose to become a lawyer, see that you have logical and analytical mind and good memory. Good communication and persuasive skills and understanding of human nature would also help you in pursuing the career of lawyer.

If you have chosen to become a scientist, see if you have scientific temperament, an open mind, curiosity, infinite patience, desire to find evidence, etc.

Interest, ability, aptitude, and health are some of the criteria on the basis of which one can match the self with the world of work.

27.5 Steps in Career Planning

Following are the major steps in career planning:

i. **To understand the self:** To make a wise career choice, one should know the interests, aptitude, abilities, skills, health conditions, personality, and priorities of the person.

ii. **To obtain information about various occupations.**

iii. **Short list some occupations (3–4) which suit the person.**

iv. **Thorough analysis of each of the selected occupations:** To this end one may collect information about the following:

    a. Nature of work.

    b. Work environment.

    c. Qualification and physical requirements.

    d. Method of entry.

    e. Advancements or promotion prospects.

    f. Economic returns.

    g. Advantages and disadvantages.

v. **Match the qualities which you possess with the qualities required for each of the selected occupations.**

vi. Select the most suitable occupation.

vii. Work towards achievement of your goal of entering into the occupation.

Note: For the student the initial step is to select the subjects for study.

Note: In various places there are guidance centers where one can get assistance in self appraisal and obtaining information about various occupations, and to make decisions in one or more aspects of one's life.

You can also consult a counselor or a career teacher if you have any difficulty while planning or building your career.

27.5 Life Skills

27.5.1. What are Skills?

The capability to perform something efficiently is known as skill. A skill is a learned ability to do something well. Hence, the qualities that individuals can develop to lead a successful life are known as life skills.

27.5.2. What are Life Skills?

World Health Organization defines Life Skills as **"the abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life"**.

Here 'adaptive' means that a person is flexible in approach and is able to adjust in different circumstances and 'positive behavior' implies that a person is forward looking and even in challenging situations, can find a ray of hope.

27.5.3 Core Life Skills

The set of Ten Core Life Skills can be categorized as below. These are:

27.5.4 Methodologies to Transact Life Skills

Sl. No.	Techniques	Description
1	Discussion	Involves exchange and sharing of ideas, experiences, facts and opinions on a given topic.Can be used in large and small groups.
2	Debate	A discussion involving two opposing parties with each group expressing opinions or views about a given topic or subject.
3	Role Play	Short drama episodes or simulations in which participants experience how a person feels in a similar real life situation.
4	Brainstorm	Free expression of ideas among participants on a given issue or question.
5	Story Telling	Telling of narratives with a particular theme, based on actual events.
6	Song and Dances	Musical compositions on topical issues and themes.
7	Drama	Composition in verse or prose intended to portray life, character or to tell a story. It usually involves presenting conflicts and portraying emotions through action and dialogue.
8	Case Study	True or imaginary story which describes a problem, a situation or a character.May also be a dilemma in which the participants should come up with opinions on how they would resolve the conflict.
9	Miming	Acting without words by the use of gestures, signs, physical movements and facial expressions.The whole idea is communicated through actions.
10	Poetry & Recitals	Compositions which capture events, themes and situations in a short and precise manner.Used in communicating feelings, opinions, ideas, habit and other experiences.Can be in the form of songs, recitations, chants or be dramatized to enhance the acquisition of various Life Skills.
11	Question & Answer	A teacher or learner tries to find information through asking questions and getting answers from the respondent.An effective method of transacting Life Skills Education as it stimulates a learner's thinking and creativity.

Sl. No.	Techniques	Description
12	Games	A structured play can sometimes be used as an educational tool for the expression of aesthetic or ideological elements.It involves mental and physical simulation, and often both.
13	Team Work	Students may be organized to work in pairs or small groups in the classroom.Promotes the maximum participation of all students as they are involved in "thinking and doing" and cooperative skills, such as, listening and communication skills, problem solving and sharing of tasks.
14	Simulation	An assumption or imitation of a particular appearance or form; the act or process of pretending.
15	Demonstration	A method teaching by example rather simple explanation or an act of showing or making evident.

27.2

1. What are the important steps in career planning?

   _____
   _____
   _____

2. Who can help in career planning and career decision making?

   _____
   _____
   _____

27.6 ► Special Provisions for Career Development

"Better late than never" is a common saying which is also applicable to the field of education. Avenues for career development are available at all the stages of life. Some such avenues are continuing education and in-service training.

27.6.1 Continuing Education

The concept of continuing education is of recent origin. Education is a lifelong process of adding or renewing one's repertoire of knowledge, information and skills. (Continuing education has relevance to all irrespective of whether one is professional, technocrat or technician). In the context of literacy learning or functional literacy, continuing education acquires special significance. After becoming literate, a person can continue education through the continuing education centers. Open school and Open University provide opportunities for continuing education.

27.6.2 In-Service Training

It refers to the education and training which a person receives after entering the occupation. It is required because of rapid advancements in all the fields of knowledge.

27.6.3 Career Adjustment

At times we may feel that the work which we are doing is not according to our choice. In that case, career adjustment becomes necessary. Career adjustment is shift in one's occupational role. It can be from one field to an altogether new field or related field or changing the responsibilities in the same field. Some situations where career related field adjustment becomes important are as follows.

- After retirement if a person is capable he/she may take up some simple jobs.
- When work environment becomes unsuitable.
- When some health problems crop up. For example if a person develops some disease while working on a certain job which will further increase if the person continues to work in the same situation or if a person develops disability which hampers his/her work.
- When there is no chance of advancement in the present career.

27.6 ▸ Social Skills

i.   **Self-Awareness:** If you're able to appreciate and differentiate between your strengths and weaknesses, you're a self-aware individual. It helps you make choices, take actions and make decisions that are consistent with your abilities.

Examples of self-awareness are:

- The ability to understand what you can or can't do.
- Recognizing your own talents and being aware of your skill set.
- The ability to differentiate between the weak and strong aspects of your abilities or behavior.

It is important to develop self-awareness to eventually develop empathy, effective communication and interpersonal relationships.

ii. **Empathy** is one of the major tools needed to form a positive relationship among our loved ones and our society. The value of imagining one's life from their perspective can be learned by empathy. Empathy is important because it improves our communication with others and can help us understand and accept others better. Empathy can also drastically improve social interactions, especially between multicultural individuals and societies.

Most often the words, **Empathy and Sympathy** are misunderstood. The differences between them are:

- **Sympathy** is a feeling of pity and sorrow for someone else's misfortune;

- **Empathy** is the ability to understand and share the feelings, concerns, emotions, needs of another.

iii. **Interpersonal relationships**: Humans are social beings by nature and friendly relationships boost social and mental well-being. Interpersonal skills refer to the ability to positively engage with others and coexist amicably. Interpersonal relationships include a host of interrelated skills, such as:

- The ability to spark up conversations in unfamiliar or new settings (e.g., business conferences)

- The ability to make others feel comfortable in your presence (e.g., a job interview where you build rapport)

- The ability to manage conflict and resolve issues (e.g., respectfully disagreeing with your manager and offering a different solution)

Interpersonal relationships are the skills which help us to relate in positive ways with our family members, friends and others. It helps one to build new relationships, strengthening the existing relationships and ending relationships constructively both personal and professional.

Effective Communication means that we are able to express ourselves, both verbally and non-verbally, in ways that are appropriate to our cultures and situations. This means being able to express opinions and desires, and also needs and fears. And, it would also mean being able to ask for advice and help in the time of need.

Communication is the process of transmitting messages and sharing knowledge, facts, thoughts, feelings and ideas through verbal and nonverbal means. To communicate, we need a sender, a receiver, a medium and message. The ability to communicate is vital to the success of any endeavour.

27.6 Thinking Skills

i. **Critical Thinking** is an ability to analyse and interpret information in a systematic manner. Critical thinking is highly responsible for inûuencing and recognizing behaviour that can be used to lead a well-balanced life.

Critical thinking is an ability to analyze information and experiences in an objective manner. It helps to recognize and assess the factors that influence attitudes and behavior. Critical thinking involves logical thinking, reasoning, comparison, classification, cause/effect and planning. It consists of mental process of analysing and evaluating.

Critical thinking is also about attitudes: Open mindedness, flexibility, persistence, interpersonal sensitivity and intercultural sensitivity.

ii. **Creative Thinking** is a novel way of seeing or doing things that is characteristic of four components - ûuency (generating new ideas), ûexibility (shifting perspective easily), originality (conceiving of something new), and elaboration (building on others' ideas).

Creative thinking means finding solutions beyond our usual or traditional way of reacting to a problem. We are often limited by our past experiences, and we dread to think differently. To go beyond the traditional boundaries of doing things, it is necessary to empower ourselves with more information through newspapers, radio, TV, classmates, teachers, relatives, friends, or even strangers. Research is the key to help us formulate ideas towards finding a creative solution.

Creative thinking will enable us to find solutions when it looks as if there is no way out. There have been many efforts to define or explain the creative process. Some psychologists think of it as the forming of associative elements into new combinations or arrangements. One who can collect a great number of associations and ideas and put them together to solve a problem has the best chance of coming up with an original solution.

iii. **Decision Making** helps us to deal constructively with decisions about our lives. It teaches people how to make decisions about their actions in relation to a healthy assessment of different options and what effects these different decisions are likely to have.

Decision making involves logical steps in choosing the best alternatives based on a particular situation. It is a course of action chosen from a number of possible alternatives. To decide something means to make a choice or come to a conclusion. It involves a wide range of personal and interpersonal skills including fact finding, logical thinking, creativity, analytical ability, sensitivity to others and assertiveness. A good decision would be one whose outcome would be positive or beneficial. It may be regarded as a result of mental process (cognitive process) leading to a selection of course of action among several alternatives. Every decision making process produces a final choice. The output can be an action or an opinion. Decisions are not made in isolation and are made in context of other decisions called a stream. A decision is a choice of action of what to do or what not to do.

iv. **Problem Solving** helps us to deal constructively with problems in our lives. Signiûcant problems that are left unresolved can cause mental stress and give rise to accompanying physical strain.

A Problem is an obstacle that hinders the achievement of a particular goal, objective or purpose. Problems arise when there is a controversy between two needs. It refers to a situation, condition or issue that is yet unresolved. In a broad sense a problem exists when an individual becomes aware of significant difference between what actually is and what is desired between one or more individual. A problem is seeing the difference between what you have and what do you want or recognising or believing that there is something better than the current situation or an opportunity for a positive act. Problem solving skill is helpful to settle an issue, solve a problem or resolve a conflict or dealing with the challenges. A problem should be considered an opportunity.

27.8 Emotional Skills

i. **Coping with Stress** means recognizing the sources of stress in our lives, recognizing how they affect us, and how we act in a way that helps us control our levels of

stress by changing our environment or lifestyle, and learning how to relax.

Stress is the psychological and physical strain of tension generated by physical, emotional, social, economic or occupational circumstances, events or experiences that are difficult to manage or endure.

Therefore, stress is our reaction to the unhabituated physical and physiological changes that occur in our daily lives. It is a normal response that happens when your physical or mental life is disrupted or changed drastically in a major way and it has an impact on your wellbeing. Stress is a normal physical response to events that make you feel threatened or upset your balance in some way. When you sense danger, whether it is real or imagined, the body's defences kick into higher gear in a rapid automatic process known as "fight-or-flight-or-freeze" reaction or the stress response.

Stress can be seen as a perceived threat to us on any level. Day in and day out we face stressful situations. The intensity and duration of stress changes depending on the circumstances and emotional condition of people who are suffering from it.

ii.   **Coping with Emotions** means recognizing emotions within us and others, being aware of how emotions inûuence behaviour and being able to respond to emotions appropriately. Intense emotions like anger or sadness can have negative effects on our health if we don't respond to them appropriately.

Emotions can be defined as a mental state that arises as a response to contact with a pleasant or an unpleasant object, or a mental state that is developed through conscious effort. Every one of us feels different emotions at different times. Sometimes we feel happy, sometimes sad, worthless, hurt or depressed. It is very normal and natural to feel various emotions. Life would indeed be very boring and dull without these colours of life called emotions.

The ability to deal with negative feeling and emotions such as grief, anger, anxiety, depression etc. is an important emotional skill that we all need to develop. People who lack emotional self- regulation experience feelings of distress. People who manage their emotions are more optimistic, generally productive and effective in their lives. Identifying emotions as they occur and to be able to monitor emotions from moment to moment is the key to self-understanding. Being aware of our own emotions makes us more confident when making personal decisions.

All these skills are interrelated and reinforce each other. Together, they are responsible for our psychosocial competence; build our self-esteem and self-efficacy and nurture holistic development.

27.9 Why Life Skills?

Life skills are a set of important tools to ensure that an individual leads a fruitful life. These set of tools can be used by everyone across all age groups, especially by adolescents because of their vulnerability to health problems.

27.9.1 Importance of LIfe Skills at Workplace

- You learn to work collaboratively with other people, which further helps you promote team (or collective) objectives.

- You find creative ways to solve problems.

- You learn to keep an open mind, encouraging new ideas and diverse perspectives.

- You learn how to stand up for yourself as well as for your team; you're accountable for your own actions.

- You discover the ability to recover from setbacks and failures and view them as opportunities to continue learning.

27.9.2. How to Develop Life Skills

Developing Life Skills is a life-long process that helps individuals grow and mature; build confidence in one's decisions taken on the basis of adequate information and thought, and discover sources of strength within and outside. It is noteworthy that, from times immemorial, every culture and society has invested in educating and empowering its younger generation to lead fulûlling and responsible lives. For example, the 'Panchatantra' stories from India have very important lessons in Life Skills enhancement that remain relevant to all generations.

Social Skills	Thinking Skills	Emotional Skills
Self-Awareness	Creative Thinking	Coping With Stress
Empathy	Critical Thinking	Coping With Emotions
Effective Communication	Decision Making	
Interpersonal Relationship	Problem Solving	

ACTIVITY - 1: DISCOVERING SELF

Introduction

To understand and identify the inner positive and negative qualities is an exploratory process. These qualities make a person unique. This activity will help to achieve the following learning outcomes.

Learning Outcomes: Participants will be able to:

- Understand the importance of knowing oneself

- Realize that every person is unique

- Recognize ones' qualities and virtues

Advance Preparation: Ball & Worksheet

Methodologies: Game/Energiser and Worksheet

Duration : 30 Minutes

Process:

- Ask participants to stand up and form a circle.
- Facilitator throws ball randomly to one of the participants.
- The participant who caught the ball has to say a short sentence about himself/herself
- which he/she is actually not.
- The sentence should be amusing.
- Continue the activity for five to ten minutes and involve all the participants.
- The idea is to get the class energized through laughter.

Facilitator's Note:

Motivate participants to define 'Self-awareness', explain the importance of understanding our individual selves and how each of us is unique.

WORKSHEET - DISCOVERING SELF

Introspect and list your inner qualities that make you unique.

My Inner Qualities			
1		6	
2		7	
3		8	
4		9	
5		10	

Sum up the activity and ask the participants what new things they have realized and felt about themselves.

Write down their responses on the writing board and reinforce the following key points:

- Understanding our inner qualities helps to feel good about our self.
- Knowing our inner self needs a lot of introspection.
- Identifying true inner qualities and strengths enhances self-esteem and confidence.

ACTIVITY-2: UNDERSTANDING BASICS OF COMMUNICATION

Introduction

Effective communication means that we are able to interact and express ourselves, verbally and non-verbally. We should also be able to express our opinion, desires, needs and fears.

The main objective of this activity is to promote effective communication skills to cope with day to day life as well as society.

This activity will help to achieve the following Learning Outcomes.

Learning Outcomes: Participants will be able to:

- Understand the basics of communication
- Internalize the basic communication skills

Advance Preparation: Short Story (Three to Five Lines) Written on a Paper

Methodologies: Whispering Game, Brainstorming, Discussion & Filling up

Duration: 30 Minutes

Process:

- Internalize the basic communication skills
- Invite eight volunteers and assign every volunteer a number (1 to 8).
- Out of the eight volunteers, request six of them to move out of the room (3 to 8).
- Handover the story to volunteer no. 1, and ask her/him to read and memorize the story.
- (Make sure that the story is not heard by the participants standing outside the room)
- Position two chairs facing each other inside the room.
- The Volunteer no. 2 to call volunteer no. 3 waiting outside the room.
- Volunteer no. 1 to sit on one chair and volunteer no. 3 to sit on the other chair facing   volunteer no. 1.
- Volunteer no. 1 to narrate the story and volunteer no. 3 to listen carefully. (Volunteers will narrate the story only once)
- Volunteer no. 1 to go back to his/her seat.
- Volunteer no. 2 to call volunteer no. 4, 5, 6, 7 & 8.
- Each pair to repeat steps 6, 7 & 8.

    (The story may be distorted to some extent)

- All the volunteers to return to their respective seats.

Facilitator to sum up the activity by asking the following questions:

- Did you enjoy the game?
- What are the reasons behind distortion of the story?
- What could have been done better in conveying the story appropriately?
- Continue the discussion by emphasizing that:

- In the process of narrating the story all components of effective communication was available but was not effectively and optimally utilized.

- To make our communication effective, let us understand the process of communication appropriately.

With the help of **below diagrams**, explain the process and components of effective communication.

Sum up the activity by reinforcing the following key points:

- Communication comprises of reading, writing, speaking and listening.

- The basics of communication have to be learnt.

- Ability to listen makes one a good communicator.

CONTENT

RECEIVER

SENDER   CODING   DECODING

Communications Medium

Feedback

COMPONENTS OF

EFFECTIVE COMMUNICATION

VERBAL SKILLS   NON-VERBAL SKILLS

LISTENING SKILLS   BARRIERS

Conclusion:

Being aware of life skills isn't enough. You need to find ways to actively implement them for successful careers and relationships. Learn how to overcome roadblocks and step outside your comfort zone. Embrace opportunities for growth and learning and pursue the best version of yourself.

INTEXT QUESTIONS ?

1. What is the difference between sympathy and empathy?
2. Briefly explain the process of communication

WHAT YOU HAVE LEARNT 👍

❐ Career in career development means all the activities which a person does in his/ her life time. These activities include personal, occupational and social life of the person.

❐ Career development is overall development in the life style of a person. It is a dynamic, ongoing and gradual process.

❐ Exploratory, establishment, maintenance and decline are the important stages of career development.

❐ Self appraisal, appraisal of chosen career and matching the abilities of the person with the abilities required by the job are some important tips for career planning. Continuing education and in-service training are special provisions for career development.

❐ Career adjustment is shifting of one's vocational role. Sometimes it becomes inevitable.

✐ TERMINAL EXERCISE ✐

1. What is career and career development?
2. What are the life stages?
3. What are the stages of vocational development?
4. Why is it important to know thyself in career development?
5. What is career adjustment?

ANSWERS TO INTEXT QUESTIONS 👌

Activities

1. Explore yourself and write the stage of development which you are undergoing now. Also combine your basic characteristics and write which occupation would suit you most.

2. Select any five occupations and write the basic characteristics required to enter each occupation.

27.1

1. Growth and exploratory stage.

2. Narrowing down of responsibilities.

27.2

1. Understanding self, selected information and short list them, analysis of information, match qualities with occupation, select suitable occupation, and working towards goal.

2. Counselor, career teacher.

WORK PSYCHOLOGY

INTRODUCTION

Workplace psychology sometimes referred to as Industrial and Organizational psychology. Psychology is concerned with understanding, explaining, and ultimately improving the attitudes and behaviors of individuals and groups in organizations and applying this knowledge to problems at work.

The specialty of Industrial - Organizational Psychology (also called I/O psychology) is characterized by the scientific study of human behavior in organizations and the work place called work psychology. The Understanding your employees' work behavior is essential to uncovering ways to elevate your business's operations, work culture, and employer brand. The way team members act and interact with one another ultimately affects a company's bottom line. We will focus on four key work behaviors:

● Job performance,

● organizational citizenship behaviors,

● Absenteeism and turnover.

28. CAREER CHOICE AND VOCATIONALADJUSTMENT

28.0 INTRODUCTION

Career Choice is the most important event in an individual's life. Person's success and consequently; satisfaction and happiness depend on how accurately he chooses his career. Improper selection of the career or frequently changing the career is very harmful for psychological health. Once we invest time, money and effort in moving along a particular career path it may not be easy to change the path. It is well known that individuals who make career choices based on personal interests and abilities, show significantly higher levels of job satisfaction and are more productive workers. Students who have gone through comprehensive career counselling are disserting in their career choices, while students who make career choices without adequate and accurate counselling and guidance are at risk of being impelled to choose careers that are not suitable for them.

Career and Work is a very important part of one's life. But every person is not suited for every kind of job. Almost every type of job requires a basic minimum level of education. It also requires a person to have certain skills or abilities which will be necessary in order to carry out the duties on the job. It is also important that personality and interest so person must match with the requirement so f the job. We have already read about work, career development and will read here about vocational choice. Related to these is the aspect of one's adjustment to the work situation. We will also study in this lesson about vocational adjustment, i.e. job satisfaction and work motivation. It is also important to know about the

various work situations particularly the organizations, small and big like shops and factories / offices, and the organizational work culture.

OBJECTIVES

After reading this lesson, you will be able to:

- *Explain the need for educational planning and career and vocational choice;*

- *State the importance of considering ability and personality factors while making career choice;*

- *Explain the importance of interest in making vocational choice;*

- *Describe what is job satisfaction and what are the factors related to it;*

- *Explain the concept and theories of work motivation; and describe what an organization is and what organizational work culture is.*

28.1 Definition of Vocation and Career

Vocation is what you strive to do in your life. It is the career you want to be in. Career, on the other hand, is a series of jobs, even change of professions, in a lifetime of an individual. Career Choice also means the broad opportunities that exist for lifelong vocations. These vocations are set out in a framework of strategies moving toward personal goals.

The best careers are mainly in the healthcare and technology fields. In fact, the top 10 careers are all in these two fields. Dentist, Nurse, Pharmacist, Physician, Physical Therapist, Dental Hygienist for healthcare and Systems Analyst, Database Admin, and Software Developer and Web Developer for technology.

28.2 Educational Planning and Behavioral Management at Workplace

Without a basic minimum level of education you can only get jobs which require manual labour. For example, if you want to take a job in a government office, the minimum level of education is VIII class. With this level of education one can get the job of a peon or a chowkidar. In order to do a job, certain skills or abilities are also required. These skills can partly be acquired by education, partly by experience, and partly one naturally has some skills. For example, if one wants to take up a job of a singer, one must have some natural ability to sing besides straining.

General education in school and college serves the purpose of providing with certain basic skills like reading, writing and arithmetic skills. It also provides with knowledge about environment and surroundings, culture, and desirable attitudes and values in accordance with the expectations of society.

The goal of general education is to allow the development of positive attitude and respect for all types of work which are required to be carried out for the proper functioning of society. The term 'general education' is used to describe education from primary level

---

to college and it has different stages e.g. elementary, secondary, higher secondary, graduation and above.

Apart from general education, there are certain professional, technical and vocational courses which help in getting certain specific types of skills. Examples of professional courses are medicine (to become doctor), engineering etc. Examples of technical courses are that of ITI and other diploma courses, courses for electricians and mechanics etc.

The minimum level of general education which is required for getting certain jobs and for admission to certain courses for special training is 10th standard. Those with lower level of education can get manual work or unskilled jobs.

Entry to the jobs at the lower level in clerical, police and armed forces requires minimum higher secondary level of education. For a large number of jobs, the higher, secondary students have to do some advanced level courses in skill training for jobs such as radio and TV mechanic, refrigeration, air-conditioning and stenography.

For many other jobs, such as those through competitive examinations, the graduation (B.A./ B.Sc./ B.Com.) degree is required. These include the civil services (like I.A.S. etc.), clerical and officer level jobs in banks, management trainees in government under takings (e.g. Steel Authority of India, BHEL), and Insurance Agents (e.g. L.I.C., G.I.C. etc.). Graduation degree is also minimum requirement for admission to professional courses like management, teaching etc. You must now be having a clear idea of the importance of educational qualifications for different types of jobs. It is, therefore, necessary for you to plan carefully the type and level of educational qualification which you need for the job of your interest.

INTEXT QUESTIONS ❓

Choose the correct alternative:

1. After completing middle level (8th Class) education, a person can get which of the following jobs:

   a. Clerk

   b. Engineer

   c. Peon

   d. T.V. mechanic

2. After completing higher secondary (12th class), a person can get which of the following jobs?

   a. Clerk

   b. Police

   c. Armed forces

   d. All of the above

3. General education does not include:

   a. Elementary education

   b. High school

   c. Graduation

   d. Engineering

4. Graduation degree does not directly help in getting success in

   a. Competitive examinations

   b. Bank job

   c. Government undertakings

   d. Air plane pilot

28.4 Gender Sensitizations and Discrimination

28.4.1 What is Gender discrimination?

Gender discrimination is when you treat an employee unfairly because they are a man or a woman. For example, advertising a job and saying that it's more suitable for female applicants. It's against the law—specifically the Equality Act—to discriminate against someone based on their sex. You shouldn't just think of sex discrimination happening to women only. It can happen to men as well, and the law protects them in the same way. Likewise, a woman can discriminate against another woman because of her gender, just as a man can discriminate against another man.

Gender discrimination doesn't have to be intentional. It's not necessarily the only form of discrimination that one person faces either; racial and gender discrimination in the workplace can go hand in hand. And one shouldn't confuse it with sexual orientation discrimination, which is when you treat an employee unfairly because they're heterosexual, gay, lesbian, or bisexual.

Workplace gender discrimination comes in many different forms, but generally it means that an employee or a job applicant is treated differently or less favorably because of their sex, gender identity, or sexual orientation. Even though the words "sex" and "gender" have different meanings, laws against discrimination at work often use them interchangeably.

Sometimes workers experience discrimination because of their gender and something else, like their race or ethnicity. For example, a woman of color may experience discrimination in the workplace differently from a white female co-worker. She may be harassed, paid less, evaluated more harshly, or passed over for promotion because of the combination of her gender *and* her race.

Fig. 28.1 *Explains of Discrimination in the work place*

Some common examples of gender discrimination include failure to promote, unfair treatment, earning lower wages, being given less demanding assignments, and receiving less support from supervisors based on one's gender—all of which are illegal practices.

What would be an example of discrimination in the workplace?

Harassment by managers, co-workers, or others in your workplace, because of your race, colour, religion, sex (including pregnancy, gender identity, and sexual orientation), national origin, disability, age (age 40 or older), or genetic information.

- Additional examples of gender discrimination at work include women being:
- Paid less than men despite having similar job responsibilities.
- Evaluated or held to a different standard due to gender.
- Excluded from important meetings.
- Fired or demoted due to a pregnancy.
- Subjected to unwanted sexual advances.
- Gender discrimination and sex discrimination are exactly the same thing—and we're going to use both terms in this article.
- But what is gender discrimination? And what are the different types? We explain with examples from the workplace.

28.4.3 Types of Sex Discrimination in the Work Place.

There are four main types of sex discrimination in the workplace:

1. **Direct discrimination:** When you treat an employee unfavourably because of their sex.

2. **Indirect discrimination:** When you have a rule, policy or practice that applies to all employees in the same way but disadvantages some because of their sex.

3. **Victimisation:** When you treat an employee unfairly because they've made a complaint about sex discrimination, or they're supporting someone who has.

4. **Harassment:** When you engage in unwanted behaviour towards a colleague, related to their sex. Because of this unwanted behaviour, you make them feel upset, humiliated or degraded. Find out more about sexual harassment.

Examples of sex discrimination in the workplace

i) Direct discrimination

Susan sees a job advert for a 'salesman'. She's interested in a sales position but doesn't apply as she believes the employer only wants male applicants.

It's direct discrimination to only promote a job to male employees unless there's a specific reason to. For example, the employer needs a man to play Father Christmas. Susan could take her case to an employment tribunal for direct gender discrimination.

ii) Indirect discrimination

Radha, Radhik, Ravali, Swapna works at a call centre. Her employer tells her team that they are changing their shifts to finish at 5pm instead of 3pm. This disadvantages Jennifer as she will no longer be able to collect her children from school.

Radha, Radhik, Ravali, Swapna could complain about indirect gender discrimination in this situation. This is because the new policy, where all staff must work until 5pm, means that she can't pick up her kids. It disadvantages female employees who are their child's primary career.

28.4.4 Sexual harassment

A male co-worker joins SWAPNA's team and starts to make sexual comments and jokes towards her. She complains to her manager, who has a chat with the employee. He stops his behaviour for some time but then continues to say things that make Maria feel uncomfortable.

Swathi, Swapna could claim sexual harassment in this instance, as her male co-worker's sexual comments are upsetting her. And he doesn't stop making these comments even after he receives a warning from her manager.

28.5 Different Types of Career

28.5.1 Agriculture

- Crop Production & Management (C.P & M)
- Dairying (Dairy)
- Fisheries (Fish)
- Sericulture (Seri)
- Horticulture
- Seed production technology Soil science plant protection
- Water shed management soil conservation

28.5.2 Food and Natural Resources.

- Baking bakery items
- Cooking.
- Catering Technology

28.5.3 Architecture and construction.

- Construction of homes
- Constructions of building
- Home decorations'

28.5.4 Arts

● Photography, Artist, Painting.

28.5.5. Audio/ Video Technology and Communication

● Audio/ Video technician
● Computer technician
● Web technician

28.5.6 Business and Finance

● Accounting Taxation (A&T)
● Marketing Salesmanship (M&S)
● Office Assistantship (O.A)
● Banking Financial Services (B.F.S)
● Insurance Marketing (I&M)
● Basic financial services
● Export-import practices & Documentation
● Office management
● Industrial management
● Purchasing Store keeping

28.5.7 Engineering Technology

● Automobile Engineering Technician (A.E.T)
● Construction Technology (C.T)
● Computer Science & Engineering (C.S.E)
● Electronics Engineering Technician (E.E.T)
● Electrical Wiring & Servicing of Electrical Appliances (E.W&S.E.A)
● Rural Engineering Technician (R.E.T)
● Automobile Engineering Technician (A.E.T)
● Construction Technology (C.T)
● Computer Science & Engineering (C.S.E)
● Electronics Engineering Technician (E.E.T)
● Electrical Wiring & Servicing of Electrical Appliances (E.W&S.E.A)
● Rural Engineering Technician (R.E.T)
● Water Supply & Sanitary Engineering (W.S&S.E)

- Desktop Publishing & Printing Technology (D.T.P. & P.T.)

28.5.8 Home Science Courses

- Commercial Garment Designing & Making (C.G.D&M)
- Fashion & Garment Making (F&G.M)
- Hotel Operations (H.O)
- Pre-School Teacher Training (P.S.T.T)
- Health care & Beauty culture
- Catering & Restaurant management
- Institutional House keeping

28.5.9 Education and Training

- Pre-School Teacher Training (P.S.T.T)
- Government and Public Administration.
- Health Science.

28.5.10 Health & Paramedical Courses

- Dental Technician (D.T)
- Dental Hygienist (D.H)
- Medical Lab Technician (M.L.T)
- Multipurpose Health Worker (M) (M.P.H.W) (M)
- Ophthalmic Technician (O.T)
- Dental Technician (D.T)
- Dental Hygienist (D.H)
- Medical Lab Technician (M.L.T)
- Multipurpose Health Worker (M) (M.P.H.W) (M)
- Ophthalmic Technician (O.T)
- Physiotherapy (P.T)
- X-Ray Technician (X-R.T)
- Multipurpose Veterinary Assistant (M.P.V.A)
- Multipurpose Health Worker (F)(NEW) (M.P.H.W) (F) (NEW)
- Clinical Assistant
- Hospital Administration
- Information Technology.

28.5.11 Humanities & Others

- Computer Graphics & Animation (C.G.A)
- Tourism & Travel Techniques (T.T.T)
- Commercial Art

28.6 Career Development Activities

28.6.1 Job Rotation Activities

According to Patton & McMahon, 2001.Job rotation activities very useful to employee. These help the employee to become exposed to new activities that can help improve their growth in an organization. Being in one position can create a monotonous routine for the employee and this will likely result in stifled employee growth as they are not faced with any new challenges. This career development strategy is effective when an organization is trying to break monotony. The organization can break monotony by assigning the employee various job functions.

28.6.2 Mentoring Activities

Employees need inspiration from time to time and providing them support in form of mentoring activities can help them acquire some form of mentorship. A career development mentor should be assigned to the employees to provide this kind of mentorship for the employees.

28.6.3 Internship Activities

Internships are a great way to help employees build their careers. Internship activities can help employees develop leadership skills. They acquire new experiences and interpersonal skills that help them to become Employee expectation

Employees have certain expectations when they are employed into a new company. As the employee settles into the company, their expectations change with time. This can better be understood by looking at Maslow's hierarchy of needs. More assertive especially when handling issues to do with conflict resolution.

28.7 Advice for Career Development

i) **Find a mentor :** Who's willing to guide you and give you advice? This might be a teacher, coach, manager, family member or friend.

Identify your interests:

Identifying your interests can help you discover what career you want to pursue. For instance, if you enjoy animals, biology and medicine, you might consider becoming a veterinarian or a veterinary technician.

ii) **Choose a job you like:** you like or a job that makes you happy.

iii) **Pursue your ambitions:** Pursuing your ambitions might include choosing what career you want to select or choose. . For example, if you want to become a construction worker, you might try to get an apprenticeship or earn specialty certifications.

iv) **Try different things:** Trying different things is an essential part of life after graduation because it helps you learn about your likes, dislikes and talents. Consider trying new hobbies, classes, foods or skills.

For instance, if you decide to try cooking as a hobby, you might discover you want to pursue a career as a chef.

v) **Form relationships:** Try to make relationships with the people you meet after graduating from high school. This could include new coworkers, friends, managers or professors. For example, you might consider meeting with coworkers outside of work to develop your relationships with them. Maintaining these relationships can help you develop interpersonal and communication skills and may lead to new opportunities, such as jobs or internships.

vi) **Cooperation at workplace** is the best way to have a healthy relationship at work. It is about to have your balance and satisfy the business need to strive for excellence; it is all about people in the business.

Always keep in mind to be:

- Accountable - Everything is happening for a reason.
- Safe - Be safe and avoid conflicts.
- Honest - Honesty is the best policy.
- Supportive – Together we can!
- Cooperative – Cooperate together for excellence.
- Trustable - Trust and credibility matters!

28.8 Importance of Career

A job may give you a steady pay cheque short-term, but **a career gives you long-term financial security**, as it encourages you to build on your skills and continue learning in order to move up the career ladder.

Five Reasons Why Your Career Is Important In Life

- Career is a lot of your life
- It affects who you are at home
- It is a part of your identity
- It provides direction and purpose
- Work will define your social life

Try it your self

Write down three most desired vocations o f your choice in order of preference. Find out the minimum educational qualification required for each of these three vocations.

Each type of job or occupation requires a characteristic pattern of abilities and personality traits. For example, to be a successful architect you have to be original, creative, imaginative, systematic, practical, determined, sensitive, patient etc. Psychologists have identified certain types of personalities which are suitable for certain types of jobs.

Though no person will have exactly the type of personality which is described below, we still get a good idea of the suitability of specific persons for specific jobs. One way of understanding the relationship between personality characteristics and jobs is to consider the following categories:

i) **Realistic:** Persons of this type are energetic and physically strong. They have good motor coordination skills but lack verbal and interpersonal skills. They are, therefore, somewhat uncomfortable in social settings. They perceive themselves as mechanically in clined, and are direct, stable, natural and persistent. They prefer concrete to abstract problems and see themselves as aggressive. Such persons prefer occupations of following types: mechanic, engineer, electrician, crane operator, tool designer etc.

ii) **Investigative:** This category includes people who have a scientific bent – of -mind. They are usually task-oriented, prone to thinking and are not comfortable with people. They have a great need to understand the physical world and prefer to work independently. They do not like leader ship positions, but are confident of their intellectual abilities. These person schools evocations such as scientist, researcher, zoologist and psychologist.

iii) **Artistic:** Persons who are artistic prefer unstructured situations with maximum opportunity for self-expression. They are very creative especially in the area of art and music. They avoid problems which are highly structured and prefer living in situations which require self-expression related to art. Such persons prefer occupations of artist, writer, musician etc.

iv) **Social:** Such persons like to be involved with people and to working groups and occupy central positions in groups. They are often religious and have good language

And inter personal skills. They enjoy activities that involve informing, training, curing, helping etc. Vocational preferences of such persons include social work, school teacher, religious teacher, etc.

v) **Enterprising:** Persons of this type have verbal skills which are very effective for selling, dominating, leading etc. They have a strong desire to achieve organizational goals and economic gains and tend to avoid situations which require intellectual effort for long periods of time. They see themselves as aggressive, popular, self-confident, cheerful, social and have high energy level. Vocational preferences include business executive, politician, property dealer, stock broker, businessman, etc.

vi) **Conventional :** Such people prefer well-ordered environment and like systematic activities involving verbal communication or dealing with numbers. They avoid situations involving social dealing or physical skills. They enjoy power and material

possessions. Vocational preferences include banking, clerical jobs, traffic policemen, shop salesman etc.

These six categories described above will give a good idea about the relationship between personality characteristics and vocational choice. The categories given above are not to be taken as final. There are overlaps between these categories and most people will not fall exactly in only one of these. Never the less, this description captures the important relationship between abilities, personality characteristics, and vocational choice.

28.9 Will you be Able to do This Job?

Even though most of us have are as on ably good idea about our abilities and personality characteristics, we do not have complete or accurate picture. Psychological tests have been developed which help in preparing a profile (description) of an individual's abilities and personality characteristics. You can go to a psychologist/vocational counselor, and she/he will administer relevant psychological tests and provide you with an ability / personality profile and will also guide in making an appropriate vocational choice.

When you apply for jobs in different organizations directly or through competitive examinations, the organizations assess your abilities and personality characteristics with the help of certain tests. They already have a certain profile in mind which their experience has shown is suitable for the vacant job positions. These organizations obtain your personality profile and match it with their requirements and thus, judge your suitability for the job.

By now you must have got a clear picture of the importance of abilities and personality characteristics for vocational choice. For getting any job, you first require a minimum educational qualification but that is not enough. Certain skills, abilities and personality characteristics are equally import anything getting a job and being able to perform it effectively.

INTEXT QUESTIONS ?

Choose the correct alternative

1. Real is tic persons are not suitable for the following job

    a. Engineer

    b. Scientist

    c. Mechanic

    d. Crane operator

2. Social people are suitable for the job of

    a. School teacher

    b. Scientist

    c. Clerk

    d. Electrician

3. Artistic persons are not suitable for the job of

    a. Musician

    b. Writer

    c. Driver

    d. Artist

4. Enterprising persons are good at

    a. Selling

    b. Leading

    c. Dominating

    d. All of the above

5. Investigative persons are:

    a. Good leaders

    b. Similar to most people

    c. Scientific in their out look

    d. Dependent on others

6. Conventional persons are not suited for

    a. Social dealing

    b. System attic activities

    c. Power positions

    d. Job of a shop salesman

Try it Yourself

Think about your abilities and personality characteristics. Write them down and decide which of the six types of persons you are closest to.

28.11 Vocational Choice : The Emerging Perspective

After reading the less on up to this point, you would have realized the importance of education, abilities and personality characteristics in choosing one's vocation. Another important aspect in vocational choice, as mentioned earlier, is interest. For any person to carry out his/her job effectively, the person must have interest in that job. Interest is also very important for deriving satisfaction from one's job.

Generally, we have a good idea about our interests but often we are not very clear about all our interests. Psychologists have developed measures which help in identifying one's interests. These measures require you to indicate your choice for different types of activities. With the help of this, a psychologist / vocational counselor will be able to provide a clear picture of your interests.

Thus, in making a vocational choice, it is necessary for a person to be aware of the minimum educational qualifications required for that job, the abilities and personality characteristics appropriate for that job, and the amount of interest which the person has in that type of job. All these factors must be considered in making one's vocational choice.

Vocational planning should be done very carefully. You should first attain the minimum education level for the job of your choice. You should also go in for skill development training which will be useful for the kind of vocation you wish to pursue. You can take the help of a psychologist / vocational counselor in obtaining your ability and personality profile. Only after combining all these aspects, you should decide about your vocation.

You must also remember that your abilities and personality characteristics are not entirely fixed. They change with time and you can bring about a change deliberately through training and self-awareness in the desired direction. Interests also change with time. Also, you may find that many a times you do not have much interest in some job even though you are suited for it in all other aspects. But after being exposed to that job for some time, you may find that you have developed some interest in it.

INTEXT QUESTIONS ?

28.11

1. Which of the following are important for vocational choice?

    a. Interest

    b. Abilities and personality characteristics

    c. Educational level

    d. All of the above

2. Indicate which of the following statements given below are True or False:

    a. Interest and personality characteristics never change.   True/False

    b. Only educational qualification is important for making vocational choice.

                                                                        True/False

    c. Psychologists can help in profiling abilities and personality characteristics.
                                                                        True/False

    d. Any person can do any job.   True/False

28.12 What is Job Satisfaction?

Are you satisfied with your job or do you want to change your present job? While in a work situation it sometimes happens that we feel misfit in the situation or we feel dissatisfied with our job. What is there as on behind it? What is job satisfaction?

Job satisfaction is a positive emotional state that occurs when a person's job seems to fulfill his/her needs. It is not always related with the money factor-because some people

also work to satisfy their urge to work. Dissatisfaction in a job occurs due to many factors. Let us take them up one by one.

28.12.1. Factors Influencing Job Satisfaction

There are a number of factors which influence one's satisfaction in the job situation. They can be categorized under two broad headings: (i) Organizational Factors, and (ii) Personal Factors. Let us try to understand the min detail.

I. Organizational Factors

A major amount of our time is spent at the workplace. The place where we spend a lot of time should fulfill our needs to some extent. Some of the important factors related to the work place areas follows.

   i.   **Rewards :** Reward includes all incentives like raise in pay, perks, facilities and promotion. The promotion is a major factor in job satisfaction. An employee can only achieve job satisfaction and work better when he knows that he will get his dues and raise in salary in time.

   ii.   **Physical Working Conditions:** The physical working conditions like availability of necessary furniture, lighting facilities, and work hazards also play a major role in job satisfaction.

   iii. **Cooperation:** Cooperation and attitude of the staff members is also an important factor in the job satisfaction of the person.

II. Personal Factors

Whether the nature of the work is of interest to the employee-is a question, the answer of which tells about the level of job satisfaction of that person. The second category of major factors are personal factors. These are as follows:

   i.   **Personality Traits:** Some jobs are suitable only to a certain type of personalities. For example, a doctor or a sales person's job is such that they require regular contact with the general public. If they are shy in nature or cannot talk much, they will not be successful in their work setting which will cause dissatisfaction. While choosing for a job, one should see that he or she has those personality traits which are necessary for that job because matching of the personality traits with the job is very necessary.

   ii.   **Status and Seniority:** It has been found that higher a person's position within the organisation, the higher the job satisfaction level is reported.

   iii. **Life Satisfaction:** Whether the job which a person is doing is giving the person life satisfaction too? A person wants to establish or reach a goal in his life and it can be accomplished through the work which one is doing. It is other than the monetary part. For example, taking out publications or conducting researches etc.

28.15 Importance of Job Satisfaction

After reading about job satisfies action and the factors related to it, you may want to know why job satisfaction is important. Job satisfaction plays a major role in our occupational life. It affects a person's mental health, physical health, and output as described below

(a) **Mental Health:** If a person remains continuously dissatisfied with the job, the continuous tension leads to many mal adjustments in the behavior.

(b) **Physical Health:** Job satisfaction affects the physical health of the person. If a person is under continuous stress, he/ she will suffer from health problems like head ache, heart and digestion related diseases etc.

(c) **Output :** The output automatically increases with job satisfaction because when a person is happy with his job situation, he would like to put more effort in his work, which in turn will increase the output.

Work Motivation

Another phenomenon which is related to one's vocational adjustment is work motivation or in simple words, the driving force behind one's work. The success of our organization / institution depends large yaupon the worker's motivation. When the employees of any organization have high motivation, the output increases.

28.12.3 What is an Organisation?

An organization is a social unit which is formed with a specific purpose. It is made up of two or more people who work together on a regular basis in order to reach a common goal or set of goals. Thus, in all organizations people work together to reach specific goals, given below are some examples of organizations.

i. **School:** Schools are organizations where people (teachers and students) work together to impart education to the students.

ii. **Bank:** Bank is an organization where employees work together to keep them one of the people safely and also help people in money matters.

iii. **Police Station:** Police Station is an organization where employees (police men) work together to provide security to the people.

iv. **Insurance Company:** Insurance companies like LIC and GIC are organizations where employees work together to offer financial security and protection to people of their goods and their lives.

v. **Colleges and Universities:** These are organizations where people work together to give student straining in specific subjects (e.g. Mathematics, Biology etc.) and specific professional skills (e.g. Doctor, Engineer).

vi. **District Courts & High Courts:** These are organizations where employees work together to help people settle their disputes and conflicts and for giving punishment to criminals. The values, beliefs, assumptions, expectations and norms (rules) which

are considered important in an organization constitute what is called the culture of organization. When an individual joins any specific organization, heroes he has to learn and socialize with reference to the culture of that organization

INTEXT QUESTIONS **?**

1. What is an organization?

    _____

    _____

    _____

2. What do you understand by the term organization a culture?

    _____

    _____

    _____

3. Give three examples of organization which are not mentioned above.

    _____

    _____

    _____

WHAT YOU HAVE LEARNT

- Work is a very important part of one's life. Not every person is suited for every kind of job.

- Without a basic minimum level of education, only jobs which require manual labor are available.

- In order to do a job, certain skills / abilities are also required.

- A part from general education which is from primary to college levels, there are certain professional, technical and vocational courses.

- A characteristic patter notabilities and personality traits are required for each job. Certain personality types like realistic, investigative, artistic, social, enterprising and conventional have been identified.

- Job satisfaction is a positive emotional state which occurs when a person's job seems to fulfill his/ her needs.

- Job satisfaction in fluencies the mental and physical health of workers and increases output.

- Work motivation is the force in which the worker feels to work more efficiently in the work situation.

- Organizations are places where people work together to reach certain goals.
- When an individual joins any specific organization, he / she has to learn about the culture of the organization, which entails the values, beliefs, assumptions and expectations etc. of the organization.

✐ TERMINAL EXERCISE ✐

1. What are the different categories in which the personality characteristics have been divided?

2. What are psychological tests? How can they help in vocational choice?

3. What is job satisfaction?

ANSWERS TO INTEXT QUESTIONS ✍

28.1

  1. (c)   2.(d) 3.(d) 4.(d)

28.2

  1 (b)   2. (a)   3. (c)   4. (d)   5. (c)   6. (a)

28.3

  1.(d)   2. (a) False (b) False   (c) True   (d) False

28.4

  1. It is a social unit created to active a specific goal.

  2.

  3.

  4. The beliefs, expectations and norms held by the organization.

STRESS AND YOUR HEALTH

INTRODUCTION

According to World Health Organization considered stress as Health Epidemic of 21st Century. Stress is part of day-to-day living Modem day life has become more and more complicated due to a number of factors such as pressure of work, technological innovations, intense competitiveness, inflation, unemployment, changes in value system. This has resulted in stress pervading every sphere of life, which can have adverse impact on health. Stress may be understood as a state of tension experienced by individuals facing extraordinary demands, constraints or challenging situations that can lead to emotional imbalances, thus disrupting the body's homeostasis. You have to catch your train at 8.00 a.m., but your auto is in a traffic jam. You just have 20 minutes to travel 5 kms. Your heart beats fast; you are sweating and grinding your teeth, looking frequently at your watch, scolding people, unable to think clearly. The stress experiences may not be necessarily harmful. However, stress is not always unpleasant. Mild forms of stress can act a motivator and energizer Stress is the spice of life and the absence of stress makes life dull, monotonous and spiritless.

This type of situation is a stressful situation when a pressure is built upon you to reach your destination. The moment your each the station, board the train and take your seat, you tend to take along sigh "ah" and then you feel as sort of relief. This relief makes you realize the tension you wherein. This kind of tension is often the cause of stress. These days the life has become fast and the pressures are so many that we are in a stressful situation in some or the other way. Also, we are not able to manage our stresses effectively. So one should know what the sources of stress are and how to deal with them. In this lesson, we shall study about the concept of stress, its sources, and reactions to it.

OBJECTIVES

After studying this lesson, you will be able to:

- *Explain what is stress;*
- *List various types of reactions to stress;*
- *Identify and name various sources of stress; and*
- *Explain the effect of stress on health*

29.1 Meaning and Concept of Stress

Stress means pressure and a nun easy experience. The causes of stress may be self, other individuals around you and your environment. Let us study how stress is caused.The

term stress began as a variant of the term 'distress' in the fourteenth century. The medieval term actually meant physical hardship, pain, torture and starvation. However, the use of term stress in modern day world is different. The stress is generally used to describe a variety of negative feelings and reactions that accompany threatening or challenging situations.

The tern stress starts in the fourteenth century. The medieval term actually meant starvation. The stress generally used to describe a negative feeling.

29.1.1. Types of Stress

Suppose you have not studied till the last date of your examination, and suddenly you try to study everything on the previous day of your exam. You are not able to learn and also you are not confident whether you have covered each topic or not. The tension mounts. What is this situation? You have put yourself in stress.

Stress need not necessarily always be negative. For instance if you are not anxious be for emanates to reexamination you will not prepare for it seriously and your performance may not be good. A little bit of stress helps us by motivating to perform well. Thus stress has both positive and negative dimensions. The positive aspect of stress is termed as "**eu stress**" meaning stress producing positive results. The negative dimension is called "**distress**".

i.   **Stresses caused by environment:** Suppose your crop is ripe and ready for harvest, suddenly continuous rain makes you helpless sand worried. Your stress is due to nature or environment. The pollution of air and water or crowding is also an example of environmental stress.

ii. **Stresses caused by other persons:** In every way you are due for promotion, but the management of your organization fails to promote you. Here yours tress is due too theirs.

As discussed before, stress need not necessarily always be considered negative. The positive aspect of stress which is termed as "eustress" produces positive results. Badminton players practice for hours together before a match. Practice is stressful but it produces good results. The famous scientist who invented bulb, Thomas Alva Edison, failed more than 1000 times, finally he succeeded. He was experiencing eustress.

The negative dimension of stress or distress softens causes unpleasantness and leads to poor performance. Radha is a bright girl, who always used to get good marks. Her marks came own drastically due to her father who comes home drunk and beats her mother. She is worried, tense and cannot concentrate on her studies which resulted in getting low marks in the examination. Radha is the victim of distress.

29.2 Signs and Symptoms of Stress

In day - today's demanding world, we tend to get stressed out frequently and we may live in heightened state of stress most of the time. Yet many of us do not take notice or are in denial until stress builds up and symptoms develop which can lead to serious health hazards. Hence, it is important to be aware of signs and symptoms.

29.1

Give short answers to the following:

1. What is stress?

    _____

    _____

    _____

2. Name different types of stress.

    _____

    _____

    _____

29.3 ▶ Reaction to Stress

Shyam, a young unemployed person, is lonely at home most of the time. He often dreams about good things in life and wants to achieve them. But till now he is not able to get a good job. Previously, he had worked in a small company, but left it as there were problems with his boss. Shyam feels depressed, unworthy and irritable most of the time. To overcome loneliness and depression, he has taken to drinking habits.

Sita is a good student. She wants to excel in the class. Her parents and teachers expect a lot from her. Due to high fever which she caught during the weekend holiday, she is not able to complete the given assignment on time. As the last date is fast approaching, Sita feels guilty, anxious and is not able to concentrate on the assignment.

In both of the above examples, changes (physical and mental) can be seen which are caused by stress. The reactions to stress can be classified into the following categories: physiological, affective, cognitive and behavioral. Let us know more about these reactions.

(i) **Physiological Reactions:** These reactions refer to the physical functions of the human body which get affected under stress and do not work in the informal routine. The reactions which commonly occur in an individual in relation to stress are:

● Rapid pounding of heart and pulse,

● Muscles becoming tense,

● Dryness of the throat or mouth,

● Feeling sick in the stomach,(Colloquially it is referred to as "butter flies in the stomach"), and Trembling etc.

Generally, it is the vulnerable and weak bodily system that gets affected by stress first. The resulting symptoms are therefore called psychosomatic reactions. For instance, if the

respiratory system is weak, stress affects it and that may lead to asthma. Similarly, if the digestive system is vulnerable, it becomes the target for the attack of stress. It usually results in ulcer. Thus, almost all the systems can very well reflect the impact of stress by coming out with various symptoms like blood pressure, wheezing, stomach ache, headache, pain of the joints, stuttering etc.

(ii) **Affective Reactions:** These reactions are emotional responses. People suffering from stress get affected quickly and manifest symptom so anxiety, depression, anger, irritability and having poor control over the emotions.

(iii) **Cognitive Reactions:** This category of reactions to stress includes the following:

- Poor concentration,
- Inability to learn anything new with same speed and efficiency,
- Forgetting,
- Inability to take proper decision that too in time,
- Confusion,
- Gate crashing of ideas, and
- Negative or unhealthy thoughts

The physiological, affective, and cognitive reactions are covert in nature. In other words, they take place within the individual but the behavioral reactions are overt which means that they take place outwardly. They include behaviors like:

- Crying,
- Talking in coherently,
- (c)Irrelevant speech,
- Hitting, and
- Bashing or banging etc.

29.5 Diverse Reaction to Stress

Physiological Reactions	Affective Reactions
Rapid heartbeat and pulse	Anxiety
Muscles becoming tense	Depression
Dryness of the throat or mouth	Anger
Trembling, Nausea etc.	Frustration, hopelessness and irritability
Cognitive Reactions	**Behavioural Reactions**
Poor concentration	Crying
Inability to learn anything new	Talking in coherently
Forgetting	Irrelevant speech
Unable to take proper decision	Hitting
Confusion	Overeating
Negative thought	Substance abuse

29.6 Stressors

Peter is waiting in a roomful of fresh graduates to be interviewed for a job in a well reputed company. His academic performance is not outstanding but he hopes to get the job through luck and by his personality. He feels that his parents and his sister must be expecting him to get this high-prestige, high-paying position. He is very nervous. His mouth is dry, his stomach feels tight, his heart is pounding and perspiration has begun to sock through his new suit. The stressors or causes of academic stress are from many sources in study related areas such as academic grades, admission to desirable academic institutions, forced change of schools, final board exams, entrance exams for admission in professional courses (EAMCET, PGCET, RET, PGE at UG PG and research levels),

Stressors are events and situations (such as bus rides or interviews) to which people must react. Let us see some of the common stressors that people experience. These stressors are perceived as mild and motivating for some and moderately or severely stressful for others. They affect well being of people. The common stressors include the following:

    (a) Boredom, loneliness

    (b) Frustration

    (c) Conflicts

   i.   Pressures to meet deadlines

  ii.   Competition

 iii.   Increased responsibility

  iv.   Exertion due to travel or any physical / mental work

   v.   Divorce, separation and death of loved ones

  vi.   Trouble in inter personal relations such as parents, in-laws, friends, boss, servants etc.

 vii.   Loss of one's self-prestige, image or status

viii.   Losses in one's profession or studies or business etc.

  ix.   Retirement

   x.   Lack of freedom and privacy

  xi.   Sexual difficulties and guilt feelings

 xii.   Changes in the financial status

xiii.   Change of residence

 xiv.   Payment of loans

Stress reactions are the physical, psychological and behavioral responses (such as nausea, nervousness and fatigue) which people display in the face of stressors.

Mediating factors such as the circumstances in which stress or stake place and each person's characteristics makes people more or less sensitive to stressors.

Every one of us experiences stress in some or the other way at home or at work place. But stress to clearance varies across individuals. We can always reduce the stress. Stress can act as a promoter of self-understanding. We don't actually know what we can do, unless we have to do it. For example, each time we clear a subject in exam, we gain self-confidence that we can also pass through this kind of situation. Sometimes experience of disappointments and failures become blessings in disguise because were allies that we were pursuing the wrong goals or the task came to us so suddenly that we were not ready for it.

With too little stress, we become lazy and with too much stress, we become tense and pronto illness. We should know how to manage and handle stress in some manner so that we can make most out of the situation.

Try it Yourself

(A) Think about and write down the frequently experienced stressors in your life and indicate what type of stress reactions do you show / display?

<center>Stressors   Reactions</center>

(B) Do it yourself: Given below are some items from the revised version of the daily hassles (troubles) and up lifts (pleasures) scale. The respondent is asked to give ratings (on 0-4) of the degree to which each item was a trouble or a uplift that day. Rating several days or weeks can give a picture of your stress or sand pleasures and may allow for a better understanding of the role of daily hassles.

How much was this item a trouble for you today?		How much was this item pleasure for you today?
0 1 2 3 4	Your child(ren)	0 1 2 3 4
0 1 2 3 4	Time with family	0 1 2 3 4
0 1 2 3 4	Fellow workers	0 1 2 3 4
0 1 2 3 4	Your hard work	0 1 2 3 4
0 1 2 3 4	Meeting deadlines	0 1 2 3 4
0 1 2 3 4	Having enough money	0 1 2 3 4
0 1 2 3 4	The weather	0 1 2 3 4
0 1 2 3 4	Cooking	0 1 2 3 4
0 1 2 3 4	Home entertainment	0 1 2 3 4
0 1 2 3 4	Amount of free time	0 1 2 3 4

Now you can identify your own stressors and add to the list above. Continue to do the ratings as done previously.

29.7 Source of Stress

Sources of stress can be classified into four categories, which are as follows: Family, Occupational / Educational, Personal and Environmental. Let us understand these sources in some detail.

(1) **Family:** If you are experiencing stress because one of your family members is seriously ill, then the source of your stress is family. The other familial stresses include financial difficulty, quarrel between spouses (husband & wife) etc.

(2) **Occupational / Educational:** For a student stress may be the examination, stay in hostel etc. A teacher who is not teaching well may add to the stress. Poor pay, over demanding boss, uncooperative co-worker and subordinates, poor working conditions are some of the occupational stressors experienced by the people.

(3) **Personal:** Personal stresses are many. A personal stress is often caused by feelings of in adequacy, inferiority and insecurity. "My memory is poor," "I am dark", "I am fat", "I am not good looking", "I cannot speak English well", "I am not intelligent", "I am not talented", "I am poor, I have poor health", "I am unemployed / underemployed", are some of the thoughts and attitudes making one feel in adequate and insecure and suffer from stresses.

(4) **Environmental:** Unexpected natural calamities such as fire, famine, earthquake, tsunami, floods etc. Are environmental stressors. Crowd, poor sanitation and pollution are also sources of environmental stress.

(5) Psychological/Personality factors as sources of stress Individuals with certain personality characteristics cope easily with stress than others and do make them less vulnerable to illness. In the research studies, three personality types that have been reported extensively in relation to stress are Type A and Type B, behaviour, hardiness and personal control. Persons with Type –A behaviour pattern are characterized as being excessively competitive, hard-driving, impatient and hostile. Type B behaviour pattern persons on the other hand are commonly relaxed and ongoing. The researchers during 1950's (Friedman & Rosen man) have found that certain components of Type A, behaviour are more precisely linked with coronary risk. Especially people who are hostile outwardly or who shows anger inward, known as "hot reactors", are more likely to develop heart disease than those persons with less angry. Their hearts race, breathing quickens and muscles tense up. Hardiness. It is a personality style characterized by a sense of commitment and of control.

6. Work Stress:

(1) Stress is very common in work place. Stressor could be from threatening environmental conditions and lack of infra-structural facilities. In addition to this, personality disposition of an individual, threat from superior staff, feelings of absence of identity and recognition etc. have significant impact on performance, absenteeism and result in aggressive behavior and withdrawal from social life, In the work area, situations that are likely to cause stress are those that are unpredictable or uncontrollable, uncertain, ambiguous, or unfamiliar or involving conflict, loss of performance

expectations. Stress may be caused by time limited events, such as the pressures of examinations or work deadlines or by ongoing conditions, including family demands, job security, or long commuting daily travel. The work place is an important source of both demands and pressures causing stress. Those that are intrinsic to the job include: long hours of work, work overload, time pressures

Try it Yourself

Identify your stress in various areas and fill up the blanks with your own stressors.

Family

(1) Finance

(2) Illness of family members

(3) Discord between family members

(4) ⸻⸻⸻⸻⸻⸻

(5) ⸻⸻⸻⸻⸻⸻

(6) ⸻⸻⸻⸻⸻⸻

Occupational / Educational

(1) Poor pay

(2) Poor work condition

(3) _____

(4) _____

(5) _____

(6) _____

29.8 ▸ Street and Health

Indications are there that 75% of human diseases are caused by the stress experienced by people. During stressful period, anxiety and nervousness are quite common symptoms. When these become intense, phobia may develop. A phobia are fresco irrational fear over an object, person, or an animal or situations. The person feels un duly anxious when he/she comes across a phobic situation and hence always tries to avoid them. Some of the common phobias are:

1. Social phobia—fear of addressing public audience (eg. Stage fear).

2. Claustrophobia—fears of closed places.

Anxiety refers to a vague unpleasant feeling of impending threat and danger. A person with severe anxiety will always be worried, unclear, confused and indecisive. Sometime Sex, Successive anxiety may lead to speech problems like stuttering and stammering. Urinary problems like bed-wetting are commonly seen among children.

Stress and the Immune System

In the course of our everyday life, every one of us is exposed to various germs and viruses but we do not fall ill. This is because we have got a protective mechanism inside our body which is called the immune system. But stress can weaken this immune system and this can make us victim of many diseases. If the stress is for a shorter period there is not much damage, but if the stress prolongs, it results in serious illnesses such as cancer, heart disease, headache, asthma and peptic ulcer. It is found that individuals under stress are more likely to catch cold than individuals who are not under stress. This is attributed to the fact that intense stress reduces body's immune system, thus making the person easily vulnerable to infections.

29.9 Stress and Health Problems

It is an accepted fact that certain cardiac problems like hypertension, angina and heart attacks are caused due to emotional strain the person undergoes. Such emotional stress caused may be due to frustration, intense anger, fear, depression or shock.

Eating disorders can also be caused due to preoccupation with stressful situations. Sleep disorders can also occur due to stress. Such persons have difficulty in going to sleep or experienced disturbed sleep or not getting sleep at all (insomnia). A person who is said to frequently experience intense emotions such as anger, jealousy, hatred, fear, panic often complain about ulcers. Intense fear or guilt can also lead some to sexual problems.

The most common stress related health problems are cold and headache. Scientists say that there is no specific medicine for common cold and tension headache. They occur when an individual undergoes stressful experiences. They may vanish under pleasant and happy situations. Pills for killing pain and cold give only temporary relief. Hence, it is necessary to know the root cause of stress for permanent solution for these health problems. For example a student might get head ache whenever he is asked to give a test/ exam.

Psycho somatic diseases like peptic -ulcer, asthma, essential hypertension (high BP) are also caused by stresses. You would have known that many die due to heart attack ata younger age. Those were Mr. Victims of stress.

The combination of repeated stress and the weakness of particular system leads to psychosomatic diseases. For example, a person gets ulcer, when under stress his stomach (digestive system) becomes weak. These people also do not express their emotions outwardly. For example, if a person gets angry he musts how it out in an appropriate way but if he keeps within himself repeatedly, he is likely to get ulcer. He should be asked to learn the proper means and ways of expressing emotions outwardly for maintaining good health.

The above includes o me of the commonly reported stress related problems. They are experienced by the individual from mild or to moderate levels. A less often occurring, severed is order is known as post traumatic stressed is order (PTSD). The symptomms include anxiety, apprehension, chronic tension, sleep disorders like in so mniaor sleepless nights, nightmares, withdraw all behavior etc. This disorder occurs when a person experiences overstress after a traumatic life threatening experience like accidents, being victimized either physically and mentally as in rape or sexual harassment, death of near and dear ones etc.

Stress Relief: In many severe case so experience of intense stress, an individual must consult the psychologist for immediate help or be institutionalized for ascertain period of time. Mild to moderate stress can be easily relieved through different way such as : regular physical exercise, relaxation, meditation, thinking positively, seeking social activities which are relaxing and pleasurable or following certain management techniques like time–management, stress reduction programmers etc. Medication such as stress drugs must be used only in severe cases and under medical supervision.

29.10 Stress Management or Coping Strategies

Tips for Efficient Coping are a very complex process that varies according to many variables such as the situation, the evaluation of the situation, and the resources available.

- Be happy
- Feel Happy
- Be positive!
- Be Optimistic
- Be Organized
- Be Assertive
- Be objective
- Accept yourself
- Make connections
- Deal effectively with mistakes
- Deal effectively with successes
- Develop self-discipline and control

29.11 Relaxation

The key to all forms of relaxation is sustained passive simple focus, the opposite of active, goal-directed planning, effort, and appraisal we use to succeed. The key to relaxation is sustaining attention while diminishing overt behaviour and covert or cognitive activity. To elaborate, all forms of relaxation, both secular and spiritual, involve the basic attention, the act of sustaining passive simple focusing. Sustaining, uninterrupted, the state of passive simple focus is made easier by practicing a formal relaxation technique. Research has shown that all forms of relaxation lead to following states of mind or relaxation states (Smith, 1999). Sleepiness (feeling "drowsy, napping").

- Disengagement (feeling "distant, far away, indifferent").
- Physical Relaxation (feeling "physically limp, warm, and heavy").
- Mental Quiet ("Mind is silent, quiet, free of thought").
- Mental Relaxation (feeling "at ease, peaceful") Strength and Awareness

Psychology - Stress and Your Health

- (feeling "energized, confident, focused, clear, aware").
- Joy (feeling "happy, joyful; having fun").

29.12 Autogenic Training

German psychiatrist Johannes Heinrich developed Autogenic training (AT) in 1932 AT is a relaxation technique used to relax body using our mind's ability. It has been frequently used in clinical practice to treat clients with various psycho-physiological problems like tension, headache, migraine, and moderate levels of hypertension, coronary heart disease, bronchial asthma, somatoform pain disorder and anxiety disorders. In healthy individuals, AT results in personal growth and development, increased knowledge of oneself, more effective adjustment and prevention of ill-health. Auto means 'self' and genic means 'being so autogenic is a way of 'being yourself. Autogenic means self-generating or produced from within. This involves inducing a relaxed feeling of warmth and heaviness throughout the body on your own by saying various verbal phrases aimed at encouraging physical and emotional calmness. It is a form of self-hypnosis resulting in restoring homeostasis in the body.

AT results in

- Reduced muscle tension in the body:
- changed style or way thinking;
- changed content of thinking.

29.12.1 Requirements of autogenic training:

Autogenic training teaches the body and the mind to relax. It is based on four requirements. 1. Reduced external stimulation, i.e., a quiet environment with dim lighting.

An attitude of passive concentration, i.e., a state of mind which is relaxed, non-effortful and not concerned with the end result. This means not bringing or making any changes, rather, just allowing the exercise work. If, while engaged in passive concentration. distracting thoughts enter the mind, they can be ignored or gently dismissed. Thoughts which carry insightful images, however, can be seen as a valuable product of the exercise Passive concentration is a key requirement in other approaches such as meditation and progressive relaxation.

The repetition of relaxation-inducing phrases based on six main themes: a heaviness in the arms and legs, b. warmth in the arms and legs, calm and regular heartbeat d. calm breathing, e, warm solar plexus, f, cool forehead. These phrases are repeated in a specific pattern to emphasize their effect and to draw the client's attention away from the external environment. Suggestions of heaviness can be strengthened by images of lead, and those of warmth by images of sunshine or warm water (Rosa 1976). The phrases may be repeated in the following pattern:

- I am completely calm (once)
- My right arm is heavy (six times)
- I am completely calm (once)

- My right arm is warm (six times)
- I am completely calm (once)
- My heart beats calmly and regularly (six times)
- I am completely calm (once)
- My breathing is calm and regular... it breathes me (six times)
- I am completely calm (once)
- My abdomen is flowingly warm (six times)

INTEXT QUESTIONS ❓

29.2.

1. **Answer the following as either true or false:**

    a) Urinary disorders like bed-wetting occur only due to stress.　　True/ False

    b) Stuttering and stage fear mainly occurs due to anxiety and nervousness.

    　　　　　　　　　　　　　　　　　　　　　　　True/ False

    c) Common cold generally occurs due to reduced immune system that is constantly exposed to stress prone situations.　　　　　　　True/ False

2. Mention some of the health disorders (both physical and mental) that are caused due to stress.

3. In what way can one over come every day stress problems?

ANSWERS TO INTEXT QUESTIONS ✍

- ❐ Stress is a kind of internal pressure caused by either internal or external forces. Generally it is because of interaction of both internal and external factors.

- ❐ Both low and high levels of stress are not helpful for the highest performance which an individual is capable of, only them overate level of stress results in peak performance.

- ❐ Stress has both positive and negative consequences. If it is positive it is known as "eu stress". The negative stress is known as "distress".

- ❐ Reactions to stress are physiological, affective, cognitive and behavioral in nature.

- ❐ Stress that is experienced at the work place is called occupational stress. It occurs due to factors liked is crepancy between individual and organizational goals, poor cooperation, in coordination, unhealthy competition among workers, role ambiguity, role conflict etc.

- ❐ Stress occurs in everyday living for every one of us. No tall stress reactions lead to disorders.

- Some of the common stress ors include boredom, physical exertion, losses, frustrations, conflicts, meeting deadlines, intense noise, etc.

- Some of the symptom corrections of stress are muscular tension, body pain, increased heart beat, dizziness, nausea, sweating, inability to relax, depression, distractibility and withdrawal, etc.

- Some of the common stress related disorders are stuttering, stammering, bed-wetting, stage fears, depression, phobia, heart attacks, and hysterias.

- Ways to combat stress are to do physical exercise, mediation, doing pleasurable activities, seeking professional help and following stress relieving management programmes like time management, learning to think positively, etc.

❧ TERMINAL EXERCISE ❧

1. What do you understand by stress? Give an example.

2. Note down the different reactions to stress.

3. List the sources of stress.

4. Write a short note on the various stress ors that you know.

ANSWERS TO INTEXT QUESTIONS

29.1

1. Internal pressure caused by integral or external factors.

2. Eu stress, distress.

29.2

1. (a) False   (b) True   (c) True

2. Peptic ulcer, asthma, high B.P., Cold, Upset stomach By exercise, relaxation, time manage

STRESS MANAGEMENT AND WELLBEING

30

INTRODUCTION

The reality of life is that it is filled with much stress, and it is all around us. At the same time, life has given us options and choices to manage stress to enhance our well-being. Up until now, we have studied how stress affects our health. In the previous chapter, we learned the definition and factors affecting stress and its relation to health. This chapter deals with the concepts of stress management and coping strategies. It also deals with improving the well-being of the individuals. We can manage our stress levels and improve our well-being with the proper scientific approach. Stress management training is an umbrella term for programmes that teach participants to cope with and manage stress.

OBJECTIVES

30.1 What is Coping

Coping is defined as the thoughts and behaviours we use to manage stressful situations. Coping is a dynamic process. It is not just a one-time action. Coping involves a set of responses over a period whereby there is a repeated interaction influencing with a person and the environment. So sometimes, more than one attempt is needed to cope with the stressful situation; instead, multiple attempts might be required. Coping is not automatic; we must learn skills to manage stress better. Coping requires active efforts from the individual to manage stress.

30.2 Factors Influencing Coping

Psychologists Lazarus and Folkman, proposed a number of personal resources, like excellent health, optimistic beliefs, socioeconomic resources, a sense of personal control, social skills, and social support that could aid people in managing the demands of stressful circumstances. **Social support** includes a range of financial and emotional aid from others. For example, a student struggling to understand mathematics can take support from his educated family members to make him/her understand the concepts. Other examples could be that a relative might support us during the financial crisis by lending money, or when we are sad, there might be a best friend to console us. Research shows that good social support improves the health and people with illness copes better with adequate social support.

Social support may also assist individuals in developing confidence in their capacity to cope with difficult circumstances.

Personal control is the conviction that one can influence some of life's events. It means a feeling of autonomy over and taking charge of our life. For example, a person with a good sense of personal control will be proactive in taking care of his health by exercising and not smoking because he/she thinks their health is in control. Similarly, a student who feels a sense of personal control studies for the exams with an adequate plan.

Another factor influencing our coping is the sense of **optimism**. Do you anticipate more positive than adverse events in your life? If you anticipate more good things, you are an optimist. If you expect more negative things, then you are pessimistic. Pessimists go through more emotional pain than optimists do. Optimistic people don't mean they are always in a good mood, but it is a person's general *belief* that good things will happen to them in life. These optimistic beliefs significantly influence how we cope with stress. The optimistic beliefs will encourage and motivate individuals to actively cope with stress. When people are sure that good things will happen, they are more inclined to persevere in pursuing significant goals in the face of stress and setbacks.

30.3 Types of Coping

Coping strategies are categorized in many ways. Two main types of coping are Problem-focused coping and Emotional coping. The goal of **problem-focused coping** is to make an effort to change the stressful situations that are damaging, posing a threat to, or challenging the person. **Emotion-focused coping** involves trying to regulate emotions brought on by a stressful event. To deal with stressful events, most people employ both problem-focused and emotion-focused coping strategies. Problem-focused coping will be helpful when there is a solution to the stressful condition. Emotion-focused coping will be helpful when there are few solutions to the stressful condition. For example, Problem-focused coping techniques, such as taking immediate action or asking for assistance, are advantageous for issues at work. Emotional coping may be used when a risk to one's health must be tolerated but is not open to a specific action.

Overall, circumstances, where actionable solutions are available will favour problem-focused coping, whereas circumstances where actionable solutions are less likely to be available willfavour emotion-focused coping. Problem-focused coping examples are Studying for future exams, planning a budget to save money, solving a dispute by speaking with a friend, and requesting more time from the boss to finish an assignment. Examples of emotion-focused coping are Writing in a journal, Exercising, watching a good movie, listening to good music, Praying, meditating etc. in this process, we do not tackle the problem. However, we try to manage the emotions coming out of stress.

Problem-focused coping	Emotion-focused coping
- Help-seeking from others - Direct action - Information seeking - Plan for problem-solving - Increased activity - Physical exercise - Logical analysis	- Venting - Praying/ meditating - Distractions/ redirecting attention - Humour - Taking alcohol/smoking (negative coping) - Denial of the problem (negative coping) - Positive reappraisal - Wishful thinking/ fantasies - Spirituality

(**Note**: these are some examples; however, there are still many ways of coping strategies)

There is another critical coping style called **Proactive Coping.** In this coping, People foresee upcoming stressors and take proactive measures to prevent them or lessen their adverse effects. Some of the positive outcomes of effective coping are:

- minimizing or getting rid of stressors

- accepting or adjusting to unpleasant events or situations

- preserving an optimistic view of oneself

- preserving the emotional balance

- maintaining fulfilling connections with other people

- improving one's chances of recovery if they are sick

- keeping both physical and mental health intact.

INTEXT QUESTIONS ❓

2

1. Define copying and explain types of coping.

2. Give example of problem found copying and emotion found copying?

3. What is mindfulness meditation?

30.4 Proactive Coping Methods

Several proactive coping methods will help us become immune to stress. These methods will reduce the potential for stress.

a) Enhancing social support

Whenever there is a difficult time, we all seek help from others. Social support is beneficial not only when pressures arise but can also help prevent issues from occurring in the first place. For example, a newlywed's couple might receive help from both families to adjust to the marriage. Many elderly people who have social support from their families do not feel lonely. By becoming a member of local organizations, including social, religious, particular interests, and self-help groups, people can improve their capacity to provide and receive social support.

b) Managing Interpersonal Problems

Conflicts with other people are some of the stressors that are most problematic. Some of the conflicts can be avoided by being *assertive.* Expressing one's thoughts and preferences directly without using intimidation or insults against another person is a sign of assertiveness. Some people who *aggressively* express their needs will increase the conflicts rather solving them. *Unassertive* people tend to be exploited by other people because they always hesitate to express their needs. In order to effectively and constructively advocate for themselves and to avoid or reduce stress, assertiveness training teaches people how to strike a balance between Unassertive and aggressive behavior.

c) Improving One's Personal Control

People who lack a sense of personal control will become helpless during stressful times. For example, a person who is ill and lacks personal control might not take the medications saying, "Oh what's the point now? What's the point of doing exercise now?". Feeling a sense of control in our life is essential to take proactive coping. It will enhance our optimistic beliefs and reduce our helplessness. Personal control can be developed from early childhood onwards. Parents, teachers, and other carers can show children love and respect. They should be given a stimulating environment, praised and encouraged for their accomplishments, and realistic expectations for behaviour and performance. Let them understand the realistic goals as challenges rather than threats. In elderly people, encourage them to take small activities which they are capable of to enhance the sense of personal control and autonomy in their lives.

d) Improving self-organization

People frequently experience tension when they realise they won't have enough time to complete the day's tasks. For example, we might search for the bike key before going to the office and feel tense when we do not find it. If the bike key is placed in a regular key holder, we can avoid the tension of not finding it at the last moment. We need to organize our world to function effectively without significant stress. This can be done in various ways, such as using a to-do list, allocating specific locations for different items, or effectively organising your time. Having a well-organized life lowers stress, save time, and frustration.**"Time management"** refers to a crucial method for scheduling one's time. Time management has three elements: set goals, make to-do lists, and lastly, set up a schedule for the day. The goal setting should be reasonable and obtainable. The goals should be *specific, achievable, measurable and realistic and have a time frame* to achieve them. It

is called with an acronym called " SMART" goals. The goal setting should have long-term and short-term goals. For example, a long-term goal could be to become a psychologist. And the short-term goal can be improving grades in the ongoing course to secure a better seat in the prestigious university. The second component is making daily to-do lists with priorities listed and keeping the goals in mind. The following is the example of to-do- lists:

To Do List

1. Studying for the maths exam

2. Calling a friend

3. Attending a meeting

4. Washing of cloths

The final step is to create a *daily Schedule* and allot the times given to each thing on the list. During the course of the day, the list should be updated to reflect any urgent new tasks that come up.

e) Exercising

There are many benefits to exercising. Every day we hear it on the radio, TV or read in newspapers about the benefits of exercise. Exercise improves physical fitness, mental fitness, improves personal control, reduces anxiety and depression. People who do not exercise have risk of developing illnesses like heart problems and diabetes. Regular exercise can improve health by lowering stress.

f) Preparing for Stressful Events

Preparing for stressful events can reduce the potential for stress. For example, if traffic is a problem, anticipating it and leaving early from home to the office will not make us stressed about getting late. Likewise, preparing in advance for exams will make us more relaxed. Planning early for wedding preparations will make things happen smoothly. Hence, preparing for stressful events by planning early or seeking more information helps us manage it well.

In conclusion, we've covered a number of strategies that might assist in lowering the likelihood of stress and, consequently, improve health. What to do if there is an ongoing stress? The following section will discuss the various stress management methods and how to stop the stress reaction after it starts.

30.5 Managing Stress to Reduce Its Reactions

The word "stress management" refers to a set of behavioural and cognitive (Thought) approaches intended to lessen the emotional and physical effects of stress. Many of learn to cope with stress with experience or by learning from other's experiences. However, when new, novel circumstances cause us to stress, we might require additional help from the experts like psychologists or psychiatrists to handle our stress levels. Some people occasionally employ medication under a doctor's supervision to lessen emotions like anxiety that accompany stress. The fowling sections discuss various behavioural and cognitive methods of stress management.

a) Relaxation

The opposite of a stressed or tense state is relaxation. It is easier to do when you learn how to relax in stressful situations. Deep breathing exercises and progressive muscle relaxation are part of relaxation training. These techniques will reduce the body's arousal caused by stress. It will relax the muscles, improve the oxygen to the blood, reduce the fast heart beating, and other physical and psychological advantages. Deep breathing and progressive muscle relaxation can be helpful even if practiced for 5 to 10 minutes. The best way to learn how to relax is in three stages: learning the fundamentals of relaxing, keeping track of life's tensions; and using Relaxation skills under stress. Relaxation is to keep you as calm as possible while coping with the specific stressor rather than to avoid the source of your stress. The process of deep breathing is as follows:

Locate a peaceful, cozy spot to sit or lie down. Take a regular breath first. Try taking a deep breath next: Take a slow, deep breath in through your nose, allowing your lower abdomen and chest to rise as you fill your lungs. Allow your belly to expand fully. Now slowly exhale through your mouth (or nose, if that seems more comfortable). Repeat this process till calmness is achieved.

In Progressive muscle relaxation, one learns to gradually relax every muscle in the body to release tension or stress. Training with experts is required to practice this relaxation process. When we are stressed, our muscles are tightened. Through progressive relaxation, our whole body muscles are trained to relax. Every group of muscles in the body are trained to feel tension and relaxation alternately. This way, the body is taught to understand the difference between an anxious and relaxed state.

b) Systematic desensitization

systematic desensitization is a helpful technique for lowering anxiety and fear. This method progressively exposes the person to feared stimuli while teaching them relaxing methods to control their anxiety reaction. The following steps are often included in the process:

- creating a ranking of the anxiety-inducing circumstances that are connected to the phobia or anxiety disorder, from least to most anxious-provoking

- educating the person on reducing their anxiety reaction by using relaxation techniques like deep breathing or progressive muscle relaxation.

- Exposing the person to the lowest on the hierarchy of anxiety-provoking situations while they utilise relaxation techniques to control their anxiety response. Once they are at ease there, they move on to the next item in the hierarchy and repeat the procedure there.

- Repeat this approach until the individual is able to cope with the event that causes the most worry without going overboard with their anxiety.

c) Biofeedback

Biofeedback is another technique that is frequently used to induce calm by changing body responses. It is a process that provides feedback using electronic devices regarding

present physiological activity to monitor and minimize the physiological aspects of stress. It is frequently used in conjunction with relaxation training. The physical parameters like heart rate, Galvanic skin response (GSR), Brain Waves feedback (EEG) and other physiological responses are used as feedback. Three stages make up biofeedback training: becoming aware of a specific physiological reaction, such as heart rate, learning how to regulate that reaction in quiet settings, and applying that control to real-world situations. The purpose of biofeedback is to teach individuals how to regulate these physiological processes for better physical and mental health.

d) Modeling

People don't just learn by doing; they also learn by watching. They observe what other people do and the effects of these role models' actions. The process of learning from others through observation is called **modeling.** People can learn how to cope with stress from observing others. We can show individuals through films, videos, and real-life examples how they cope with stressful times and how one can imbibe the skill to face stressful situations with courage. For example, our former president, Bharat Ratna, Dr A.P.J Abul Kalam, faced many adverse conditions in childhood, yet he became successful in many areas. He can be a model for many of us on how to face adverse conditions and, without limiting ourselves, be resilient and cope with various forms of stressors.

e) Mindfulness meditation

Buddhism teaches that enlightenment requires mindfulness, which is attained through the meditative process of focusing one's *awareness* on the present moment rather than on the prospective future or memories of the past. Practicing mindfulness can enhance coping, lessen anxiety, and enhance quality of life. Being mindful rather than automatically reacting to stressful situations is the aim of mindfulness meditation. We discover through meditation that "thoughts are just thoughts," which may or may not be true. We can also learn to ignore unhelpful thoughts or become aware of them without being emotionally attached to them. learning mindfulness is not easy, and most teaching methods require students to attend multiple classes over several weeks or months. In India, Vipassana Meditation Centres located at various cities offer free 10 days Vipassana course to learn mindfulness meditation. Mindfulness helps us to develop a perspective on one's ***present-moment*** events that is marked by ***curiosity, openness, and acceptance.*** This perspective helps us to deal stressful situation effectively.

f) Yoga

Yoga is a way of life that fosters both physical and mental wellness. Eight main steps make up yoga. The most crucial actions that we can often take are listed below:

- **Yama:** practicing self-regulation

- **Niyama:** These are internal practices that guide how we interact with ourselves.

- **Asana:** These physical positions help the body prepare for spiritual practices like meditation.

- **Pranayama:** Breathing techniques that quiet the mind and control the flow of prana (life force) in the body.

- **Pratyahara:** is the act of withdrawing the senses from outside stimulation in order to direct one's attention inward.

- **Dharana:** This is concentration, or the capacity to direct one's attention to a single thing.

- **Dhyana:** or meditation, refers to the capacity to maintain undistracted attention on a subject

- **Samadhi:** The highest state of meditation in which one loses all awareness of space and time.

Yoga is beneficial to be good for health. According to scientific studies, persons who practiced yoga frequently felt happier and had less inflammatory reactions to stress than those who were not practicing. Therefore, yoga may lessen the toll that stress has on a person.

g) Multidimensional Approaches

To cope with stress, one particular strategy might not be enough to help the stressed person, and the most successful intervention typically incorporates various techniques. Having many stress-coping skills will increase the opportunity to use various skills in handling stress. Research says a combination of skills will yield better results than one intervention. As stress is inevitable, coping with stress is a repetitive adaptive process till we have the skill to manage it effectively.

In the above sections, we have discussed various methods of stress management. The following section deals with the concept of "Well-being", its definition and how to enhance one's own well-being.

INTEXT QUESTIONS ❓

3

1. List the methods to proactive copying?

2. Explain the methods to reduce stress reactions?

3. What is mindfulness meditation?

30.6 Well - Being

A desire to live "a good life" and for our lives to go in the direction we hope for is innately linked to happiness in humans. A "life well lived" experience includes both feeling well and performing well. As per World Health Organization, well-being is defined as " *A state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community*". *Hedonia* and *Eudaimonia* are two important philosophical traditions that are used in the scientific study of wellbeing. The definition of hedonia is

"the pursuit of pleasure."On the other side, eudaimonia means "well functioning," which can be understood as "performing well" or "doing what is right or worthy."

PERMA model to enhance wellbeing

Positive psychologist Martin Seligman created the PERMA model of wellbeing, which outlines five components or dimensions that affect overall wellbeing:

Positive feelings: This refers to developing a positive attitude on life and having positive emotions like happiness, joy, contentment, and thankfulness.

Engagement: This is the state of being totally absorbed and involved in tasks that are personally satisfying and challenging and that give one a sense of accomplishment.

Relationships: Fostering a sense of community and belonging through establishing and upholding healthy relationships with others, such as family, friends, and neighbours.

Meaning: This is when a person feels that their existence has meaning and purpose and that their life has value and significance that extends beyond themselves.

Accomplishment: Setting and attaining goals and feeling a sense of mastery and accomplishment are all examples of accomplishment, which can increase one's self-confidence and self-esteem.

According to the PERMA model, all the above five elements are significant for attaining and maintaining overall wellbeing. Individuals can enhance their sense of wellbeing and lead more fulfilling lives by focusing on these elements and cultivating positive emotions, engagement, relationships, meaning, and accomplishment.

Well-being interventions

Numerous positive psychology techniques have been demonstrated to be moderately effective in fostering specific aspects of wellbeing (such as engagement, relationships, personal Growth, or meaning in life) as well as in improving overall wellbeing. Certain exercises such as creating life goals or practicing forgiveness may be included in well-being interventions; however, most wellbeing-boosting activities require repeated practice in order to have an impact and to maintain their effect over time. Physical exercise, utilizing character strengths, having an optimistic explanatory style, mindfulness meditation, enhancing social support are some examples to enhance well-being.

❧ TERMINAL EXERCISE ❧

1. To understand the concept of stress management.
2. To Learn copying mechanism and types of copying
3. To Learn the methods of reducing stress reactions.
4. To get experience to concept of wellbeing.
5. To get experience to wellbeing integrations.
6. To understand and learn various techniques and strategies of stress management.

WHAT YOU HAVE LEARNT

In the chapter we have explained the concept of stress management broadly and also learned about the specific copying struggles and types of copying. We learned that coping is a skill which new to be learned one period of time. We understand that copy is affected by various multiple factors. There various types of copying like problem found copying, Emotion forced copying ……….. copying. There are various methods to increase the ………….. copying like, enhancing social support ……….……. interpersonal problems, improving once perusal control, improving self organization, exercising, preparing for stressful events are highly helpful in proactive copying. The stress vacation can be reduced by relaxation methods, syplematic discrimination, ……….……., mindfulness meditation yoga. This chapter also helped us to understand the concept of welling and its model to enhance wellbeing.

TERMINAL EXERCISE

1. What are the positive outcomes of copying?

2. Explain the proactive copying strategy of improving self – organization?

3. Give a ……..…… account of relaxation process?

4. Explain the various steps of yoga?

5. Explain the PERMA model of wellbeing?

ANSWERS TO TERMINAL PROBLEMS

FACILITATING EARLY CHILDHOOD EDUCATION

INTRODUCTION

Listening the word 'child' and visualising the 'child' gives us a bundle of joy, immense pleasure/ happiness / and curious to look and wish to be with them .and knowing about how children learn and feeling of associating to be with them in their learning and over all development is our role and responsibility as an adult, parent or care taker. Before we proceed further in this regard it is to know about who is a child., their needs and characteristics. and how importance and critical are these early years

OBJECTIVES

As learner or student teacher you will be able to know by the end this unit about

- *the importance and criticality of early years of child,*

- *characteristics of the child*

- *role and responsive care giving by parents, caregivers as an adult.*

- *How important the neuron connections of brain in early years*

- *The need to create stimulating and enriched environment for the children to get interacted.*

- *What is" use and disuse" "Pruning"*

- *about the growth and development of children.*

- *the stages of growth and development from birth to 6 years*

- *different developmental domains*

- *and understand the role of parents/ caretakers in facilitating the environment for the child in strengthening the domains of development.*

- *What is child development?*

- *What is a development almilest one?*

- *Why is it important to know about development almilest ones?*

- *Specified Milestones for different age groups.*

- *Will be able to develop knowledge and understanding on "how do children learn and what are their different styles of learning.*

- *Will be able to plan and organize play way activities to support and enhance their style of learning.*

26.1 Child

Every child

- is unique, special, individual and different..
- is busy, smiley and lovely.
- every child's interests, skills, and abilities are different
- have different personality of their own.
- is gorgeous and stubborn.
- genius, creative, caring, playful, adventurous, bubbly, chatterbox, inquisitive, follows an individual pathway of learning-different way and at different pace.
- Adults too are differently intelligent.

a) Early Childhood Period is crucial and critical because it is ….

- a foundation period for the future development and the basis for later development is laid.
- a period where the child's brain, intellectual and social competence proceeds more rapidly than any other time
- a period where the child needs a stimulating environment. If the early experiences of the child are enriching, he develops to his full potential through sense.
- plastic and impressionable.
- in which the child attains most of the personal and social habits before the age of six
- a period of overall development. The child grows in all the five areas of development-physical, mental (cognitive), language, social and emotional.
- a period of maximum learning. Any damage done during this period has a long lasting effect on the child's personality.

b) First years are first ever:

The seed of success are sewn in early years only

- Child' brain develops maximum during this early years specially during 0-3 years
- During the first 3 years of life, brain is most plastic, grows fastest and is most responsive to the outside world.

- A child needs opportunities to play and interact with others and with the environment

- Child is curious and ask too many questions?

- Needs Care and responsive parenting which helps children develop sense of trust in the environment hence needs quality time from both parents

- Child with and need to talk interact with people around specially mother and parents. talking with your child is very essential.

- A sound start is the right way to begin language learning

- Inspiring the child during this period is to develop a sense of responsibility

Children will exhibit a wide range of characteristics, and these vary depending on their age, developmental stage, individual personality, and environment. However, some common characteristics of children include:

These early years are critical in every child's life. Hence whatever may the term used by adults and care givers we need to provide opportunities for children to learn joyfully.

c) Early child hood is a period for optimum growth and development

Rapid physical growth and development:

- Children typically grow and develop at a fast pace, with significant changes in height, weight, and physical abilities occurring during infancy and early childhood during these years child along with physical growth and development acquires most of the personal and social habits

- First 8 years are critical in every child's life due to rapid brain development

Curious and a desire to explore:

Children are naturally curious and have a strong desire to explore their environment, which is important for their cognitive and social-emotional development.

Playfulness and a sense of imagination: Children enjoy play and have active imaginations, which helps them learn, process information, and express themselves.

Emotional sensitivity and vulnerability: Children can be sensitive to the emotions of others and may have a hard time regulating their own emotions, which is a normal part of their development.

Developing social skills: Children are learning how to interact with others and form relationships, which is important for their social and emotional development.

Developing language and communication skills: Children are constantly learning new words and developing their language skills, which are essential for their social, emotional, and cognitive development.

Dependence on caregivers: Children rely on adults for their physical and emotional needs, and require support and guidance to navigate the world around them.

Overall, children are complex beings with a unique set of characteristics and needs, and it's important to understand and support their development in a nurturing and caring environment.

A child needs exposure and opportunities to experiment with a variety of experiences, objects and places. Also, he requires enriching experiences and meaningful interaction with adults and peer groups. Further, he also needs an emotionally secure and supportive learning environment during this period.

The care givers, parents and adults need to provide environment in such a way child explores experience and scaffold the development and learning.

It is observed and understood the importance and criticality of early years in the humans life The yearly year are best period when the child's without inhibition and rigidity and flexible imbibes what is exposed and experienced hence responsive care, early stimulation and active learning opportunities in the first few years are to be planned and provided which is critical for promoting brain development which leads to overall development and enhanced lifelong learning capacity.

Fill up the blanks

1. Early childhood period refers to the age of child from _____

2. Children express their ideas to others by _____

3. The five areas of development are _____

26.2 Brain Development

The experience the child has in early years has an impact on child's personality, growth and development. These early years are crucial as maximum brain development takes place. Let us understand how important the experiences we provide in early years for maximum brain development that takes place.

26.2.1 Brain – plasticity – Neuron connection

The first years of a baby's life are very important for developing the brain circuitry and architecture that will lay the foundations for future learning and behaviour.

> **The latest technological and scientific development says that, it's not just genetics influencing brain development, but the environment as well. At birth, a baby's brain is incomplete, despite the fact that her brain contains billions of brain cells.**
>
> - At birth, a baby's brain already has 100,000,000,000 cells. This is about the same number of stars in the Milky Way. Unlike the rest of a new baby's body, the brain is not complete at birth. In order to start working, the cells need to communicate with each other. As a baby starts to experience life, connections are made between cells - the more connections there are, the more the brain can do.
>
> - A baby's brain develops so fast that by age two a child who is developing normally has the same number of connection as an adult. By age three, a child has TWICE as many brain connections as an adult.
>
> 'By the age of two, a child's brain contains twice as many synapses and consumes twice as much energy as the brain of a normal adult' (Nash, 1997, p. 1) and is 80% of an adult sized brain.

a) Let us observe the neuron connection at birth and at age 2 years

Bityh to 2 Years - Synapses
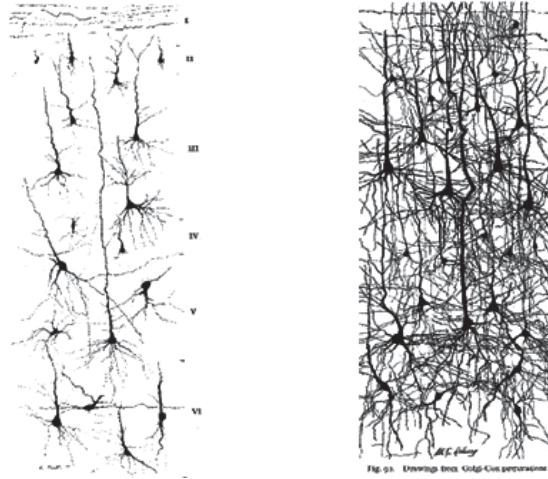
| Birth		2 Years
Born with life time supply of neurons	Synapses form based on experiences	Mind is fine tuned to the world children inhabit

- In the first five years of life, **child's brain develops more and faster** than at any other time in his life. The early experiences the child has – the things he sees, hears, touches, smells and tastes – stimulate his brain, creating millions of connections. This is when foundations for learning, health and behaviour throughout life are laid down.

- Many researches on brain have proven that 80% of brain development takes place during the first 6 years of life (Edie and Schmid, 2007). Stimulation and interaction play great role in development. The nurturing provided during early years is important for social, emotional and intellectual development. Many eminent psychologists have given significance to early years as sense of trust and attachment begins.

b) Sensitive periods of Early brain development

By this graph we can understand that specific area of development takes place in the specified time in yearly years. Opportunities for the specified area of development need to be provided. Windows of opportunities to be to enhance the development. from 0-6 years. The above graph represents the particular period which denotes the maximum capacities to develop in the areas mentioned from o-6 years.
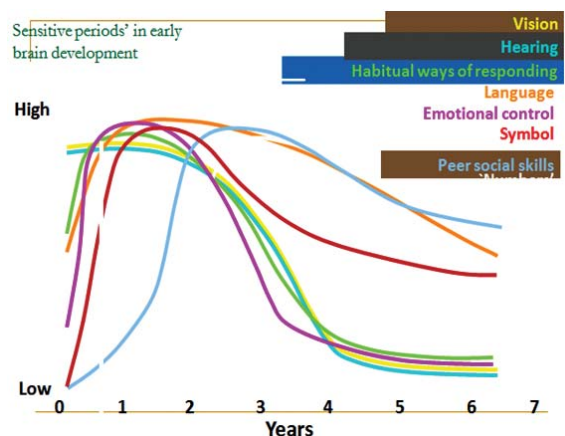
c. Brain areas with longest periods of organization related to...

- self-regulation,
- problem-solving,
- language/communication
- Social bonding
- Most vigorous growth, pruning, connecting, and activity occurs between *1-1/2 years through 3 or 4 years old*
- Environment and experience refines the connections; enhancing some connections while eliminating others
- Brain development is "activity-dependent"
- Every experience excites some neural circuits and leaves others alone
- Neural circuits used over and over strengthen, those that are not used are dropped resulting in "pruning"
- The brain is undergoing explosive growth in the first years of life and needs organizing experiences to facilitate development.

Let us see how healthy brain develops and How early experiences promote healthy brain development?

Important areas of brain development are associated with...

- Self-control or Self-regulation
- Language/communication
- Learning
- Social emotional function
- Research shows that everyday experiences with caregivers or other children can optimize the development in these areas

INTEXT QUESTIONS ?

1.	Pruning	(a)	1,00,000,000,000 cells
2.	At the time of babies birth	(b)	Brain development
3.	Activity dependent	(c)	neural circuits that are not used are dropped resulting

d) Research has Shown that Successful Scaffolding Results in Healthy Brain Ready

- Faster rates of language learning
- Increased task persistence
- Increased self-control

- More appropriate requests for helpÏ

- Increased self-monitoring during tasks

- Increased ability to learn

- Moderates risk factors

- Children show improved school achievement

- With planned, intentional instruction in the preschool years.

- When the literacy environment at home and in school can engage the child.

- With consistent reading aloud

- When preschool teachers receive high quality training.

- just as parents who provide scaffolding promote healthy development, so can pre-school teachers provide scaffolding in the classroom

It is to understand that parents/ care takers or early childhood educators play an important role to provide opportunities for the children to get interacted with environment and with rich sensorial activities to get experienced in strengthening the neuron connections .

26.3 Needs of Children

Children have a variety of needs that must be met in order for them to develop into healthy, well-adjusted individuals. Meeting these needs is essential for their physical, emotional, and cognitive growth. Parents, caregivers, and communities all play important roles in ensuring that children's needs are to be met.

The following are questions every adult/caretaker has in their mind while handling the child

- What Does a Young Child Need?

- What is the Caregiver's Role?

- The importance of mother / parents/ siblings interactions with children to meet their needs

Care takers at home and in the learning centres need to have the knowledge of child's needs at different stages and need to be addressed by extending love, care and support needed to meet the needs that develop secured feeling, confidence independence in children.

Some of the basic needs of children include:.

- Biological needs

- Intellectual needs

- Socio emotional needs

Meeting these needs requires a holistic approach that takes into account the unique needs of each child. It requires a supportive and nurturing environment that fosters growth and development.

a) Physical needs: include food, water, shelter, clothing, and healthcare. These basic necessities are essential for a child's survival and growth. A healthy diet, access to clean water, and adequate medical care are crucial to a child's physical development

Stimulating environment and required interactions are to be planned and provided to the children as developmental process. To meet the physical and motor coordination physical activities through play need introduced to the children

- **Early Childhood Programs to meet large and small muscle coordination**
- **Early Childhood Resources to meet physical needs**

An important and obvious task is meeting children's basic physical needs. Parents are responsible for providing nourishing meals for their children. In addition, children require a safe and clean place to live in. Health and safety of the children are also crucial. Regular health checkups and providing necessary care through out and when children are sick or hurt are the basic needs of every child.

The age appropriate activities should be provided to children to meet the physical needs according to their age so that they are able to perform with ease and facilitate to meet the physical needs.

b) Cognitive needs: include the opportunity to learn and develop intellectual abilities. Children need access to education and stimulating environments to develop their cognitive abilities.

- Read to the child
- Build language skills. Talk with the child, even when they are too young to know all you are saying.
- Play with the child
- Intellectual needs are essential for a child's cognitive development. Here are some of the intellectual needs of children:
- **Stimulating Environment:** Children need an environment that is rich in sensory and learning opportunities to help them develop their cognitive abilities. This can include providing age-appropriate toys, books, and other educational materials.
- **Exploration:** Children need opportunities to explore and discover the world around them. This can involve hands-on learning experiences, field trips, and other interactive activities.
- **Curiosity:** Children are naturally curious, and it is important to encourage and nurture this curiosity. This can involve answering their questions, providing opportunities for investigation and discovery, and encouraging their interests.
- **Problem Solving:** Children need opportunities to develop their problem-solving skills. This can involve offering open-ended activities, challenging puzzles, and other problem-solving tasks.
- **Creativity:** Children need opportunities to express their creativity and imagination. This can involve providing materials for art, music, and other creative activities.

- **Language Development:** Children need a language-rich environment to develop their language skills. This can involve reading aloud to them, engaging them in conversation, and providing opportunities for language development.

- **Critical Thinking:** Children need opportunities to develop their critical thinking skills. This can involve asking open-ended questions, encouraging them to make connections and draw conclusions, and fostering their ability to analyze and evaluate information.

- Meeting the intellectual needs of children is important for their cognitive development and overall success in life. Parents, caregivers, and educators can help to meet these needs by providing a stimulating environment, encouraging exploration and creativity, and offering opportunities for language development, problem-solving, and critical thinking.

- The activities that enhance cognitive development are as follows:

- Categorizing Matching colours

- Identifying and matching shape., Memory games

- Exploring and understanding their surroundings

Care taker need to provide opportunities to listen, think, enquire, think differently by language and number readiness along with observational and innovative way of thinking.

- Know he/she is important to the caregiver

- Learn who he/she is

- Develop a positive self esteem

c) **Cultural needs**: include the opportunity to learn about and appreciate different cultures and traditions. Children need exposure to diverse cultures and experiences to develop an appreciation for the diversity of the world.

INTEXT QUESTIONS ❓

1. basic needs of children are _____,_____, _____

2. _____,_____,_____are the activities to be conducted at learning centre for language and cognitive development of children

It is understood that

- The caregiver is the significant person who meets the child's needs on an ongoing basis.

- Provides **love, care, and nurturance** for the child.

- Makes sure the child is **safe and healthy**   Engages the child in **play, conversation, singing, and activities** that expand learning.

- The Infant Knows His / Her Needs will be Met

- It is vital to babies under one year to develop a sense of trust; knowing the caregiver will meet their needs.

- Trust is born from having the baby's needs met by a consistent caregiver.

Care giver need to be skillful while taking care of children to make child Initiative and independent

Young Child takes action When He / She Feels Capable and Confident to do new Things

- Preschoolers begin to imagine

- Learn skills through play

- Increase in ability to follow directions

- Gain new skills

- Feel capable to learn

Care giver need to do the following activities together with the children

- **Talk** (even to a baby)

- **Read** books daily

- **Play** with blocks, balls, trikes, puppets, and more

- **Draw** (big crayons)

- **Teach** a song

- **Have fun**

- Creating a sense of security and trust.

How to develop self help skills.

- *E*ncourage to wait for their turn

- Sharing things

- Help them to recognise people associated with them and speaking to them.

- Guide them to keep their things carefully.

- Inculcate the habits of punctuality and regularity.

- Encouraging them to participate in games and making them follow given directions.

- Help them to listen to instructions and implement them.

- Display behaviours of cooperation ; compassion; social relationship; group interaction; pro- social behavior; expressing feelings, accepting others feelings

- Develop the ability to adapt and control emotions

d) Emotional and Social Needs: Nurturing children means giving them plenty of love, support, encouragement and opportunities for enrichment. These factors help children meet their emotional and social needs and prepare them for adult life. Parents and other caregivers can also aid in children's emotional and social developments by removing as many barriers

as possible that prevent children from exploring the world on their own, and yet keep them safe. For an infant, this means providing a safe environment to explore. For a preschooler, this might mean playing in a sandpit without worrying about whether clothes will get dirty. With reassurance and freedom to explore, a child develops a healthy emotional wellbeing. Communicating and giving time and attention to children shows them love and support. Actively listening is one way to show children that they are important. Teachers have an import antrolein the socio emotional development of children.

> Emotional and social needs are crucial for children's healthy development. Here are some of the emotional and social needs of children.

- **Emotional Regulation:** Children need to learn how to manage their emotions and express them appropriately. This includes understanding their feelings, coping strategies, and problem –solving skills.

- **Self- Esteem:** Children need to feel valued and respected by others to develop a healthy sense of self-worth and self-esteem.

- **Social skills:** Children need to learn social skills such as communication, cooperation, sharing and empathy to interact effectively with others.

- **Positive relationships:** Children need to have positive relationship with adults and peers to feel connected and supported.

To best understand the relationship between play and different needs of children, a teacher must be knowledge able about the research base and typical characteristics that describe how play enhances all children's learning and development. From this knowledge base, teachers will be able to make appropriate decisions about providing adequate opportunities and time for all children to play.

26.4 Growth , Development, Developmental Domains

Human beings grow and develop from birth, childhood to adulthood. During this process of growth to development child undergo many changes physically, and in other aspects and equip with many hereditary and environmental experiences. Child undergoes different stages of development, learn and develop and gain many skills. Any adult /caretaker need to know, understand and develop skills in order help the child for their optimal growth and development.

Let us learn and understand about growth, development, developmental stages and domains.

26.4.1 Growth and Development

Growth refers to physical aspect. It refers to quantitative changes in size, shape and proportions of the parts of body such as structure and internal organs.

Development includes processes like maturation and learning which are qualitative by nature. It is the emergence of expansion of the capacities of the individual.

26.4.2 Stages of Development

Child development refers to the process during which a child develops the ability to do more complex things as it grows older.

Development lists break the lifespan into nine stages as follows:

1. Prenatal Development

2. Infancy and Toddlerhood

3. Early Childhood

4. Middle Childhood

5. Adolescence

6. Early Adulthood

7. Middle Adulthood

8. Late Adulthood

9. Death and Dying

26.4.3 Domains of Development

Every child is a unique individual and has skills and abilities that can be further enhanced and developed. The main aim of providing quality care and education during the early years is to enable the child to develop as a holistic individual and realise his/ her potential to the fullest in all the areas of development. Physical, social, emotional and cognitive.

i. **Motor Skills - eg:** Using the large muscle groups in sitting, standing, walking, running, balancing and changing positions.

ii. **Advanced Motor Skills-eg:** Using hands to eat, draw, dress, play, write etc.

iii. **Learning Skills - eg:** Learning to speak and use body language and gestures for communication and the ability to understand others.

iv. **Cognitive and Thinking Skills-eg:** Learning, problem – solving and reasoning.

v. **Social Skills - eg:** Interacting with others, maintaining relationships with family, friends and teachers, learning to share and cooperate and responding to other people's feelings.

26.4.4.1 Physical, Health and Motor Development:

● Developing coordination and control of large motor muscles

● Developing strength and coordination of small motor muscles

● Integrating the movements of many parts of their body

● Developing a sense of balance in movement

● Adequate nutrition and sound health status

● Begin to display personal hygiene skills

● Recognise the importance of safety rules

Development of the child is classified under six main areas of development. The curriculum must address the following interrelated domains of holistic development through an integrated and play based approach which focuses on development of life skills.

E. Development of Birth- Three Years

i) Sensory and Perceptual Development:

- Development of the five senses through visual, auditory, olfactory and kinaesthetic experiences
- Learning to control and coordinate their reflexes
- Coordination of sensory perceptions and simple motor behaviours
- Display awareness of location and spatial relationship

These activities should be provided to children according to their age so that they are able to perform with ease.

ii) Language Development:

- Begin to develop active listening skills
- Use expressive and receptive communication skills
- Develop vocabulary and use language to engage in conversations.
- Develop verbal and non-verbal communication skills
- Display emergent literacy skills (preparing children to read and write): such as
- identify and differentiate sounds, phonological awareness; print awareness and concepts; recognition of letters; letter- sound correspondence; building words and sentences.
- Display the use of prewriting skills (scribbling, marking, drawing, etc) for variety of purposes

iii) Cognitive Development:

- Development of object permanence (know that objects have substance, maintain their identities when they change location, and continue to exist when out of sight)
- Development of perceptual categorization based on how things look, feel, and taste Development of memory for objects, people and events
- Begin to develop vocabulary and skill related (comparing, classification, seriation; space, quantity, length, counting etc)
- Develop skills related to observing, reasoning and problem solving
- Explore the physical, social and natural environment by manipulating objects, asking questions, making predictions and developing generalization

iv) Development of Creative and Aesthetic Appreciation

- Begin to represent objects, events and ideas in the form of drawing, clay modelling and other art forms
- Develop expression, enjoyment and disposition for music and movement

v) Personal, Social and Emotional Development

- Display awareness of their abilities, preferences and characteristics
- Development of self concept; self control; self help skills;
- Develop initiative and curiosity; independence and autonomy;
- Display awareness of behaviour and its effects
- Display increased attention span, engagement and persistence in daily activities
- Emergence of pretend play and use of objects as representation
- Develop friendship with peers, show cooperation and participate in group activities
- Development of attachment, and emotional bonding with adults
- Develop empathy, learn to control feelings and express emotions in relevant manner

F. Development from Three- Six Years

i) Sensory and Perceptual Development

Demonstrate the use of different senses (sight, hear, feel, taste, smell) to guide movements and recognize objects Awareness of space and direction, distance, quantity etc.**.**

ii) Physical Health and Motor Development:

- Developing coordination and control of large motor muscles
- Developing strength and coordination of small motor muscles
- Demonstrate the use of body with proper sense of space and direction
- Coordination of fine muscles with dexterity; eye hand coordination
- Developing sense of balance, physical co-ordination
- Recognize different food and demonstrate healthy dietary habits
- Display healthy habits, personal care and hygiene. Display ability to follow safety rules, make choices and avoid danger

iii) Personal, Social and Emotional Development

- Development of self concept; self control; life skills/ self help skills;
- Develop initiative and curiosity in new experiences and learning
- Developing a sense of independence and autonomy;

- Display awareness of abilities and preferences, appreciates similarities and differences in people and awareness of behaviour and its actions

- Displays relevant and appropriate habit formation, increased attention span, engagement and persistence in daily activities

- Develop interpersonal skills with respect to peers, family, teachers and community

- Display behaviours of cooperation; compassion; social relationships; group interaction; pro- social behaviour; expressing feelings, accepting others feelings

iv) Language Development

- Develop Listening and Comprehension skills

- Use expressive and receptive communication skills

- Develop effective verbal and non-verbal communication skills

- Develop vocabulary and use language for a variety of purposes.

- Display emergent literacy skills and love for reading (preparing children to read and write):such as identify and differentiate sounds, phonological awareness; print awareness and

- concepts; recognition of letters; letter- sound correspondence; segmentation, building

- words and sentences and early writing.

- Demonstrate interest and ability in writing

- Develop competency in home language while acquiring beginning proficiency in language of school transaction and/ or English, if needed.

v) Cognitive Development

a) **Cognition** is a term referring to the mental processes involved in gaining knowledge and comprehension. These processes include thinking, knowing, remembering, judging and problem solving. These are higher-level functions of the brain and encompass language, imagination, perception, and planning.

b) **Cognitive development** is the construction of thought processes, including remembering, problem solving and decision-making, from childhood through adolescence to Adulthood. Cognitive development also refers to how a person perceives, thinks and gains understanding of his or her world through the interaction of genetic and learned factors. Among the areas of cognitive development are information processing, intelligence, reasoning, Language development and memory.

Perception is the ability to see, hear or become aware of something through the senses. Perception is organizing and interpreting information in order to understand that information.

Receiving knowledge by observation, visual and auditory perception. visual and auditory discrimination, visual and auditory association. Responding by expressing of ideas and thoughts through communicative skills.

- Development of various concepts including pre number and number concepts and operations (knowledge and skills related to comparing, classification, serration; understanding of and vocabulary related to space, quantity, length and volume, one to one correspondence ;counting etc)

- Predicting patterns and making estimations in measurement ; data handling;

- Develop skills related to sequential thinking, critical thinking, observing, reasoning and problem solving

- Explore the physical, social and natural environment by manipulating objects, asking questions, making predications and developing generalizations.

- Differentiate between events that happen in past, present and the future

- Develop knowledge of relationship between people, places and regions

- Develop knowledge of relationship between people, places and regions

G. N. Development of Creative and Aesthetic Appreciation

- Representing objects, events and ideas in the form of drawing, clay modelling and other art forms

- Develop expression, enjoyment and disposition for music and movement

- Demonstrate creativity and inventiveness with materials

- Develop the ability to adapt and control emotions

H. Aesthetic development:

Aesthetic education is fundamental to young children's holistic development and future lives. The goals of aesthetic domain in the curriculum framework is to help young children enjoy aesthetic experience and artistic creation, and develop rich imagination, and respond to feelings and preferences for artistic creation of young children; The aesthetic domain includes the development of "exploration and awareness", "performance and creation", and "response and appreciation";

The learning aspect of the aesthetic domain is divided into two parts: "affection" and "artistic media"; Teachers should also pay attention to appropriate arts and cultural activities so the young children can experience their own local culture. If preschool teachers open their eyes and ears, they can guide young children to share in the beauty and joy of life. Therefore the implementation of preschool education should support aesthetic education.

In daily life, young children often have the opportunity to explore natural phenomena such as flowers, grass, fish, animals, plants, rain, rainbows, etc. At the same time, young children are interested in utensils used in daily life, devices they see, and even architectural elements in the environment. These experiences build up the aesthetic domain which includes: the development of "exploration, and awareness", "performance and creation", and "response and appreciation". Through the process of exploration and awareness, young children can sharpen their visual, auditory, gustatory, olfactory and tactile sensations. "Exploration and awareness" means that young children explore with keen senses and perceptions, perceiving

the beauty of things around them. Young children use things such as trees shrubs, sand or bottles to enjoy life, and they use their own voice, body, or spoken language to express inner feelings and imagination

Individuals or groups can display their creativity through performance. Secondly, "performance and creation" indicates that young children try to use various forms of artistic media to stimulate their imagination with unique expressions and creations. "Response and appreciation," the third principle in the aesthetic domain, refers to young children's diverse artistic creations or expressions in their environment, and expressing their feelings and preferences. In daily life or in games, young children have many opportunities for artistic creation or performance. Usually younger children respond intuitively to these creations with physical movements or vocal expressions, such as watching, clapping, and smiling. Older children will gradually come to describe or express their feelings and opinions in more complex ways. This can be achieved by developing young children's aesthetic perception and enriching their aesthetic experiences through arts education.

Goals in the Aesthetic Domain:

- Explore the beauty of the material world.

- Enjoy aesthetic experience and artistic creation.

- Develop rich imagination.

- Respond to feelings and preferences for artistic creation.

The goals of aesthetic domain in the curriculum framework are therefore to help young children enjoy aesthetic experience and artistic creation, and develop rich imagination, and respond to feelings and preferences for artistic creation of young children.

Learning aspect in the Aesthetic Domain

The learning aspect of the aesthetic domain can be seen in two parts: "affection" and "artistic media". young children should be able to feel positive affection and pleasure in different aesthetic experiences, as well as in their creative activities (affection). In other words, young children should engage in aesthetic activities, and their teachers should let them have fun in the process . "Artistic media" includes visual arts, music and drama. It refers to the artistic expression of personal emotions and imaginative creativity in art or craft through craft tools and materials. These tools include pens, scissors, glues, plastic tables, staplers, and punchers. The source of visual artistic appreciation is mainly found in the creation of young children or their peers. Picture books, online materials, or exhibitions can help expand children's appreciation of visual art. Young children should be encouraged to pay attention to forms, colors, shapes, line, materials and other forms of expression, expressing their opinions according to their own feelings or preferences .

Aesthetics, or a set of values relating to nature and the appreciation of beauty, should be incorporated into early childhood development. In doing this, young children will see the connection and importance of music, visual arts, and pretend play in their education.

I. Divergent thinking

- is the process of creating multiple, unique ideas or solutions to problem that you are trying to solve.
- is through spontaneous, free –flowing thinking, and it requires coming up with many different answers or routes forward.
- is an essential capacity for creativity
- is a thought process or method used to generate creative idea by exploring many possible solutions?
- typically occurs spontaneous, from flowing manner such that many ideas are generated in an emergent cognitive fashion.

Convergent thinking considers only one solution to a problem where as divergent thinking involves many more different ways of thinking and expands with many more different ideas is process of having original ideas that have value with lots of ways to interpret a question with multiple answers and with one answer.

Advantages of using divergent thinking

Divergent thinking can benefit work processes in the following ways:

Divergent thinking play important role in finding best possible solutions for any problem

A divergent thinker will explore

- with the ability to develop with large number of ideas for directing any activity or any work
- with flexibility – the ability to produce ideas in numerous categories
- originality – the ability to produce unusual or unique ideas
- elaboration- the ability to abstract ideas into realistic.

Strategies to stimulate divergent thinking:

- let children to use question or change the question in reverse or in any other form
- seek wild and soft answers
- collaborate alternate uses of task
- celebrate any achievement with different encouraging ideas
- enhance creativity and establish tolerant environment
- organise field trips, exhibitions, any events to exhibit talents of children of performances with actions of music and movements

Process of creating an environment for divergent thinking :

- brain storming before starting any activity or special event
- plan with steps for processing

- establish with different ideas in creative sequence

Home environment and learning centres environment need to be attractive, stimulating , encouraging. idea, **organising** with provision of handling with creative and thought provoking .it is role and responsibility of parents/ caretakers or teachers in the learning centres to facilitate while organing the indoor and outdoor space

Children are encouraged teams are encouraged to think outside the act and exercise their creativity. This encourages teamwork as they compare ideas and collectively work towards one goal, boosting them work

INTEXT QUESTIONS ❓

1. Development of five senses through visual, Auditory, Olfactory, kinaesthetic Experiences is _____

2. Learning begins from _____

3. Pre number concepts are _____ and _____

4. Cognitive development is development of various concepts including _____ and _____

26.4.5 Impact of Early childhood care and education programme on the child's development

The ECCE programme should ensure 'holistic development' of the child and reflect the in separable nature of care and education by comprehensively addressing the need for care, nutrition, health and well-being of young children and parent counselling along with supporting the development of all domains. The holistic development approach is vital for provision of interconnected and interconnected activities covering all domains of development while keeping diverse needs of children in mind.

Development and learning takes place in all domains, development in one domain influences the other domain:

Children are thinking, feeling and interacting human beings and it is important to address all domains for their development. Changes or development in one domain facilitates or hinders the development of another domain.

Children's development and learning follows a sequence in which later acquired abilities (skills and concepts) build upon what children already know and apply. In the first few years of life the growth, change and development mostly follow a predictable pattern;.

Child Development and Learning are characterized by individual variation: While learning and development follows a predictable pattern there may be individual variation in the normative course of development as well as uniqueness of each child as an individual. No two children, even within the same family are the same. Each child has an individual pattern and timing of growth and development as well as individual styles of learning. Each individual child has his/her own strengths.

Children develop holistically and benefit from experiential learning: This simply means that children learn best through active exploration using the senses such as touch, taste, smell and manipulation to build perceptual skills.

Learning begins from birth active. They learn through all their senses and stimulations. Early care and stimulations whether positive or negative have a cumulative impact on children's development. Since care and early stimulation promotes brain development and leads to the forming neural connections, it is imperative that children are provided with optimal stimulation in the early years and prevent cumulative deficit in the long run.

Development and learning result from a continuous interaction of biological maturation and experience. A child has genetic endowments which may predict healthy growth, but inadequate nutrition in the early years of life will have impact on their potential from being fulfilled.

There are critical periods in development: .sensitive periods of development need to understood and it is important to use "windows of opportunity" and ensure that the children get the needed environmental inputs and supports for a particular kind of learning and development at its "prime time" for desired outcomes.

Children's learning reflects a recurring spiral that begins in awareness, and moves to exploration, to inquiry, and finally, to application: Any new learning by children begins with awareness, which is generated from their experiences with objects, events, or people and ends with utilization, where children are able to use what they have learnt for multiple purposes and apply their learning to new situations.

Children learn and develop in a stimulating / nurturing/ supportive/ protective environment: During the early years of life, children move from sensory or behavioural responses to symbolic or representational knowledge. They learn within a social context and from meaningful interactions with other children, adults and materials

Development and learning is largely influenced by the social and cultural context of the children. Development and learning of children happens hand in hand and it largely depends on the influence of the child's family, immediate environment, the community and at a broader level the society. Every culture has its own

Children's have curiosity and desire to learn: Children are curious and have an innate desire to learn. Children observe what happens, talk, discuss and reflecting on their findings, stretch their imagination for possibilities, ask questions, and formulate answers. While exploring and learning young children construct their knowledge and understanding of the world, they learn as well as from teachers, family members, peers and older children.

Children learn and develop through play: Play is central to the child's well being and development. Children's spontaneous play provides opportunities for exploration, experimentation, manipulation and problem solving that are essential for constructing knowledge. Developing positive approaches to learning goes a long way to determine later academic success in life.

Adults must provide opportunities for children to explore, play and apply to facilitate child's growth and development.

Reference activities

The following table shows the different activities which support and extend physical and motor development of the child.

Activities that help in developing Socio Emotional Skills in Children.
Creating a sense of security and trust. Teaching self helps kills.
Encouraging them to wait for their turn. Sharing things.
Helping them to recognise people associated with them and speaking to them.
Guiding them to keep their things carefully.
Inculcating the habits of punctuality and regularity.
Encouraging them to participate in games and making them follow given directions. Helping them to listen to instructions and implement them.

26.5 Developmental Milestones

Children as they grow older start understanding and expressing things much more clearly than before. All these activities constitute the physical, mental and emotional growth of a child. There can be disparities in the development and progress of different children. Some children may learn to do certain things abitearĮierora little later than the others.

Keeping an eye on the developmental milestones of your child, on the basis of what average children are able to do within a certain age, you can spot any developmental delay and problem in time.

Let us understand how child develops and specific developmental mile stones observed at different specific age.

Why should care takers need to about child developmental milestones?

26.5.1 What is a Developmental Milestone?

A Developmental Milestone can be described as a set of functional skills orage-specific tasks that an average child is able to perform when he reaches a specific age. There are many milestones in the entire phase of the development of a child. The developmental miles tones in children should not be compared as each child is a unique individual. Children can reach mile stones early or late.

26.5.2   What is the Importance of a Developmental Milestone?

The developmental milestone is mostly used by the parents/ teachers/ pediatricians to make sure that a child is developing at a normal pace and is not suffering from any growth-related problem.

It is important note that while making use of the simile stones, the parents/ teachers

Pediatricians should keep in mind that it is not necessary for a child to be able to do a specific task exactly within the age range mentioned. Some variations are bound to be

there, as every child is unique. It is only when the variations become too many that the need for worry arises.

A month-wises kill chart can be prepared for the children, right from the time they are born up to the age of three years.

26.5.3 Milestones for different age groups of children

A child shows various characteristics and achieves various mile stones from its infancy till the age of six years. The physical, learning and emotional milestones achieved by an infant/ child month by month from immediately after birth has a new born up to the age of six years are as follows:

i) New born Baby: Characteristics

A new born

- baby's eyes can focus and track faces and objects that are within eight inches of its face.

- Can turn their heads in the direction of voices and sounds. New borns recognize the voices of their care givers.

- Have the ability to taste and prefer sweets. They may grimace when their tongue comes in contact with something bitter, sour or salty.

- Sense of touch is normal. It can feel pain and responds to how it is being touched.

- Sucking is a natural instinct in newborns. Many newborns need to have this instinct satisfied, even when not being fed. Many babies need to suck on their hands or a pacifier.

- Canyawn, sneeze, hiccup pandha veatrem blingch in or lower lip.

- Have as leep cycle of approximately one- two hours and wills leep between 16 and 20 hours per day.

- Can grasp things that are placed in their hands.

- Can start leto sounds and movements, even in their sleep.

- Babies communicate through crying. Caregivers can quickly come to know what different cries mean as a baby expresses his or her needs. One to Three-Month- Old Infant

a) Physical Milestones

Infants learn to

- Turn their head stop refer red positions when lying on theirs to machs or backs.

- Hold their chins up when lying on their stomach. By three months most infants are able to raise their heads and chests off the floor when lying on their stomachs.

- Roll from side to side by three months.

- Reach out and swipe at objects that are within their field of view.
- Start producing tears when they cry.

b) Learning Milestones

Infants in this age group can

- Readily identify the voices of their care givers and other family members. They turn to these voices over other sounds they hear.
- Look at faces over objects and they become more animated and excited with familiar faces.
- Turn their heads to search for a sound they hear in their environment.

c) Emotional Milestones

Infants.

- To trust that their needs for nutrition, comfort and closeness will be met
- So the themselves by sucking.
- Infants smile at faces with specials miles given to those he or she recognizes.
- Infants in this age group start to display their moods through their facial expressions and cries.
- Infants in this age group learn to mimic the expressions or facial movements of others. They also respond to being talked to by excited movements, sounds or facial expressions.

ii) Four to Seven-Month-Old Infant

a) Physical Milestones

Infants

- are able to hold an object in their hands and bring it to their mouths. They learn to pass an object from one hand to the other.
- are able to push their heads and shoulders up and rest their weight on their for e arms when they are lying on theirs to machs.
- In this age group start drooling and teething.
- Learn to roll from back to side, and then they learn to roll froms to mach to back.
- Learn to pull their feet to their mouth and play or che wontoes.
- Infants may sit un supported for a brief period of time.

b) Learning Milestones

- Infants in this age group coo and gurgle and gradually start making consonant sounds. This will be preceded by the infant's imitation of sounds.

- Start reaching out for objects they want and link certain sounds with objects.

- Explore their mother's body with their hands.

- In this age group like looking in the mirror, and examining things for longer periods of time.

- Look down when they drop some thing.

c) Emotional Milestones

Infants in this age group

- Start to laugh, soon to be followed with chuckling when excited.

- don't cry as much as they used to earlier as they have now found other ways to communicate their wants and needs.

- Fuss and can be demanding if they feel their needs are not being met. Squeal and wiggle excitedly when they are stimulated by care givers or for something they favour.

- Smile at themselves when they look in the mirror. They also smile to their babies.

- Can hold out their arms when they want to be pick edupor hugged.

iii) Eight to Twelve-Month-Old Infant

a) Physical Milestones

Infants

- Arable to sit alone without support.

- Bang on tablespoon the r surfaces with an object.

- Are crawling, on with their abdomen on or off the floor.

- Learn to pull themselves up to a standing position and eventually standalone.

- Learn how to change positions such as from lying to sitting.

- Learn to drink from a cup.

b) Learning Milestones

- Infants in this age group being to make vowel and consonant cooing sounds.

- May starts h outing to get heir care giver's attention.

- Older infants may say one syllable words or a combination of the same syllable, such as "mama" or "dada."

- Imitate actions they see, such as holding as poon or playing with a toy.

- May be curious about a toy that is being hidden and start looking for it.

- Drop things on purpose to see it fall.

c) Emotional Milestones

Infants in this age group

- Start to show fear of individuals they are unfamiliar with.
- Tend to cry and appears cared when parents leave them with another care giver.
- Laugh more frequently and show a desire to make parents happy.
- May resist going to bed and display their anger when they are unhappy.
- May cry when scolded.
- Repeat a care giver' sections during play.

iv) One to Two – Year – Old Child

a) Physical Milestones

- The baby Is more mobile and is able to first crawl and then walk.
- Completely we aned soon after its first birthday.
- Is able to hold and drink from a cup.
- Able to figure out how an object is stuck and how to make over it free.
- Is able to stack two or three blocks.
- Shows an interest in using a spoon himself or herself.
- The child is able to keep himself or herself awake and may resist bed time.

b) Learning Milestones

- The child be comes in trigged with animals and may imitate animal sounds.
- The child is tens closely to those around mother and starts to imitate words.
- The child comes to know what certain words mean and be able to retrieve objects when asked.
- The child is able to follow simple commands.
- The child starts saying more words.
- The child becomes more curious about his or her environment.
- Can answer questions that have a "yes" or "no" answer.

Shows an interest in watching adults or older children write and may like to have crayons and paper to scribble on.

c) Emotional Milestones

A child this age

- Cries when he / she feels parents or other care givers are unhappy with him / her.

- The child is able to display affection to those he or she loves and give hugs and kisses upon request.

- The child is able to display fear or anger at objects or individuals.

- The child attaches himself or herself to an object that gives him/her a sense of security.

- The child feels more secure when placed on a schedule, or routine.

v) Two to Three-Year-Old Child

a) Physical Milestones

The child

- Is able to jump with both feet together.

- Is able to hold "fat" crayons and scribble on paper.

- Is able to run, chase and play.

- Is able to ride a tricycle.

- Is able to dress himself or herself.

- Is able to climb.

- Cooperates for potty training / A child starts his / her potty training.

- Can feed himself or herself.

- All primary teethe merge.

b) Learning Milestones

The child

- Is able to understand the differences in sizes and textures and differentiates between large and small, short and tall, soft and hard.

- Is able to say upto 50 words and make small sentences.

- Is able to name upto five different body parts.

- Can tell you his or her name and is able to identify some colours.

- Loves to engage in pretence and make believe play.

c) Emotional Milestones

A child

- may be hard on himself or herself if he or she makes mistakes.

- Starts to label feelings such as happy, sad etc...

- Knows what he or she likes and dislikes.

- May start showing temper ant rums.

- Is interested in playing or being around other children his or her age.

- This a get ends to excel and flourish in a routine.

vi) Three to Five-Year-Old Child

a) Physical Milestones

A child

- Is able to run jump and climb.

- Is able to hold smaller crayons and utensils with ease.

- Starts to become an expert on tri cycles.

- Is able to stand on toes.

- Sable to dress himself or herself and has the urge to do buttons and zippers by himself/herself.

- Children are generally fully potty trained by four years.

b) Learning Milestones

Starts drawings haps and letters with encouragement.

- Starts thinking of things outside himself or herself. For instance, the child may learn that a particular object is meant for pool play or that a certain kind of ball is meant to be kicked, thrown or hit.

- Loves to listen to stories and can even memorize short parts of rhymes or songs.

- May draw family members on paper.

- Speaks in sentences and knows how to use plurals.

c) Emotional Milestones

- Learns to express as his or her vocabulary expands and is able to express thoughts, feelings and desires through speech.

- Starts to separate from care givers and becomes more independent.

- Learns to play with peers and learns the concept of taking turns, sharing and fair play.

- Bonds with pets.

- Shows excitement over pending holidays.

- Comes to know the difference between basic right and wrong.

- Expresses love or fear of others openly.

vii) Five to Six- Year- Old Child

a) Physical Milestones:

- Will be more in control of his or her body.
- Has a marked increase in stamina and coordination.
- Throws and catches a ball with practice.
- Starts to lose baby teeth as permanent teeth start emerging.
- Shows a preference to right or left handedness.
- is able to skip.
- Is able to master buttons.
- Shows an interest in learning how to lace and tie his or her own shoes.
- Is usually worn out from a day of play and learning and goes to be dreadily. However, many children in this age group do not like being awakened in the morning and may be fussy.

b) Learning Milestones

- The child is able to write the alphabet though the letters may not be neat or precise.
- The child has a broader sense of right and wrong.
- The child shows a strong desire to learn.
- The child can put events in order such as beginning, middle and end.
- The child knows his/her full name, address and birthday.
- Is able to differentiate between fact and make believe.
- Understands directions such as under, over, around and through.
- Learns better when he or she is kept on a routine.

c) Emotional Milestones

The child

- Shows protective tendencies toward pets, younger siblings and parents.
- Swings are more stabilized as he/she settles into childhood and becomes comfortable with who he/she is.
- Has the ability to understand when he or she has done something wrong and that he/she may be punished.
- Has a firm set of family ties an disloyal.
- May develop fears such as the fear of darkness, animals, monsters or people who are different.

- The child wants to do things for himself or herself such as bathing, grooming and brushing teeth.

Knowing what the normal developmental milestone is makes it possible for parents and teachers to prepare children ahead of time for the changes that will take place in their bodies, their interests, or their behavior.

26.6 ▸ Approaches to Learning

Learning begins when the child is starting with familiar and progressing to new understanding. It is vital that learning of children at this Stage is anchored by nurturing relationship with those around them. These relationships help children feel safe, become more optimistic, curious, communicative and interactive. They are in constant interaction with environment, people around and things available to be used. They want to touch everything they see, listen, smell and taste. Further more children learn by doing, by experiencing by actively participating in the learning process.

26.6.1 How Children learn?

Children

- are natural learners and learn in their own way.
- show interest to learn best when their physical needs are met and they feel psychologically safe and secure
- have an innate sense of curiosity - they wonder, question, explore, try out, and discover to make sense of the world. By acting on their curiosity, they continue to discover and learn more.
- learn through five senses of touch, smell, vision, hear (auditory) and taste
- learn through first hand experiences.
- learn best through actual participation and expression.
- through social interaction with other adults and peer group.
- are active, eager to learn, and respond with interest in different situations.
- when motivated, create and develop interests "to need to know" and construct knowledge.
- learn through play
- demonstrate,what they are interested in and with what they are concerned about.

> Play is universally regarded as the heart of how young children

26.6.2 Play way approach:

- Play can be free, guided or structured and planned. Free play is initiated by children and adult supervision is minimal whereas guided play is initiated by the teacher with special learning objectives. When children are observed during play, teachers know the present level of knowledge and understanding of children and identify the

areas of intervention and the learning style of children so that children can be guided to the next level of development through play.

a) *Implementing or transacting learning centre curriculum through play way approach is necessary to enhance learning of young children.*

Children learn best through play - through activity and doing. They learn by first-hand experiences involving manipulation, exploration, and experimentation. This playfulness with materials, ideas, thoughts, and feelings helps in developing children's creativity, flexible thinking, and problem-solving abilities, and enhances their concentration, attention, and perseverance. Children improve their thinking, vocabulary, imagination, speaking, and listening skills through play, whether they are reconstructing real situations or creating imaginary worlds.

For young children play is voluntary, meaningful, active, symbolic , rule bound, pleasurable even when dealing with serious matter. Hence play becomes significant in children's development. Play leads to development. Teachers can see this taking place as the surface behaviour of children's play reflects their deeper understanding.

Play is not enrichment of work nor should it be a release from work that is perceived to be drudgery. Play doesn't limit itself to an outdoor or indoor game nor can a teacher simply say to children "Go Play" and then hope for the best

Play is not a separate component but is integrated in every activity of ECE programme. play way approach includes , learning and development through rhymes, stories ,art and craft activities dames and free or structured /planned talk on different concepts with children

Play is a natural activity of young children and is an essential part of learning. Through play children develop:

b) **Importance of Activity based learning and play way approach**

Children get motivated and at the same time enjoy learning through activity-based learning:

i.   *Helping students memorize information* – By encouraging kids to get physically and mentally involved in the learning process, activity-based learning helps students learn and retain information. This process of gathering knowledge through personal experience (i.e. experimentation) is shown to help children *memorize* and understand learning material.

ii. *Encouraging kids to be independent and inquisitive* – Activity-based learning focuses on independent investigation and analysis. By asking kids to work on their own and/or in small groups, this teaching method encourages students to be independently inquisitive, think critically, and learn from their own experience. This self-directed learning process in turn supports their acquisition of knowledge outside (as well as inside) the educational environment.

iii. ***Supporting social development*** – Whilst activity-based learning encourages kids to take responsibility for their own learning experience, group-based activity work also helps students develop teamwork and social skills. These skills will later prove essential to their work and social life.

iv. ***Emphasizing the relevance of educational material*** – Kids don't always understand the relevance of learning material when simply putting pen to paper. Activity-based learning, on the other hand, helps kids understand the 'real-life' relevance of learning material by encouraging them to explore and solve realistic problems and scenarios.

v. ***Encouraging kids to express themselves in different ways*** – Activity-based learning encourages kids to be creative in the way they express their knowledge. This learning method provides students with the opportunity to express what they have learnt through the act of doing as well as through the act of verbal presentation.

Learning at this Stage is, therefore, an active and interactive process in which children learn through play and through interaction with others and materials children are actively engaged in their social and cultural experiences, and they constantly adjust and use new information to make sense of their perceptions and their experiences with natural, real-world materials that provoke and enhance learning, imagination, creativity, innovation, and problem solving in diverse and unique ways. Play way learning gives support to the children indifferent ways .we observe that some of the children are visual learners., some others auditory learners and some others are kinaesthetic learners

- Children learn through songs/rhymes communicating with others games, stories and expressing through art and craft

- **Children learn through** Interactions with Adults, children's peers, older children

- **materials**

- **environment**

There are various approaches to learning, and different individuals may have different preferences when it comes to their learning style. . Here are some commonly recognized

26.6.4 Learning styles of children

i. ***Visual learning***: This approach involves learning through visual aids such as diagrams, charts, and videos. People who prefer this approach may find it easier to remember information when it is presented in a visual format.

ii. **Visual learners :** The students with a visual style of learning will remember information best when presented with pictures or images. Visual learners will often recognize numbers and letters better than peers with another type of learning style.Visual learners best remember what is seen. These children tend to remember faces instead of names, are good readers and have good imaginations. They respond best to instruction that includes reading, posters, graphs etc.

iii. *Auditory learning*: This approach involves learning through listening to lectures, audio recordings, and group discussions. Children who prefer this approach may find it easier to remember information when it is presented through spoken words**.**

iv. *Kinaesthetic learning*: This approach involves learning through hands-on activities, movement, and physical exploration. children who prefer this approach may find it easier to remember information when they are physically involved in the learning process.

Children with a kinaesthetic learning style

- are the physically active members of the class. They learn best by manipulating objects and engaging in physical activities to learn the material.eg. manipulating with blocks and other material.

- learn best by doing, experimenting and involvement. These learners remember what was done, not necessarily what was seen or heard, and might have difficulty paying attention and staying focused on their schoolwork or homework. They benefit most from hands-on instruction, using manipulative, role-playing or building things etc.

Kinaesthetic Learners

- Teachers in early childhood education must understand the diversity of learning styles in the classroom environment.

- Each child is likely to have a different learning style, children need a variety and activities

- Understanding how students learn will make it easier to create appropriate lesson plans for the educational program.

Benefits for care takers

When Teachers/care takers/parents know about the learning styles of the children.,

How does it benefits to care takers /parents/ teachers ......

- Knowing and understanding your child's preferred learning style is useful to you when you tackle learning situations with your children.

- Using this "multi-sensory" approach to learning when helping your children with their homework assignments will stimulate and enhance your children's learning processes.

- It will surely increase your young one's academic success. Using a "multi-sensory" – "multi-modal" learning style approach, you will change the pattern of failure to success and meet the needs of your child who is academically "at-risk".

- Using this approach will empower you to reach your child's learning preference even if it not always clearly defined.

- Children struggle when they try to learn in ways that aren't natural for them.

- When you plan a variety of demonstrations of instruction, your children can utilize their individual strengths to succeed in learning

- Remember there is never "one" right way or "only" way to teach and help your children with their learning

- Helping your children with the knowledge of the various learning style preferences and the use of technology will add a new dimension to your pursuit of successfully meeting your children's learning needs. With your creativity, knowledge and motivation you will meet the challenge.

Verbal :

- Students who focus on words rather than simple auditory sound. In early childhood education, verbal learners and auditory learners will have similarities due to the use of stories as a primary method of understanding information. As children get a little older, the verbal learners will prefer learning through reading, writing and listening to information. Auditory learners will focus on music and sound in general, but will not necessarily enjoy reading or writing.

What research says

- Several studies have shown that accommodating a child's learning style can significantly increase his performance at school.

- Two elementary schools in North Carolina increased the achievement test scores of students from the 30th percentile to the 83rd percentile over a three-year period by accommodating different learning styles.

Tips for the teacher

- Reinforce learning using multiple learning styles.

- Help your child improve learning skills in the learning styles he or she is less comfortable with.

- In some cases, this requires helping your children understand their own abilities. This may include teaching some compensation and coping techniques.

Play is the primary mode through which children begin their learning of children in done by different approaches. It is care takers .facilitators resource fullness to use .relevant approach to the children who will t benefitted

INTEXT QUESTIONS ❓

26.1:

1. Why first year of the child are important
2. What are the characteristics of children?

26.2:

1. "Brain development is faster after babies birth "write about the neuron connections during early years

2. How early experiences help in promoting brain development explain

26.3:

1. What are the physical needs of children

2. How do care taker at home/ in learning centre help children to met their needs

26.4.4:

1. What are the different situations in which we can stimulate children to think divergently and plan for it

26.4.5:

1. What is the difference between growth & maturation

2. Explain sensory perceptual development in pre-school children

3. Observe a pre-school child in pre-school and write a report on domains of development

26.5:

1. What are the emotional milestones for the children of age group of 5-6 year old

2. Mention the physical milestones for children of 2-3 years of age group.

ANSWERS TO INTEXT QUESTIONS

NEED AND IMPORTANCE OF PLAY IN LEARNING CENTER

27

INTRODUCTION

One of the great challenges in education planning, therefore, is to incorporate pre-primary education into the formal education sector while retaining the distinctive elements of quality programming for young children. A key element to consider is 'learning through play', or 'playful learning', which is central to quality early childhood pedagogy and education.

OBJECTIVES

After studying this lesson, you will be able to

● *Appreciate and understand Play as a medium of learning for children during early years.*

● *Understand the importance of Early Childhood Education for overall development.*

● *Importance of Developmentally appropriate programme for children*

● *Develop knowledge of different strategies /components to promote holistic development of children.*

● *Realize the importance of the role of teacher in promoting holistic development in children*

27.2.1 Need and Importance of Play in Child Development

One of the great challenges in education planning, therefore, is to incorporate pre-primary education into the formal education sector while retaining the distinctive elements of quality programming for young children.2 A key element to consider is 'learning through play', or 'playful learning', which is central to quality early childhood pedagogy and education.

Educators are re-thinking how to teach young children to tap their enormous learning potential. Play i: s one of the most important ways in which young children gain essential knowledge and skills. For this reason, play opportunities and environments that promote play, exploration and hands-on learning are at the core of effective pre-primary programmes. The next section of this brief explains what is meant by play and play-based learning and gives examples of the many ways in which children learn through play. Children learn critical skills and develop as they play when children choose to play, they are not thinking "Now I am going to learn something from this activity." Yet their play creates powerful learning opportunities across all areas of development. Development and learning are complex and holistic, and yet skills across all developmental domains can be encouraged through play, including motor, cognitive and social and emotional skills. Indeed, in playful experiences,

children tap a breadth of skills at any one time. Often this occurs during 'corner play' or 'centre time' in the context of early learning or pre-primary programs. Corner play, when well planned, promotes child development and learning competencies more effectively than any other pre-primary activity. By choosing to play with the things they like to do, children actually develop skills in all areas of development: intellectual, social, emotional and physical.9 For example, while children are playing, they can try out new social skills (e.g., sharing toys, agreeing on how to work together with materials), and they often take on some challenging cognitive tasks (such as figuring out how to make a building with smaller blocks when the larger ones are not available). Children are 'hands-on' learners. They acquire knowledge through playful interaction with objects and people.10 They need a lot of practice with solid objects to understand abstract concepts. For example, by playing with geometric blocks they understand the concept that two squares can form a rectangle and two triangles can form a square. From dancing a pattern such as step forward, step back twirl, clap and repeat, they begin to understand the features of patterns that are the foundation for mathematics. Pretend or 'symbolic' play (such as playing house or market) is especially beneficial: in such play, children express their ideas, thoughts and feelings, learn how to control their emotions, interact with others, resolve conflicts and gain a sense of competence.11 Play sets the foundation for the development of critical social and emotional knowledge and skills. Through play, children learn to forge connections with others, and to share, negotiate and resolve conflicts, as well as learn self-advocacy skills. Play also teaches children leadership as well as group skills. Furthermore, play is a natural tool that children can use to build their resilience and coping skills, as they learn to navigate relationships and deal with social challenges as well as conquer their fears, for example through re-enacting fantasy heroes.12 More generally, play satisfies a basic human need to express imagination, curiosity and creativity, which are key resources in a knowledge-driven world. They help us to cope, to find pleasure, and to use our imaginative and innovative powers. Indeed, the critical skills that children acquire through play in the preschool years form part of the fundamental building blocks of future complex "21st-century skills".

27.2.2 Importance/benefits of play

i) **Stimulates Early Brain Development:** Play is crucial for early brain development as it helps children understand the world and lays the foundation for future growth. Infants are born with numerous brain cell connections (synapses), which are built upon through play, sensory experiences, and toys. Insufficient play can lead to lost neuron connections. Neuroscientists found that enrichment from toys, games, and play can change brain chemistry, positively impacting the cerebral cortex, responsible for higher cognitive processing.

ii) **Improve Intelligence:** Early playing also has an important role in a child's intellectual development. One study by the University of Arkansas shows that regularly offering toys to infants to play will leads to higher IQ by age three . He found that playing could enhance a child's cognitive, linguistic, and social development .

iii) **Spark Relative Thinking:** Playing enhances children's creativity, which is linked to divergent thinking – generating new ideas and exploring various solutions. Studies

show a strong connection between play and divergent thinking. In one experiment, children engaged in play displayed higher creativity levels than those in a non-play activity. Free play, particularly imaginative play, significantly improves divergent thinking as it encourages self-designed play and imagination. Research also suggests that creative adolescents often had imaginary friends in childhood.

iv) **Improve Communication, Vocabulary, and Language**: Early play enhances communication skills, as studies show that infants who play with their mothers develop better language abilities. Dramatic play predicts performance in pre-reading, language, and writing for kindergartners. Pretend play helps children practice new vocabulary and understand others during social play.

v) **Promote Impulse Control and Emotion Regulation:** Self-regulation is vital for school readiness and social success. Children engaged in pretend play with caregivers demonstrate better emotion regulation, making them more likable and socially competent in preschool.

vi) **Grow Social Competence and Empathy**: Play is crucial for social development, as unstructured active play with others fosters social skills. Pretending and negotiating during play enhances social interaction, cooperation, and self-control. Psychologists link fantasy play to social skills, popularity, and positive social activity. Playful children develop more empathy, leading to better understanding of others' feelings and beliefs.

vii) **Better Physical and Mental Health:** Play enhances emotional intelligence, fostering resilience and mental health. Physical play activities promote motor skills, strength, endurance, and overall health.

viii) **Teach Life Lessons**: Play develops problem-solving skills, helps children cope with struggles, and offers a safe space to rehearse future social roles. Trying different roles enables abstract thinking through perspective-taking.

ix) **Strengthen Relationship with Caretakers and Peers:** Playing with children strengthens bonds and provides positive experiences that stimulate brain development. Happy, playful moments are valuable gifts for children's well-being.

27.2.3 Importance of Play as a Medium of Learning for a Child

Play is the primary mode through which children begin their learning .It also supports the all round development of the child.

The Play-based Learning Continuum highlights different levels of teacher involvement in play that can support children's learning in a children-centred and playful environment. The Continuum includes both child-led and Teacher-led activities. Children should get balanced opportunities for play in each year throughout the Foundational Stage including Grade 1 and 2.

Roles	Free play	Guided play	Structured play
	Child-ledChild-directed	Child-ledTeacher supported	Teacher-ledChildren actively participate
What do children do?	Children decide all aspects of their play - what to play, how to play it, for how long to play, with whom to play Ex: e.g., solving puzzles, role playing with their peers, reading a book.	Children plan and lead their own play, similarly as they do during free play. For example, for development of emergent literacy skills, the Teacher introduces a vocabulary activity, like finding rhyming words from a story and talking about it and introduces games for actively using the vocabulary.	Children actively listen, follow rules, participate in activities and games planned by Teachers. For example, the Teacher may ask children to create a story by adding a line each to a scenario in a playful manner, and then have them write it, or organize a story card sequence after a read-aloud session.
What teachers do?	Teachers organize a stimulating play environment in the classroom, observe children, and help when children ask for support.	Teachers offer support and actively facilitate play. Teachers guide the children in different tasks that they are involved in, ask questions, play with the children to meet specific learning objectives.	Teachers carefully plan activities and games with specific rules to promote Competencies in a learning sequence. Language and mathematics games, nature walks, songs and rhymes are planned on a daily basis.Teachers provide planned playful learning experiences through games and activities with rules. This could include storytelling, use of rhymes or songs, guided conversations, language and mathematics games, or a guided walk. This form of play has tighter boundaries set by the Teacher especially the learning sequence to be followed, the rules in a game to be followed, and so on.

27.2.4 Nature of play and its Significance for Different Domains of Development:

Although play is a difficult concept to define, it is very easy to recognize. Children actively involved in play may be engaged in a variety of activities, independently, with a partner, or in a group. Because play is closely tied to the cognitive, socio-emotional, and motor development of young children, it is an important part of developmentally appropriate early childhood programme.

The following lists the areas we cover inside and outside to enhance development in all areas of Physical , language , social , emotional & cognitive domains,

Inside	Outside	Group times
● Manipulative ● Dramatic Play ● Creative area ● Language area ● Music area ● Sensorial activity area	● Water Play ● sandpit ● Climbing and Balancing ● Art and Craft ● Collage	● Language – news, re telling events, stories, picture talk, felt boards, puppets, dramatic play , feely bags ,memory games, listening skills, following directions ● Music – finger plays, commonsense rhymes, songs, nursery rhymes, movements , dancing relaxation, records, tapes, scarves, musical instruments.
Children used various types of play in order to support and facilitate meaningful learning opportunities as they develop language , motor ,social, emotional & cognitive abilities.		

Types of Play	Description
Physical Play	Involves movement and helps develop gross motor skills, hand-eye coordination, balance, and fine and gross motor skills.
Dramatic Play	Allows children to act out stories and create narratives, which helps them work through emotions, develop social skills, and improve literacy and reading skills.
Sensory Play	Involves exploring the five senses and can be incorporated into other types of play. Provides tactile, auditory, kinesthetic, and visual learning opportunities.
Nature Play	Gives children the opportunity to explore and understand nature, which research shows benefits their overall development. Can involve caring for plants and experiencing the natural world.
Music and Art Play	Allows children to express and develop their creativity, which is important for their growth and development. Improves memory and brain power and widens vocabulary.
Age-Appropriate Play	Focuses on providing safe, appropriate, and stimulating play equipment that is tailored to children's developmental ages. Ensures that outdoor play opportunities are challenging, stimulating, and a learning environment for all age groups.

Because play is imperative in a child's development, play-based preschools may provide a better learning environment than other alternatives . When choosing a preschool, parents should pay attention to how classes are conducted, whether the "play to learn" approach is used, and how much free-play is allowed. Creating a Montessori home is also a good alternative.

Early Childhood Care and Education is the Foundation of Learning Over 85% of a child's cumulative brain development occurs prior to the age of 6, indicating the critical importance of appropriate care and stimulation of the brain in a child's early years for healthy brain development and growth. It is, therefore of the utmost importance that every child has access to quality early childhood care and education (ECCE). Presently, quality ECCE is not available to most young children, particularly children from economically disadvantaged families. Investment in ECCE has the potential to give all young children such access, enabling all children to participate and flourish in the educational system throughout their lives. ECCE would be the greatest and most powerful equaliser. Universal provisioning of quality early childhood development, care and education must be thus be achieved by 2030, to ensure that all children entering Grade 1 are school ready.

The overall aim of ECCE is to attain optimal outcomes in the domains of physical and motor development, cognitive development, socio-emotional-ethical development, cultural/ artistic development, and the development of communication and early language, literacy, and numeracy.(NEP2020)

27.3.1 Objectives of Early Childhood Care and Education (ECCE)

The aim of Early Childhood Care and Education is to facilitate optimum development of the child's full potential and lay the foundation for all round development and lifelong learning. While parents and home have the main responsibility of the welfare of the child, a strong partnership between the community and the ECCE centres is important for the well being of the child and in achieving the following objectives. The specific objectives of the Early Childhood Care and Education programme are to: (National ECCE policy ,2013) let us now understand the objectives of ECCE. The role of teacher in promoting & achieving the outcome, and what skills the child exhibits in the process of attaining the objectives for the holistic development.

Objectives	Child demonstrates	Role of teacher
1) Ensure each child is valued, respected, feels safe and secure and develops a positive self concept	Demonstrates self confidenceSense of security "I am" "I can" Communication and expression	Teacher to provide opportunities for Narrating story in his own wordsNarrating an incident/ explaining about the theme or concept in his/her own vocabulary. Providing opportunities for self expression through art craft activities, action songs, dramatization etc

Objectives	Child demonstrates	Role of teacher
2) Enable a sound foundation for physical and motor development of each child- as per each child's potential	The child demonstrates strength and coordination of large and finer muscles, sensory-motor skills, Physical fitness, Nutrition and hygiene. ex: large muscles in the body ex: hands, legs, thighs, chest etc., the child develops control, coordination, and development during this age. This specifically helps in games and sports, dance, dramatization and action, gymnastics in future.

The development of fine muscle movements in fingers, wrist, eye-hand coordination, and control is called fine muscle motor development. This helps in fine and sensitive activities like writing skills, creative activities, and other job- related skills that involve fine motor development. | Large muscle development activities like:Walking, balancing, running, crawling, creeping rolling, jumping, hopping, swinging, Rhythmic movements, throwing, catching, kicking etc.

Fine motor development activities: Threading beads, tearing-cutting-pasting, stamping, folding paper, sorting, arranging in sequence, manipulation of objects, pouring water etc

Providing and encouraging balanced diet, eating locally available foods and fruits, opportunities for practicing personal hygiene like use of soap for washing hands, use of toilets, use of dustbins etc. |
| 3) Imbibe good nutrition routines, health habits, hygiene practices and self help skills | The child demonstrates good feeding practices

- By taking balanced diet with locally available foods.
- Demonstrates good health and hygiene practices such as use of handkerchief, washing hands with soap before and after use of toilet, use of dustbin, being physically and mentally fit etc.
- Demonstrates self- help skills like eating on their own, dressing, getting ready for school etc. | Ensure age appropriate immunization, opportunities for a consistent daily schedule. |

Objectives	Child demonstrates	Role of teacher
4) Enable children for effective communication and foster both receptive and expressive language	• Demonstrates listening skills, - understands word meaning (receptor skills), • Communication skills, interest in reading and writing (expressive skills) • Demonstrates conceptual understanding of the world around them by observing, experimenting exploring that some objects are circle shaped while some are square shaped, (shape concept) identifies colours, extends thinking that sky is always in blue colour etc (colour concept) • Pre- number concepts (big / small, long/short, far / near, above / below, right / left, in / out etc)	Teacher narrating the story, children memorizing the story, following the instructions, riddles and puzzles, activities for vocabulary development on like my body, family themes, environment, nature walk, free conversation, free play
5) Promote development and integration of the senses	• Demonstrates learning through integration of five senses-listening, seeing, touch, smell and taste there by understanding the world around them.	
6) Stimulate intellectual curiosity and develop conceptual understanding of the world around by providing opportunities to explore, investigate and experiment	• Demonstrates conceptual understanding of the world around them by observing, experimenting exploring that some objects are circle shaped while some are square shaped,(shape concept) identifies colours, extends thinking that sky is always in blue colour etc., colour concept)· • Pre- number concepts (big/small, long/ short, far/near, above/below, right/left, in/ out etc)· • Memorises • Sorting and classification • sequential thinking • logical thinking and reasoning • problem-solving • Conceptual understanding about the environment(living environment, Physical environment, social environment)	

Objectives	Child demonstrates	Role of teacher
7) Enhance development of pro-social skills, social competence and emotional well being	● Demonstrates relating to self :habituated to school, good personal habits, positive self concept by being self confident and self esteem, regulate his/her emotions in an socially acceptable way· ● Relating to others: Respecting other children's feelings and emotions and rights. Listen to others and sharing feelings with others. Cooperate, learn to wait for his/her turn, participating in group activities. ● Relating to adults Listen to what elders say, following their instructions, cooperate with them, treat them as friends and as guide. Learn to behave by regulating his behaviour on his own and not by adults always.	Teacher narrating the story, children memorizing the story, following the instructions, riddles and puzzles, activities for vocabulary development on like my body, family themes, environment, nature walk, free conversation, free play
8) Develop sense of aesthetic appreciation and stimulate creative learning processes.	● Demonstrates creative expressions through arts ● Creative movements ● Creative thinking ● Aesthetic appreciation towards people, nature, animals, birds etc.	Activities for children such as ● Drawing, coloring ● Painting ● Printing ● Tearing, cutting and pasting ● Folding papers and preparing toys 3-6 years children for ● Being able to express their feelings according to music and movements like; gestures and rhythmic movements ● Rhymes

Objectives	Child demonstrates	Role of teacher
9) Imbibe culturally and developmentally appropriate behaviour and core human values of respect and love for fellow human beings.	• Respect, admire and practice culture, festivals and other rituals.	
10) Enable a smooth transition from home to ECCE centre to formal schooling • Enhance scope for overall personality development	Demonstrates • Reading readiness in developing familiarity with print material, developing vocabulary and ability to handle books. • Writing readiness involves fine motor development, understanding directionality and finding meaning in writing. • Number readiness includes pre-number concept, categorization, classification, sequential thinking, seriation, problem solving and reasoning (shapes, colour).	

27.3.2 ECCE , of good quality ,helps children in achieving their full potential and prepares children for primary school. What is a good ECCE/ Quality ECCE in a learning centre ?

Early Childhood Care and Education is….	Early Childhood Care Education is not
• A balanced play and activity based program which provides a stimulating environment for the language, intellectual, social emotional and physical development of the child. • A child centered program catering to individual children's learning and emotional needs through individual, small and large group activities and one to one communication. • Lays the foundation for the development of reading, writing and number work. • A school readiness programme which 'readies' children for learning to read, write and do arithmetic later. • A programme which indirectly promotes self control and thereby inner discipline in children through interactions.	• NOT a syllabus bound program for teaching 3R's nor 'a song and a rhyme and go home' approach. • NOT a teacher centered programme that follows formal classroom approach as in school. • NOT a program for formally 'teaching' reading, writing and arithmetic, which is to be done in primary. • NOT a downward extension of the Primary Grades • NOT a programme which demands unquestioning obedience or exercise strict classroom discipline • NOT a programme to conduct tests to know how children are learning and developing.

In this connection, one has to understand the difference between the terms,' Play and Activity ,'.

Play for a child is natural, spontaneous, enjoyable, rewarding and it is self initiated. While children do not engage in play for its learning outcomes, yet it has been shown that play prompts growth and development. In recent times play has been considered as a behavioural disposition that occurs in describable and reproducible contexts and is manifested in a variety of observable behaviours. (Fein & Vandenberg,1983).

What is an activity? A good activity is a

- Part of a well planned series of experiences identified by the teacher for the child for a particular learning area/areas and not an isolated learning experience.

- Where child is actively engaged physically and mentally.

- Challenging enough for the child so as to help her/ him practice and apply here/ his skills and knowledge in a variety of ways, across many situations.

- Enables children to learn in a joyful and interesting way.

A child-centEred and responsive approach requires that each child gets the time he or she needs without pressuring the child to respond verbally. However, non-verbal communication should be interpreted by the caregiver and expressed in words.

27.3.3 What is a Developmentally Appropriate Programme

Children grow and learn at different speeds in different domains of development like physical, emotional, intellectual, language, and social. Some children learn things like walking and talking faster than others. This is because of the genes, how they learn, their environment, and their experiences in the home. Parents and teachers might worry if a child doesn't learn something at the expected time, but it's normal. Children learn at their own pace and in their own way. Child Centered programs are designed to meet the needs of each child. Teachers according to the knowledge about children's development need to choose safe, healthy, interesting, and challenging activities and materials. Programs for three-year-olds are different from programs for five-year-olds, so it's important to have a program that is appropriate for each child's age and abilities.

27.3.4 Objectives

Developmentally Appropriate Curriculum: The term "developmentally appropriate" comes from NAEYC's most celebrated publication, Developmentally Appropriate Practice in Early Childhood Programs. (Bredekamp & Copple 1997) It refers to an approach to learning that is centred on the child.

A developmentally appropriate curriculum must be appropriate in three ways.

- The curriculum must be age-appropriate. This means that the learning goals and activities must be targeted to the way preschoolers typically develop. Age- specific activities like rolling the ball to small children, throwing the ball to catch for 4+ children.

- The curriculum must be individually appropriate. This means that it must meet the particular needs and interests of each child in the classroom.

- The curriculum must be culturally appropriate. This means it must be consistent with the values and beliefs of each child's family background. Being developmentally appropriate means that the curriculum addresses the needs of both the individual child and the group as well.

(celebrating the local festivals and culture, dressing up the dolls with local dress in a doll corner etc)

- The term *developmentally appropriate programme* is commonly used by child care professionals to describe the programme that takes into account the level of physical, social, emotional, and intellectual developments of a child. A "developmentally appropriate" or "developmental" child care environment is one in which the physical, social, emotional, and intellectual development of each child is considered while planning the program. "Developmental appropriateness is generally defined within:

- Age appropriateness-the universal, predictable sequences of growth in children

- Individual appropriateness—the unique sequence of growth of each child. This takes into account the personality, learning style and background of each child.

In particular, a developmentally appropriate early childhood program emphasizes on:

- Active exploration of the environment.

- Self-directed, hands-on learning activities.

- A developmentally appropriate program is balanced

- Balance between individual and group activities.

- Regular and supportive interaction with teachers and peers.

- There will be loud, boisterous activities and quiet, calm activities Balance between active movement (outdoor games) and quiet activities. (indoor games like manipulating with the material, creative activities etc)There will be opportunities for the children to work in large groups, (story telling, circle time activities) small groups (creative activities, readiness activities) and individually.

  (narrating stories in his/her own words, singing action songs, workbook etc)

- There will be indoor and outdoor activities.

- A developmental program is culturally sensitive; respectful and appreciative of the differences and similarities among individuals

- Prepare children for smooth transition to primary grade.

27.3.5   What are the Components of DAP?

- Understanding the normal stages of development of children.

- Assessing the individual development of each child.

- Planning a program that is fun and interesting to each child.

- Providing appropriate space, materials and opportunity for exploration.

- Observing the children and encouraging them to extend a particularly interesting activity.

- Implementing an environment that is safe, both physically and emotionally.

- Setting and enforcing reasonable limits for children's behavior. ROLE OF TEACHER IN Developmentally Appropriate Programme CLASSROOMS

27.3.6 Teacher in Developmentally Appropriate Programme classrooms is a planner, facilitator, observer, and supporter.

In DAP classrooms, the teacher plays multiple roles as a planner, facilitator, observer, and supporter. A preschool teacher who possesses a thorough understanding of child development tailors the programme to cater to each child's unique needs. Rather than instructing each child individually, the teacher selects flexible activities and materials that enable the children to progress at their own pace. With the aid of these materials and adult guidance, children are empowered to explore and learn more effectively.

The teacher designs the programme to cater to the varying levels of children in the classroom, facilitates their learning through activity, planning and creating an appropriate environment, observes their progress closely, and provides support where necessary. The teacher is responsible for designing activities, communicating with the children, and promoting their intellectual and social development. Those teachers who dedicate time and effort to incorporate developmentally appropriate practice in their classrooms will discover it to be a rewarding experience.

27.4 Different Strategies Commonly Used in a Pre School Setting

The common strategies that are generally used in a pre-school setting are: Conversation as a strategy; Learning through Play; Music and movement for joyful learning; Stories; Art; Creativity; and Readiness. Each of these strategies provide bases for certain major demands of the programme simultaneously, including a number of inter related components.

To facilitate teacher to create flexible learning environment multiple strategies have to be adopted. Preschool curriculum is to be based on   the concepts and activities that foster the following: , culminating with school readiness programme for enabling smooth transition of 5+ children into first grade .

Name of the Strategy and Objectives	Materials that can be Used
Good habits: Providing opportunities for children to inculcate good habits. Making them understand the need to keep the surroundings clean and recognize the need to practice personal cleanliness. **Conversation**: Conversation as a strategy is highly useful both for the child and the teacher as it provides needed security to the child and helps the teacher in understanding every child in the class. Helps in developing familiarity with persons and the environment, a secure feeling, socialization, habit formation, listening, and understanding, auditory discrimination, following instructions, use of vocabulary, expression/ communication, responds to questions, conveys ideas and experiences, auditory visual pre-reading, thinking, imagining, predicating.	Monkey and Elephant hand puppets, flexi charts, dolls, and star/smiley stickers to motivate children. Booklets – these are picture books related to the various concepts of the ECE program. Charts, bibs, stick puppets, finger puppets, etc. are included for children to interact with the teacher/caregiver and among themselves
Play: Program is broadly based on "Play" as a medium of learning and development. No other kind of activity offers such rich opportunities for development of the whole child as that of play. It also provides opportunities for the development of motor co-ordination and control, eye-hand & eye-foot coordination, kinesthetic awareness, body cues, sensory awareness, following instructions, waiting for turn, sharing, and co-operating, problem-solving. **Action songs** for joyful learning.	Rope, basketball set, balls of different sizes, hula hoops, board games, toy cars, dolls. Kanjeera, dholak, rattle, kolatam sticks were supplied. An audio CD consisting of 41 action songs in Telugu and English is also part of the kit.
Story: Story is a powerful tool in meeting the developmental needs of the child. It facilitates learning in children and helps the teacher in observing children hence to be carefully planned and used.	Colorful story picture books – listening to stories and handling the books, 6 story sequence cards – children narrating the story in sequence, 3D models for 1 story – to create interest in children, finger puppets and stick puppets – children to use it and tell a story in their own words, bibs – to role-play the characters and dramatize.

Name of the Strategy and Objectives	Materials that can be Used
Art Creativity and Self-expression: Aims to provide freedom to the child to act and express – scope for self-expression. Opportunity for the teacher to assess the level, interest, ability, and involvement of children in different activities. Provides opportunities for sensorial experiences, creative thinking and new experiences, expression of thoughts and feelings, practice skills, aesthetic appreciation, working in groups, fine motor development. Sense of "I am and I can".	Beads of different shapes, colors, and sizes, lacing cards (different animal shapes), stencil set (5 each – fruits, vegetables, vehicles, and shapes), straws of different sizes, colors with connectors (3, 4, 5-way), building blocks.
Readiness activities - Reading readiness, Writing readiness, Number readiness.	Picture–letter association cards (Telugu and English), number–numeral association cards, number and Telugu alphabet wheels, sandpaper letters, fishing game, workbooks for 4+ children.
Cultural Programs	To exhibit their talent, to develop self-confidence, to know about their local culture.
Scientific Thinking	To create enthusiasm in children with simple experiments on science. To create thinking of 'Why?' and 'How?' in them and promote enthusiasm.

INTEXT QUESTIONS ?

A) Match with the correct answers:

1. scope for self expression
2. create thinking of what and how, curious
3. sequential thinking, vocabulary and problem-solving
4. big/small, tall/short concepts
5. Auditory- visual association

(a) Pre number concepts
(b) Storytelling
(c) Science experiments
(d) Picture reading
(e) creative activities

B) Choose the correct alternative:

A developmentally appropriate program is

a) Balance between active and quiet play
b) Focus on Group activities alone
c) Scope for exploration
d) Balance for free play and guided activities

What is Foundational literacy and numeracy?

The national FLN Mission is an important step of Government of India towards ensuring that our children attain literacy and numeracy skills by Class III. There is a set deadline of 2026-27 to achieve Foundational Literacy Numeracy Mission targets.

Let us first understand what is foundational literacy and numeracy? Foundational Literacy means oral language development, Decoding (sounds and symbol relationships), reading fluency, reading comprehension and writing. Whereas Foundational Numeracy means developing number sense, understanding shapes and spatial relationships.

Why FLN?

There is a strong national concern today regarding the poor learning levels of children at various stages of school education. NEP 2020 highlights that a large proportion of students currently in elementary level – estimated to be over five crore – have not achieved foundational literacy and numeracy.. Neuroscience researches highlight that rapid and extensive brain development takes place during early years. The all-round capacities that emerge in 3-6 years age-group are pre-requisite for later success in school and life. Positive experiences received by a child at the foundational stage, supports the child's lifelong learning and development. If there are learning gaps and they are not filled at the earliest, they continue to widen. As a result children start falling behind in their learning levels and their learning outcomes may not be achieved successfully. Besides this, NEP 2020 has highlighted that attaining foundational literacy and numeracy for all children must become an immediate national mission.

Specific Aim : The basic aim of the national mission of FLN is to enable all children to read and respond with comprehension, independently write with understanding, develop number sense, mathematical thinking, problem solving and reasoning.

- The focus is on the holistic development of child. All children in the class should be happy, confident, thinking and learning.

- The aim of FLN is to ensure that children learn in a joyful manner through play, stories, rhymes, activities, local art, craft and music and develop strong foundations for lifelong learning. The mission outlines learning outcomes which have been designed in a spiral and progressive manner from Preschool to grade three

- Focus on literacy and numeracy includes : Pre reading skills develops reading readiness in children. Reading readiness means gaining meaning from the printed words and learning the relationship between written symbols and spoken sounds.(exp. Bat (word) sound of B–a–t).Hence it is not sufficient if children learn A to Z or numbers 1to100,but they should be able learn skills like shape and sound matching / discrimination / finding similarities / sequencing ordering etc. which helps in laying a strong foundation for reading.

- *Pre-reading skills includes:* Development of vocabulary and language, Phonological awareness (understanding that letters have sounds), Print recognition, Reading pictures and picture books.

- **Pre-Number Skills:** Comparison, (Seriation, Classification), Sorting, Shape, Space and Position, Patterns and Relationships, Estimation, Prediction, Concept of Money, Number and operations, Counting, One to One Correspondence, Quantity, Comparison of Sets, Number and Numeral, Numeral set Association, Writing of Numerals

- **Pre-writing skills:** children at preschool should be given opportunities to develop certain skills as part of mastering pre writing skills. Too often, young children are given writing tools to use before they are ready to use them. Young children from 3-5 use their hands to explore and learn about the environment and themselves. By developing good hand skills and other pre-writing skills children can be prepared for then existed, which is writing. Pre-Writing Activities include Dot-to-dot drawings of pictures, objects, shapes, numbers, letters, folding activities, Colouring activities, Repetitious strokes within a given outline, All activities which promotes fine motor skills, eye hand coordination, fine motor development, coordination and control. Ex: lacing, joining the dots, manipulation of toys etc.

INTEXT QUESTIONS ❓

Match the following

1.	Kanjeera, dholak	(a) School readiness, pre -reading & pre-writing skills
2.	Story flash cards	(b) Sensorial experience
3.	Bibs	(c) Story telling
4.	Sand –pit	(d) Music & movement
5.	Visual discrimination cards and stencil sets	(e) Conversation

27.8 Significance and Role of Caregiver in the Management of Learning Centre

An ECCE teacher/ caregiver plays multiple roles and responsibilities as caregivers/ teachers in an ECCE program. They play a vital role in fostering the all-round development of children, and it requires a combination of knowledge, skills, and passion to work with young children. The focus on observing children's needs, planning developmentally appropriate activities, and adapting them to suit the learning abilities of normal children and also children with special needs are essential aspects of a successful ECCE program.

It is also crucial for caregivers/teachers to create a supportive and inclusive learning environment where all children feel safe, respected, and valued. The development of responsive relationships with children is also important as it allows for a mutual learning between the caregiver/teacher and the child.

The caregivers/ teachers in an ECCE programme are facilitators who engage children in multiple experiences to foster their all round development. They play the following roles:

- Observe children to identify their needs and capabilities and move with the pace of the child's development

- Plan developmentally appropriate, holistic and challenging activities • Facilitate learning to meet the objectives of the curriculum

- Adapt activities to suit the learning abilities of children with disabilities. Like, a child with visual challenge could be given multi-sensorial experiences

- Organize supportive learning environment by taking care of aspects such as the arrangement of the physical environment and equipment; the scheduling of activities and events and groupings

- Develop responsive relationship with children and understand that transactions within the classroom is a journey of mutual learning between the child and herself so that she can continue to learn and help the children in her care

- Respect the child and the social environment the child comes from.

- Focus not only on planning and conducting activities but also on continuous processes for interaction and relating learning to child's environment.

- Create nurturing and positive relationships with children and among children

- Interact verbally with children in a calm, respectful and friendly manner

- Ensure social inclusion of children with disability in the ECCE classroom. Help in early identification and intervention for children with special needs

- Develop a plan for the transition of children from Preschool to Pre-primary or Primary programmes. To accomplish the above the teachers need to enjoy being with young children, be knowledgeable about children's development and early childhood curriculum and should be skilled at implementing the curriculum. The other significant adults in the ECCE set up are also an integral part of the programme for the child and must contribute to the above mentioned roles.

In addition, caregivers/teachers should work in partnership with parents, as they are a child's first and most significant teacher. Collaboration with parents can help in early identification and intervention for children with special needs and facilitate a smooth transition for children from preschool to pre-primary or primary programs.

Overall, the roles and responsibilities of caregivers/teachers in an ECCE program are crucial in providing a strong foundation for a child's future development and success.

WHAT YOU HAVE LEARNT

- ❑ The challenge of play for teachers, parents and child caretakers is to intervene only to maximize the educational consequences of play without sacrificing its essence and the key is to balance.

- ❑ The essence of good teaching and parenting lies in this ability to think about the needs of the young children, depends on the quality of relationship maintained with the child and the quality of play. Understanding reasons for children's play and its

consequences help one to perceive play as a potential for learning rather than as a challenge.

❑ The role of teacher is to plan and provide age-specific activities for which the teacher needs to know the patterns and types of play for holistic development of children.

❑ The Preschool Curriculum Framework forms the foundation for ensuring that children in all Anganwadi settings preschool settings experience quality teaching and learning. It has a specific emphasis on play-based learning and recognises the importance of communication and language, social and emotional development and early literacy and numeracy.

❑ The types of materials used by the teacher should foster to the language, cognitive, emotional and social development of the children and to explore the environment.

❑ The role of teacher is predominant in facilitating their learning by planning the activities and environment, observes their progress and support wherever they need. When preschool teachers are sensitized to the values of writing for children and provide a stimulating environment in their classrooms, children will learn to write (and read) easily and naturally and will come to their elementary school experiences with a much more solid foundation of the basic skills.

✂ TERMINAL EXERCISE ✂

1. Discuss the importance of play in Early childhood years?
2. What is the role of teacher in organizing play for children in a learning centre?
3. What is a Developmentally Appropriate Program and the role of teacher in organizing activities for preschool children?
4. What is Foundational literacy and Numeracy? What are the skills to be developed in preschool children for smooth transition to primary school?
5. What are the objectives of ECCE? What is the role of teacher in managing and organization of activities in a learning centre?

ANSWERS TO INTEXT QUESTIONS

27.5:

A)   1-e;   2-c;   3-b;   4-a;   5-d

B)   a;   c;   d;

27.7

   1-d;   2-c;   3-e;   4-b;   5-a;

HINTS TO TERMINAL EXERCISE

1. Refer to section 27.1
2. Refer to section-27.1.1
3. Refer to section-27.5
4. Refer to section -27.6
5. Refer to section -27.8

ORGANISATION OF A LEARNING CENTRE

<div style="float:left">**28**</div>

INTRODUCTION

We all know that Children grow, develop, and learn through play. The curriculum and the learning environment of the ECCE center should revolve around play. The types of materials used, kind of play materials available, the colors used in the center and the variety of experiences provided for the children are all equally important in promoting learning in children. Children need space for physical movement as well as a stimulating environment for sensorial learning. Children need both indoor and outdoor space to accommodate and provide opportunities for play and learn. Outdoor and indoor space in a learning center together constitutes the Physical environment. They also need a variety, flexible and constant changes   as well as a sense of order in the environment. The outdoor and physical environment therefore needs careful organization of space to promote learning in children.

OBJECTIVES

After studying this unit, you will be able to:

- *To understand how to plan, design and manage outdoor and indoor space for children's active learning, participation with free movement and guided/ free play.*

- *To understand the importance of flexible classroom organization with activity/learning corners and design accordingly*

- *To understand the need and importance of assessment of children*

- *To realize the importance of Teaching- learning material in promoting holistic development of children.*

- *To realize and understand the need for maintenance of records and registers for documenting child's development and progress in a learning centre.*

28.1 Infrastgructural Facilities

The learning centre is essentially a play and activity – based program for which adequate infrastructure including indoor and outdoor space is a prerequisite. Adequate infrastructure would provide not only sufficient space for free movement but also appropriate in terms of safety, sanitation, light, ventilation, and transportation. Given below are the essential as well as desirable physical infrastructures for running a quality preschool program.

28.1.1 Location

The building in which the learning center is located should be at a site that should be:

● easily accessible to the children., away from heavy traffic, ponds, wells, ditches, nallahs, heaps of garbage, cattle shed or animal shelter, slush, stagnant water, and uncovered drains.

● surrounded with a boundary wall or a fence with a gate to mark the safe area.

Desirable

● The preschool may be located on the ground floor.

● There may be a direct approach to road for easy transport and delivery of supplies.

● The preschool may preferably be in the same premises of the primary school, or it should be close to or adjacent to a primary school.

● The immediate surroundings of the preschool may have plenty of natural resources which can be used as educative material.

A first-aid kit and access to the local medical professionals is also essential.

National ECCE policy, 2013, quality standards framework identifies the key principles, indicators and exemplary good practices required for assuring quality in ECCE services. Quality standard **IV** refers to space, building, outdoors, aesthetics, cleanliness, and green area, safety and approach.

To standardize the quality of ECCE available to children, Basic Quality Standards and Specifications are laid down by ECCE (National ECCE policy 2013) which is applicable across public, private and non-governmental service providers. The following base standards would be non-negotiable for promoting quality programs that are mandatory for all service providers.

28.1.2 Non –Negotiables

● An ECCE program of 3-4 hours duration

● Classroom measuring atleast 35 square meters for a group of 30 children and availability of adequate (atleast 30 square meters) outdoor space for a group of 30 children.

● Adequately trained staff

● Age and developmentally appropriate, child centric curriculum transacted in the mother tongue/local vernacular language.

● Adequate developmentally appropriate toys and learning materials.

● A safe building which is within easy approach. It should be clean and should have surrounding green area.

● Adequate and safe drinking water facilities

● Adequate and separate child-friendly toilets and hand wash facilities for girls and boys

- Separate space allocated for cooking nutritionally balanced meals and nap time for children Immediate health service in terms of First Aid/ Medical Kit available at the center.

- The adult/ caregiver: child ratio of 1:20 for 3–6-year-old children and 1:10 for under 3s should be available at the ECCE Center. Children should not be left unattended at any given point of time

28.1.3 Outdoor space

According to NCERT preschool guidelines, Outdoor play area must be large enough, i.e., minimum 300/450 (15×20/30) square meters per 25 children in the preschool/ to play and run around safely.

The outdoor environment plays an equally important role in the development of children as it provides a space for play, exploration, and social interactions. It is mandatory that all children have the opportunity to engage in daily outdoor physical activity. A specific time must be set aside every day for break time and for outdoor play/activities. This time can be used for free choice of play on the climbing and playground equipment, for more structured activities involving physical movement and balance, and for practical activities such as working in the gardening patch, digging and planting, etc. The sand and water play area can be in troughs with wheels to enable both indoor and outdoor play. It is important that the learning materials are modified for children with special needs.

28.1.4 Indoor space

How should an indoor space and a preschool classroom look like?

The indoor environment should be planned to keep in mind the interests and developmental needs of young children. A large indoor space can be divided into learning/activity corners with an appropriate arrangement of shelves and furniture.

It is important to keep in mind that the quality of the physical classroom space, along with the materials provided, affects the levels of child involvement and the quality of interactions between adults and children.

Indoor space Essential

- The standard floor area of a preschool classroom should be a minimum of 35 (5×7) square meters to accommodate a maximum of 25 children. It should be well ventilated and well lit. It should have proper roofing, windows, doors, and flooring with provision of mats wherever necessary.

- The size of chairs and tables should be suitable for preschool children.

- Stackable child-friendly furniture that can be easily moved according to the play activities should be used to ensure flexible classroom organization.

- There must be a provision of electricity for light fittings, fans and other electrical equipment.

- There should be regular provision and supply of stationery, such ascrayons, variety of papers, sketch pens, colored chalks, etc.

Setting up an Early Year's Classroom in a Learning Centre

The ECCE classroom arrangement must be flexible, which can be adjusted to lesson plans and activities, such as large groups for singing, storytelling and smaller groups for activities like drawing and manipulating blocks and for individual play. It should have Classroom arrangement for large group activities (e.g., circle time): During the morning circle time, leave enough space between the children. This way the children who come late will be able to join the circle easily and participate in the activities with minimal disturbance to the other children.

28.2.1 Circle time

During this time, the children sit in a circle, along with the ECCE teacher. Circle time may be used for engaging the children in a discussion, reading a book or singing songs/ rhymes, formal and informal conversation etc. Sitting in a circle allows all children to face each other clearly. The teacher sits on the same type of chair/ mat as the children, which conveys that the ECCE teacher is a facilitator.

28.2.2 Classroom arrangement during small group activities

The classroom should allow for the ECCE teacher to engage children of a particular age group in small group activities. During this time, other children can play independently in one of the four corners (free play). The children should be encouraged to choose a corner of their own interest as this will motivate them to be engaged in the learning process. Meanwhile, in the small group, the ECCE teacher can focus on facilitating activities or discussions that are somewhat

Fig. 28.1:

challenging and need guidance from an adult Ex: Four years children doing work books while younger children playing free play in the corners. Children are made into small groups during creative activities where they learn from elder children, learn to share the materials, exchange ideas, wait for their turn etc. In this way, the space in the ECCE center can be used efficiently by dividing the children into one large group and four small groups.
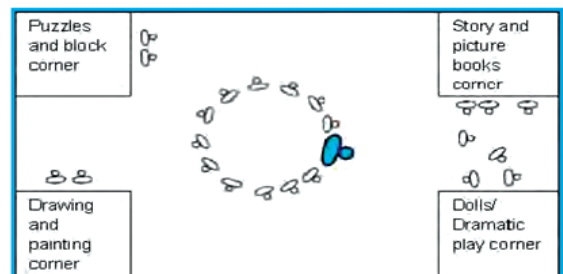
28.2.3 Free play

It is important to give children some opportunities to engage in free play. Where, they follow their interests and usually remain engaged in activities for long periods of time (15-20 minutes) and require minimal teacher supervision. Such opportunities help children to make simple choices, express themselves during free play, (ex: drawings, colorings etc.) a skill that is needed for problem solving and also increase their attention span.

28.2.4 Learning/ Activity Corners

What are Learning corners?

Physical space is divided into interest areas in a learning center where children can explore, make things, experiment, and pursue their own interests. Separate interest areas or learning corners are established places in the classroom with resources and materials that actively engage children and may change according to the theme/ topics.

Interacting with the material by the children provide various learning opportunities like curiosity, they love to explore, experiment with objects, investigate and trees to manipulate differently. (Divergent thinking)

Why Learning corners/ Activity Areas?

Importance of activity areas/Learning corners:

Playing in the activity areas help the

- Children to exercise as per their choices of interest and also freedom to explore and investigate that interests them.

- Children learn to work with freedom in groups or individually and at the same time within the time limit.

- It provides opportunities to create, draw, manipulate, discover, learn new skills, make mistakes, modify their strategies and gives a sense of achievement and self-confidence after they mastered the activity in which they were engaged. for ex: building a tower fixing, jig-saw puzzle or solving a maze etc.

- Children learn time management as well as self-regulation.

- Inspiring classrooms encourage children to explore, move and experiment with the material available in the environment.

- It is important to make children comfortable in their physical surroundings so that they will venture to explore materials or events around them.

The following are the suggestive activity areas or learning corners which should be equipped with adequate material for children:

i. **Book area:** This area should have a variety of age-appropriate children's thematic books, comics, slates, chalks, etc.

ii. **Doll's area and dramatic play area:** The materials to be kept here can be various kinds of dolls, doll-sized furniture and clothes, doll-sized cooking utensils (pots, dishes, spoons, etc.), pretend food (vegetables or fruits made of clay), dress-up clothes (scarf, cap, stole, jacket, small sari, long pieces of cloth, etc.), combs, mirrors, walking sticks, old spectacles, non-functional telephones or cameras, a briefcase and a lunch box, etc. children love pretend playing by acting out as doctor, teacher, parent by narrating the dialogues dress themselves up looking into the mirror etc.

iii.   **Discovery area/Science corner:** It should be equipped with materials like magnifying glasses, shells, plants, seeds, magnets, iron objects, weighing scales and weights, children develop skills such as why is this happening? What happens if we seeds will attracted? measuring tapes or any other locally available materials.

iv.   **Block building area:** This area should have variety of blocks of different colors, shapes and sizes, such as, hollow blocks, interlocking blocks, foam blocks, wooden blocks, etc.

v.   **Manipulative**: This area should have manipulative materials, such as puzzles, matching cards, lacing cards, seeds, seriated shapes, inset boards, shells, material for sorting, strings and beads, small toys, such as cars, trucks, animals, toy figures, take apart toys, number rods, abacus, and other objects from the environment, such as leaves, stones, pebbles, twigs, flowers, etc., through manipulating children develop skills of matching classification, sorting, eye hand co-ordination which later helps in pre –writing skills.

vi.   **Music and movement area**: The music area may be equipped with daphli, bells, bowls, flutes, tambourines, string instruments, rattles, utensils of different types or metals, local musical instruments, music system and a variety of DVDs of songs, poems and rhymes. This area may have material such as ribbons or scarves for the children to use as props to promote creative movement. A library in each preschool having appropriate resource material and educational audio-visual aids for teachers and children is desirable.

vii.   **Creative art corner:** Through drawing, painting and working with clay children begin to understand that real life objects and events can be represented in many ways. This fosters symbolic thinking, which is an important pre-writing skill. In addition, these activities provide opportunities to exercise fine motor muscles of the fingers and the hands, which prepare them to write. The materials in this corner can include different types of paper, crayons, pencils, washable markers, slates, different colored chalks, pieces of fabric, paints, brushes, tape, play dough or clay, rolling pins and boards, old newspaper and magazines for collage and ice-cream sticks.

Points to remember

- All the materials should not be displayed at once, as this will be too overwhelming for the children. Consider changing the materials in each corner after every two weeks. Children need time to practice but if the materials are never changed, they will get bored and will lose interest in the corner.

- Keep active, noisier centers (blocks and constructions) at a distance from quiet ones (reading, games and toys).

- All corners should be labelled using words and illustrations alongside and stating how many children can work there at a time by drawing stick puppets such that children can 'read' it.

28.2.5 Display on the Walls

It is essential to display children's artwork and projects on the wall. This helps children to remember the activities in which they participated and fosters their self-esteem, as they feel their work is valued. Parents also feel proud of their children and take a more active interest in their education when they see their children's work displayed in the center. All displays should be at children's eye level. Other pictures displayed on the walls must relate directly to the current curriculum in the classroom, such as the theme of the month. It is best to label pictures as this helps young children understand that written words can be used to represent objects, which in turn helps them to understand the purpose of reading and writing. The display should be regularly changed as per theme and children's work.

28.2.6 Furniture and Mats

Furniture in the classroom, must be child-sized, so children are comfortable sitting and working on them. Colorful mats can be used to mark the sitting area. It is important to consider the texture when selecting mats. Children must feel comfortable as they sit on the mat and focus on their tasks.

28.3.7 Shelves

Shelves should be low in height and hold manipulative toys, puzzles and other learning materials for children to explore. Children must have easy access to these resources. Storage shelves and/or low room dividers can be used to separate learning corners to clearly mark boundaries. Establish 'traffic patterns' of movement for entering the room, putting belongings in a specific space, access to bathrooms and sink areas and moving from one area to another.

INTEXT QUESTIONS ?

28.4

Choose the correct alternative.

1. An early learning center should have.

    a)   Flexible arrangement of children

    b)   Only large group interactions

    c)   Small group interactions

    d)   Free play in the center

    e)   All the above

While planning the day and activities, make sure to balance quiet individual time with large and small group interactions. Individual time activities include the choice of free play in quiet centers such as the reading, writing or the puzzle center. Group time is often energetic and noisy. Like Songs, rhymes, finger plays, dramatics, science, math and physical activities. Group times should fit into the whole curriculum and support themes and projects with opportunities for group interactions both in the indoors and outdoors settings. Balance it

with active and quiet activities. A large group quiet time might include a story read aloud session. Small group interactions might include children working together in the creative center in a college or in construction work in the block center.

Therefore, the ECCE learning environment should be planned creatively and imaginatively for the holistic development of the child.

28.3 Importance of Teaching - Learning Material in a Learnig Centre

A child in the early childhood stage learns essentially through interacting with the environment and this interaction cannot occur in a vacuum. A child needs a stimulating environment which must necessarily have a variety of materials to arouse and sustain his curiosity and interest and promote his learning. On the other hand, financial constraints are a major feature of most Early Childhood Education programs. Keeping in mind this constraint, it is suggested that the following points may be noted:

i. The material listed as essential / desirable is not prescriptive but suggestive. Where possible and required, improvisations may be resorted to.

ii. Material purchased / developed may be multipurpose in nature for it to be cost effective.

iii. In view of the extensive requirement of materials for the various developmental objectives, it will be necessary to fall back on teacher – made materials.

While selecting / developing material for activities, it is necessary to ensure that the material is safe and has potential for learning as well as for direct manipulation by children and is not merely a teaching aid.

For meaningful learning on the part of the children, the content of the material should be culturally and regionally appropriate.

For effective transaction of activity-based teaching learning particularly in small groups it is necessary to provide sufficient in door material in multiple sets which could simultaneously engage at least three if not four groups of children in a class. Regular and proper maintenance of the play material is necessary, for which the staff needs to be provided both training and recurring financial allocation, for contingent expenditure.

28.3.1 Materials that can be Prepared by Teachers

Most of the TLM required for the Foundational Stage can be made using locally available and low-cost materials. Teachers should develop capacities for creating simple TLMs from locally available materials. Cardboards, straws, packaging material, old clothes, bottle caps/ seeds/pebbles (for counting), match sticks (with chemicals removed), old tires, plastic bottles, and containers (for measuring), coconut shells, used paper, used egg cartons (for sorting) all become sources for developing TLMs.

28.3.2 Materials that can be Prepared by Children

Children can make simple TLMs as part of their art and craft work. Teachers can bring used fabric to make soft cloth balls, puppets, and toys for play. Making simple toys, puzzles and board games can be very engaging activities for young children and they can employ all domains of development in designing and creating these materials.

28.3.3 Materials that can be Purchased from the Market

Some of the TLM are made of materials that might not be locally available. They might require more sophisticated tools and equipment to produce. These materials can be procured from the market. Ex: colorful beads, building blocks of various types, dominoes, magnets, pegboards, crayons water colors etc., slide, jigsaw puzzle for outdoor etc.

28.3.4 Given below is the suggestive teaching- learning material that can be used in a learning center:

Outdoor material for large muscle development-essentials	Indoor equipment material-essentials
i. Commercially available or improvised equipment from the environment for providing experiences like climbing, jumping, balancing, swinging, swaying, cycling etc. Should be provided. ii. Equipment like large and small balls, old tires, rings etc. for throwing, rolling, catching and kicking should be provided. iii. Sandpit/sandbox, trays, plastic strainer, containers. Plastic mugs, 'katoris', different Moulds etc. for and play should be provided. iv. A basin/bucket, mugs and cups of different sizes, sieves and floating toys for water play should be provided.	Play materials for manipulative play for example form boards, mosaic, tiles, nesting toys, beads, wire, leaves, twigs, pebbles, clay, sand and any other material that the child can easily manipulate. Play material for constructive play, for example wooden/ plastic blocks, boxes, plastic tubes, cartons etc.

28.3.5 Language Skills - Cognitive Skills

Language Skills	Language Skills
a) Listening–Story telling aids like picture books, puppets, story cards, sound boxes etc. b) Vocabulary building and verbal expression– conversation charts, pictures, flashcards, picture books, collection of rhymes and stories. c) Reading readiness–picture cards/ strips/ charts for auditory and visual discrimination and auditory and visual association. d) Writing readiness–Slates, chalks, crayons, blackboard, drawing paper, stencils etc.	a) Listening–Story telling aids like picture books, puppets, story cards, sound boxes etc. b) Vocabulary building and verbal expression– conversation charts, pictures, flashcards, picture books, collection of rhymes and stories.c) Reading readiness–picture cards/ strips/ charts for auditory and visual discrimination and auditory and visual

28.3.6 Material for cognitive and art activities

Material for cognitive skills	Material for Art/Craft Activities
a) Sensory development–sound boxes, visual discrimination cards, touch cards, feely bag, smelling boxes, food items of varying tastes, etc. b) Concept formation – materials in the environment, cards, pictures, jigsaw puzzles self-corrective puzzles for matching, sorting, arranging, classifying, problem solving, memory and sequential thinking. c) Material for imaginative play/role play dolls, doctors set, old dresses, toys/kitchen utensils, mirror, old spectacle frames, purses, old shoes, weighing scales, clocks and other commercially available toys and traditional toys and games. **d) 28.5.8:Audio-visual equipment:** Videoe) e) T.V. f) Slide Projectorg g) Tape Recorder	a) Material for tearing/cutting and pasting. scissors, paper, cloth, gum, fevicol etc. b) Material for drawing/ coloring/ painting. crayons, paints, colors, paint brushes, paper, colored chalks, slates etc. c) Material for clay working clay, shall owbasin, plastic cloth, strainer, tumbler etc. d) Material for stitching blunt needles, colored thread, gunny bag, cotton cloth, beads etc. **28.3.7: Material for Music and Movement Activities:** Essential (a) Harmonium (b) Dhapli **Desirable** (a) Dholak (b) Drum (c) Tambourine (d) Triangles (e) Rhythmic Cymbals (f) Ghungroos (g) Anyother locally available or improvised teacher-made material **First aid kit** Essential (g) A (a) Bandages (b) Sticking Plaster (c) Sterilized Surgical Cotton Wool (d) Gauze (e) Thermometer (f) Scissors (g) Pincers (h) Antiseptic Ointment (i) Potassium permanganate Genllan violet Mercuro Crome

a)The goals of early childhood programs are to meet the general needs of children and provide good education and care, that is, to provide opportunities for children to develop holistically with sufficient scope for development of skills. Planning the program, conducting activities, encouraging children to participate and interact is one aspect, and observing their level of development and learning status is another aspect. This is an evaluation.

28.4.1 What is Assessment?

Assessment is a process of collecting / gathering information about children in order to make decisions about a child's progress.

Assessment is to support learning and development of children. The assessment process should be planned based on the goals and objectives of our curriculum.

This will enable us to:

- Collect information about the interests and abilities of the child.
- Identify developmental needs and learning levels of the child.
- Initiate action to support the learning process of the child.

28.4.2 Why assessment?

Assessment is an essential and integral component of any ECCE program to ensure that the program remains child centric, and the experiences and activities are planned according to the level of the child. Assessment is the analysis of information about a child's progress. Collecting it identifies what children know, understand, can do and feel at different stages in the learning process. It gives an insight into children's interests, achievements and possible difficulties in their learning from which next steps of care, stimulation and learning can be planned. Thereby it provides a platform to support the planning of a sound curriculum for progression in learning. Therefore, it is necessary to maintain the progress report of every child and maintain the child's profile to document learning and progress of the child.

- Assessment contributes to evaluation, revision, and development of programs. , helps in early identification of developmental delays, children with special needs, their learning styles and progress.

28.4.3 What to assess?

The early year's curriculum would provide the opportunity for learners to construct meaning; acquire skills and dispositions basically through a play and activity-based approach. Hence make sure that the whole child is addressed, and the activities focus on integrated learning in all domains of development. Therefore, feedback should be given on children's progress and performance in each of these areas. Hence assessment of children's learning is done by the observation of children by the ECCE teachers/ Caregivers for the purpose of improving the program in order to help children achieve the appropriate developmental tasks.

28.4.4 When and how to assess?

Continuous assessment should be an integral part of the ECCE program. Assessment yields strengths and gaps in learning and also to assess the effectiveness of the program. Observation and documentation of children's learning is interwoven with the daily learning

and helps ECCE to teachers/caregivers to find out what the children already know in order to plan the next stage of learning. The progress of the child needs to be shared between the parents and families too.

- Different tools and strategies are to be employed in order to document and assess a child's learning. Ex observation schedule to observe the child in the program, use of growth charts, etc.

28.4.5 Assessment tools and strategies:

On Doing observation, Questioning, and listening to children. All children are observed often and regularly, with the ECCE teacher/caregiver focusing on the whole class to focusing on one child or activity, and from non-participant observing from without to participant observing where listening and interacting with the child is required.

~~Systematic procedures~~Anecdotal records are brief written notes based on observations of children. These records need to be systematically compiled and organized. The teacher should make comprehensive notes on how the child is spending time, his/her social relationships with others, nutritional and health habits etc.

~~Systematic Sampling of Children's Activities~~Document selected samples of children's artwork, scribbling, writing conveying their ideas, photographs of their work, videos, audios of storytelling in a group, group participation etc.

28.4.6 Documentation procedures

Developmental checklist procedures	Portfolios	Summary
information, data, attributes or elements, criteria that guides ECCE teachers and caregivers to observe children Specific developmental screening checklists used for identification of developmental delay or impairments for preventive measures and referrals. The teacher has to observe and record the observations of the child during informal time such as free play, lunch time & in all domains of development games & exercises, his play & behavior with his peers & friends how he expresses himself, whether expressing his thoughts and needs, curiosity level to learn new things etc.	Collections of children's work that are designed to demonstrate successes, growth, higher order thinking, creativity and reflection Portfolio maintained for each child to be kept at the ECCE center. Include - Cover page with center name and details. - Child's personal details along with a photograph. Information sheet and feedback from parents discussing children's interests and strengths. - Medical health form. - Children's artwork, drawing and writing samples - Photographs of models made by a child - Photographs of children at play. - Noting of interesting discussions held with the child. Ongoing developmental progress checklist form. - Copies of summary progress reports given to parents.	Outline children's progress though narrative reports by ECCE teachers/ caregivers Developmental Progress Card with narratives to share with parents and later to be shared with Primary school

The purpose of assessing preschool programs is mainly to improve the quality of the

program and other basic services given to children. The preschool program should always be reviewed on a periodic basis keeping in mind the preschool goals and early learning outcomes. It must address the components designed and delivery of the preschool program.

28.5 Requirement of Personnel in a Learning Centre

28.5.1 The Preschool staff

A preschool should have dedicated staff, who can collaborate to create a cohesive and joyful learning environment for children in preschool centers/Learning centers. The preschool staff, especially teachers, provide an opportunity to children for holistic development inside and outside the classroom. Apart from the teachers, the administrators and helpers are equally important for the successful functioning of preschool programs. They should be carefully selected on the basis of their experience, education, and dedication to preschool education. The qualification of each staff member, their role in the learning of children and proper functioning of preschool centers, ideal teacher-children ratio, their salary structure, recruitment and service conditions, as well as their professional development, is discussed below:

28.5.2

Qualification and salary	Essential Staff	Desirable staff
• As per Government norms • Salary as per norms	**Administrator** (Principal/Headmaster of the Primary School)	Supervisor or in charge where there are more than four sections for preschool program. The senior most teacher should be designated as incharge of the preschool program.
• Class XII pass with two years Diploma in Preschool Education recognized by NCTE. • Salary as per norms for primary school teacher	**Teacher** One for 20 children with a helper for 3–4 years old.. One teacher for 25 children with a helper for 4–6 years old.	**Assistant Teacher** Where there are more than 25 children in a class, an assistant teacher is recommended.
• Class X pass, minimum 18 years of age, must have induction training in preschool education. • Salary as per State norms for semi-skilled persons	**Helper** One for 20–25 children up to 3–6 years old.**Security staffSupport Staff**Cook, accounts person, peon and gardener	**Parent Volunteers** Local craftsmen, artisans willing to work with children, art and craft instructors, music instructors.

Assessment of children is done through.

a)   Informal, random observation

b)   Focused observation

c)   Progress reports

d)   Checklists developmental

e)   All of the above

28.5.4 The Preschool Teacher

Preschool years are very crucial for the holistic development of children between the age of 3–6 years and for laying the foundation for lifelong learning. A child at this stage particularly needs a teacher who is qualified and well trained, with a passion for teaching young children, enjoys interacting and playing with them, encourages questions and promotes sharing. The preschool teacher is therefore, required to plan developmentally appropriate high quality preschool education programs, by designing and providing a suitable classroom environment, child-friendly materials, age-appropriate play activities and guide children's learning through meaningful interactions and scaffolding. She should demonstrate necessary sensitivity and understanding towards young children's developmental needs as also diversity of childhood experiences knowledge and skills. Accordingly, she should plan opportunities and experiences for them that are contextually relevant and would contribute to their optimal development. It is, therefore, imperative that the preschool teachers have suitable academic qualifications, are professionally trained, periodically mentored and supported and incentivized with a salary at par with that of primary teachers and have a suitable career trajectory. Since preschool education is an unregulated sector, with ICDS and private schools being the major providers, there is likely to be a large number of untrained teachers or Anganwadi workers transacting preschool education in the system. With preschool education being considered an integral part of school education now, it is important for the States to create a cadre of preschool teachers similar to primary teachers and expand preservice and in-service teacher development facilities, across the states to ensure availability of professionally trained teachers for this stage of education.

28.5.5 Pre-service Training

The National Council for Teacher Education (NCTE), which is a statutory body for regulation of quality of Pre-service Teacher Education, has prescribed minimum qualifications for Preschool Teachers— Class XII pass with a two-year Diploma in Preschool Education. States should promote access to this Teacher Education Program by instituting it in SCERT or District Institute of Education and Training (DIET) and training faculty while also encouraging private institutions, as and when required to expand the availability of professionally trained

teachers.

28.5.6 In-service Training and Professional Development

In-service training and other professional development opportunities need to be designed and provided for the preschool teachers as these provide space for teachers to share, make networks, and remain updated in the field. Professional development should be an ongoing process, which will prepare teachers to develop and expand upon their skills and knowledge. For untrained teachers and anganwadi workers already in service, opportunities may be provided for upgrading the qualifications of existing staff by providing vertical skill development programs under National Skills Qualifications Framework (NSQF) with a provision for Recognition of Prior Learning (RPL) and credit accumulation and provision of flexibility with multi-entry and multi exit options leading up to the desired certification.

These programs could be offered through face-to-face mode or distance and blended modes. The salary structure may be adapted to accommodate this flexibility. In-service (ongoing) education and training can be conducted 'on the job' or can be provided by an external source, such as training institutes or colleges. It can be provided through workshops, conferences, subject training, field-based consultation training, supervised practices and most importantly through on-site mentoring. Institutions including universities, SCERTs and DIETS, should be supported and encouraged to provide specialized training programs in preschool education which may be in the mode of: (i) contact programs, (ii) through open and distance mode, or (iii) blended mode (mix of contact and distance mode). It is suggested that the training programs should have the component of supervised internship in a preschool or anganwadi.

28.5.7 Helper

The preschool teacher needs a helper to transact the program effectively. Since, the helper is regularly interacting with young children, she also requires skills and knowledge about the basics of child development, engage with young children, maintain hygiene and cleanliness of children as well as the classroom, help in serving food and help teacher in different activities. It is important that she is well trained for her roles and responsibilities. The helper should assist the teacher in the day-to-day implementation of the preschool curriculum, she should also be able to conduct some of the activities with children, as and when the need arises. Provision for career upgradation should also be provided for the helpers after taking into account their qualification and experience in the field.

28.5.8 Roles of Stakeholders in Preschool Classroom

28.5.9 Program and curriculum Implementation

Head of the preschool	Supervisor	Teacher	Assistant teacher	Helper
• Manage day-today operations of the preschool education program. • Coordinate with co-located anganwadi workers, supervisors and other functionaries for convergence. • Supervise the implementation of ECCE preschool program. • Organize meetings with the staff and maintain a record of the meetings whenever required. • Supervise and guide all teachers and other staff members.	• Conduct routine inspection of center's facilities for health, nutrition, safety, fire and occupancy compliance and take necessary corrective action. • Supervise the preschool program along with regular teaching or without regular teaching responsibilities. • Conduct periodic observations to evaluate job performance of assigned staff, maintain appropriate documentation, and meet timelines. • Conduct regular staff meetings for group	• Assist the Headmasters Headmistress or Supervisor in purchasing of materials. • Training the Assistant Teacher to transact the curriculum in her absence. • Training helper to support in the implementation of preschool program • Supporting supervisor and head of the preschool. • Supervising the work of a helper	• Assist the Headmasters Headmistress or Supervisor in purchasing of materials. • Training the Assistant Teacher to transact the curriculum in her absence. • Training helper to support in the implementation of preschool program	

Head of the preschool	Supervisor	Teacher	Assistant teacher	Helper
● Coordinate and support effective curriculum transaction. ● Supervise and participate in the conduct of training and orientation programs, workshops and other professional development activities for teachers.	● Provide guidance, hand-holding and technical assistance toothier staff (i.e., assistant teachers). ● Plan, organize and oversee implementation of a curriculum that is age and developmentally appropriate. ● Ensure completion of growth monitoring, health screening of all children and proper maintenance of records. ● Ensure that balanced snacks and meals are provided to children.	● Become familiar with the early learning outcomes and developmental goals and accordingly plan activities. ● Prepare monthly or weekly lesson plans and daily schedules to ensure holistic development of all children keeping in mind diversity and special needs of children. ● Maintaining student portfolio. ● Identify developmental delays, plan and implement specific activities with the support of special educator. ● Plan and arrange field trips or nature walks according to the need.	● Prepare teaching learning materials. ● Conduct and assist in organizing small group activities as guided by the preschool teacher. ● Assist the preschool teacher during structured large group activities such as circle time, whole group storytelling, etc. ● Become familiar with the early learning outcomes and developmental goals and accordingly plan activities. ● Assist the teacher in developing lesson plans.	Escort the children from the time of arrival, departure, between activities (for example to outdoor areas and toilet). ● Preparation food under the supervision of the teacher and assistant teacher. ● Assist the teacher during field trips and nature walk between activities (for example to outdoor areas and toilet).

Head of the preschool	Supervisor	Teacher	Assistant teacher	Helper
	• Ensure children's safety and well-being at all times.	• Plan balanced snacks and meals. • Ensure children's safety and well-being at all times. • Observe and assess children's behavior and performance and make notes. • Communicate observations to children's parents at regular intervals. • Plan lessons that allow for child initiated and teacher-initiated activities. • Taking remedial measures for children absenteeism, if required.	• Assist the preschool teacher in planning and developing activity areas, display boards and physical setup of the room. • Assist the teacher during field trips and nature walks. • Identify individual child's strengths and needs, reporting to the preschool teacher and helping the teacher in assessment. Maintaining student portfolio. • Engaging with children in the absence of the teacher.	• Preparation of food under the supervision of the teacher and assistant teacher.

28.5.10 Support of Parents / Community and other Stakeholders

Head of the preschool	Supervisor / Incharge	Teacher	Assistant teacher	Helper
Coordinate with teachers for supporting children with special needs	• Act as a one-point contact for the preschool and a link between parents, community, teachers and headmaster or headmistress. • Coordinate for administrative queries such as attendance, admission, transport, parent teacher meetings, fees, etc. • Plan and organize orientation for the parents on the philosophy, policies and pedagogical processes of the preschool education and ensure their participation • Collect suggestions and feedback from the parents.	• Work with the preschool team to strengthen the program and parental support activities. • Develop a relationship with parents, community and involve them as partners in their child's education. • Communicate and share information of interest with parents and community regularly during parent teacher meetings. • Deliver informational sessions and workshops for parents. • Observe and assess children's performance and provide feedback on children's progress in a sensitive manner	• Assisting the preschool teacher for maintaining communica- tion with the parents and community and making home visit whenever necessary	• Interacting with parents when they come to school.

28.5.11 Classroom Duties

Head of the preschool	Supervisor / Incharge	Teacher	Assistant teacher	Helper
• Guidance on 21st century skills and techniques to be used in improving preschool program such as critical thinking, collaboration, working in teams, self-regulation, etc.	• Plan and help in designing the classroom and learning environment of the preschool. • Monitor average daily attendance for each child on a weekly basis. • Ensure variety of materials and	• Maintain a safe, comfortable and emotionally supportive environment by using positive and encouraging words. • Prepare teaching-learning materials for all children. • Observe and interact with children in activity areas. • Ensure transaction of daily schedule as per plan (not to be rigid). • Maintain each child's portfolio. • Handling emergencies and giving first aid. • Interact with children with love, nurturance and empathy	• Maintain a safe comfortable and emotionally supportive environment by using positive and encouraging words. • Escort and play with children during outdoor play and ensure their safety. • Interact with children in activity areas. • Take responsibility for daily routines of children like arrival, departure, snack time, checking hygiene, etc. • Handling emergencies and giving first aid. • Interact with children with love, nurturance and empathy.	• Maintain cleanliness of the class intermittently. • Maintain hygiene of the children—toileting, hand washing, etc. • Help the teacher in preparing class for activities such as setting up materials for the activities. • Preparation of room for rest time, music and movement. • Handling emergencies and giving first aid. • Provide love and nurturance. • Serving food under the supervision of teacher or assistant teacher. • Support the teacher in organizing events. • Repair and remove any play material that poses a threat to children.

28.5.12 Match the following

1.	Cumulative	(a)	records of child's extracurricular activities assessment of academic progress
2.	Portfolios	(b)	cognitive development
3.	Concept formation	(c)	children's work
4.	Feely bag, touch cards	(d)	learning corners
5.	Classroom organization	(e)	sensorial

28.6 Records and Registers to be Maintained in an ECE Centre

Proper maintenance of records is most useful for purposes of curriculum planning. The curriculum of the school, if it is to be effective, should be based on the needs, interests, and abilities of the children. The teacher should provide such experiences to the children which are meaningful, interesting, and functional for them and which are in accordance with their development all level. The teacher and his successfully only when she knows the background information of the group of children for whom she is making the plan.

There cords help the teacher to determine the readiness of the children for school. Data about the child's physical, emotional, intellectual and social development should help the teacher to determine whether a particular child is ready for formal schooling or not.

The records, if carefully kept, are also valuable from the point of view of researchers. We have hardly any data on the pattern of child development in India. These records, if well maintained, should yield a great deal of material for studies in child growth. One point that every teacher should be in mind is that records are not kept for the purpose of storage. If they are not used for the guidance of the children, they cease to serve the purpose for which they are kept.

Records and Registers

These records, if well maintained, should yield a great deal of material for studies in child growth. One point that every teacher should bear in mind is that records are not kept for the purpose of storage. If they are not used for the guidance of the children, they cease to serve the purpose for which they are kept.

Definition of Records and registers:

Registers: Talks about the details regarding the number of static things of schools like Attendance Register, Admissions Register, Stock Register etc.,

Records: Talks about the Children's cumulative Record.

28.6.1 Classification of records and registers

The two categories of Records and Registers are –

● Maintenance and Administrative Records

● Records of Children

28.6.2 Maintenance and Administrative Records

1. **Record of Income and Expenditure:** Helps the organization/school function smoothly without any financial crisis.

2. **Stock Register:** Enables us to have an idea of what we have and what has to be purchased from outside.

3. **Visitors Record:** The book is meant for recording the visit of important personalities to the learning center, including officials from related departments. It provides a record of the interest shown by the community in the school. It could seem like a means of getting the contact address of very important people who have an interest in the school.

4. **Register for Registration:** It gives an idea about how many children are registered in the center and the background information for scrutiny.

5. **Record of Early Planning calendar:** Helps in guiding to workout total number of working days, holidays and activity for each month for the academic year.

6. **Food Record:** Facilitates checking whether the children enjoy planned diet or not, to find out the expenditure for each meal and to enable changes in the menu, if necessary.

7. **Parent Education Program Record:** Planning for Parent Teachers' Association meeting helps to organize smoothly and interestingly it also gives us the information about the number of parents attending, the topic on which awareness given their feedback etc.

28.6.3 Records and Registers related to Children

1. **Admissions Register:** This register is very important to have an idea of how many seats are filled and how many vacancies are there.

2. **Attendance Register:** Helps to monitor the children and staff regularity.

3. **Monthly Progress Report:** Makes the teacher identify gaps and strengthen the program.

4. **Yearly Progress Report:** Very essential to motivate parents and children.

5. **Health Record:** The main aim of this record is to make the parents and the workers realize the gradual development of each child and it helps in early identification of any setbacks and to guide. Health information about the physique of the child, physical appearance, nutritional status, mental health, immunization etc. will be obtained.

28.6.4 Cumulative Record for Young Children

The cumulative record folder is thus means by which one gets to understand the needs of the children better, but it serves no purpose if it stops with diagnose is. It is up to the teacher to make use of the information. It is a store house of information on students cognitive, affective, and psychomotor development.

●   It reflects continuous assessment of students educational or academic progress.

- It also records children's performance in extracurricular activities.
- It could be useful for researchers on both child development study and school management.
- Student report sheet / card.
- Academic performance / progress report.

28.6.5 Staff and Student's Personal Files

- It is necessary that the school should have as much information very one of teachers and students as possible. This record provides current and first-hand information and the staffing as well as the student information.
- It assists in enforcing account ability and continuity in the school work.
- Assess the teacher's adherence to the syllabus and how and when the work is done.
- Evaluates teacher's competency and efficiency.

I) Record & Workbook or Weekly Dairy

A carefully kept record of work is a strong stimulus to dutiful and progressive work.

i) School Timetable

- Provides information on when classes begin, when school opens and closes.
- It's how activities to be performed by teacher and student.
- It assists in regulating the activities of students and staff of a particular school.
- It facilitates and enhances student interest and attention and prevents mental and physical strain.

ii) Staff Time Book & Movement Book

- Provides information on when staff report to and leave from work.
- Promote regular attendance & punctuality.

The role of head teacher and school records are synonymous because effectiveness and efficiency of head teacher depends largely on the vital documents. However, the class teachers complete this task by effectively discharging their duties by proper upkeep and maintain these academic records for which they have direct responsibility.

WHAT YOU HAVE LEARNT

- ❒ Designing and maintaining the physical environment of a preschool classroom is a challenging task for a preschool teacher. Designing physical space for young children blended with pedagogy and safety help in their process of learning. It varies from one ECE centre to another and from urban to rural setting depending on the availability of space and the number of children.

- ☐ Activity areas also known as "learning centres" or corners are established places in the classroom with resources that actively engage children. These areas may be changed according to the theme/topics and as per the interests of the child.

- ☐ It is essential to display children's artwork and projects. This helps to boost and foster their self- esteem and also helps them remember in what activities they participated. Display may be used to convey a theme being covered in the classroom. This makes them curious, interested and involve in the theme.

- ☐ Materials and equipment contribute to the overall environment and program philosophy. The success of an early child hood environment is not dependent upon designing above. The materials and equipment given to the children are just as important to learning as physical space of the classroom.

- ☐ Programme implementation process should include lots of materials that have an abundance and variety of uses to give children a sense of creativity and control.

- ☐ Proper maintenance of records is most useful for purposes of curriculum planning. The curriculum of the school, if it is to be   effective, should be based on the needs, interests, and abilities of the children.

- ☐ **The Preschool staff:** A preschool should have dedicated staff, who can collaborate to create a cohesive and joyful learning environment for children in preschool centers/ Learning centers. The preschool staff, especially teachers, provide an opportunity to children for holistic development inside and outside the classroom. Apart from the teachers, the administrators and helpers are equally important for the successful functioning of preschool programs. They should be carefully selected on the basis of their experience, education, and dedication to preschool education.

✂ TERMINAL EXERCISE ✂

1. Do you think the organization of space in a learning center influences a child's learning? If so, what are the effective ways of organizing a center for a child's learning?

2. Explain the advantages of four main learning corners in a learning center.

3. What is assessment? How do you assess young children?

4. What is the importance of records and registers in a learning center? explain?

ANSWERS TO INTEXT QUESTIONS ✍

28.4 :   1-e   **28.8:** e   **28.17:** 1c;   2a;   3e;   4b;   5d;

HINTS TO TERMINAL EXERCISES

1) 28.2.3, 28.2.4; 28.3, 28.3.1; 28.3.2; 28.3.3;   2) 28.3.4 to 28.3.4h

3) 28.6.2 to 28.6.7;   4) 28.8;

PLANNING AND CONDUCTING PRESCHOOL PROGRAMME

INTRODUCTION

Programme planning in a Preschool/Play centre involves creating a structured and well-thought-out plan for the activities and learning experiences that children will engage in. The early years of a child's life are important for their development. What they learn during this time can shape their personality and is hard to change later on. It's the responsibility of adults to provide children with a variety of experiences and help them develop positive habits, attitudes, and a curious mind.

The process of Programme Planning involves assessing the needs and interests of the children, developing learning objectives, selecting appropriate activities and materials, and determining how the activities will be implemented and evaluated.

In this lesson, you will learn to know about the process of programme planning in a play-way approach in a Preschool / Play centre.

OBJECTIVES

After studying this lesson, you will be able

- *to develop knowledge, understanding and skills in planning and implementation of developmentally appropriate programme in the preschools.*

- *to understand the need and importance of planning the long and short terms programme.*

- *to get to know the appropriate ways of assessing children's learning and development*

- *to know the need, importance and significance of feeding programme in the preschool*

29.1 Principles of Programme Planning

Before going into the details of programme planning process, let us understand the meaning of the terms like programme, plan and programme planning in the context of Preschool/ Play centre Programme:

- **Programme:** Programme is a written statement which describes proposed developmental activities, the actions, and resources required.

- **Plan:** Plan is schedule of development work outlining different activities in a specific period. It answers the questions like what, why, how, and when as well as by whom and where the work is to be done.

- **Programme planning:** Programme planning is the process of making decisions about the direction and intensity of development/ education efforts to bring about desirable change among preschool children.

29.1.1 Considerations to keep in mind when Planning a Preschool / Play Centre

Planning.

- consider children's developmental needs
- learning goals
- how they learn best through play
- the local culture
- creating an inclusive classroom and
- the latest research on brain development

By taking these factors into account, the programme can be well-rounded , and effective in supporting children's learning and development.

29.1.2 Basics Principles for Programme Planning

The following are the basic principles that may be useful for teachers when planning learning experiences and activities for young children:

a. **Freedom for the child:** Providing children with a safe and supportive environment that allows for spontaneous play can help promote their growth and development.

b. **Learning activities must be doing activities:** Children learn best by doing things on their own, so it's important to provide them with hands-on experiences and avoid doing things for them.

c. **Activities should be based on real objects and situations:** Exposing children to real-life situations and objects can help them learn and understand things better.

d. **A well-planned schedule:** Planning activities in advance can help ensure that the teacher and child's day is more productive and enjoyable.

e. **Language as a tool of learning activities**: Encouraging children to use language to talk about what they see and feel can help them develop their language and communication skills.

f. **Individual attention:** Developing a rapport with each child and providing individual attention and recognition can help support their learning and development.

These principles can help guide the development of developmentally appropriate learning experiences and activities for young children, helping to ensure that they are engaging, supportive, and promote growth and development.

29.1.3 Planning a Balanced Preschool Programme

Overall, a balanced and developmentally appropriate programme is essential to ensure that young children receive the support they need to learn and grow in all areas of development.

"Let's look into a balanced and developmentally appropriate program."It has following characteristics…..

a. **Provides a nurturing and warm environment:** It is a key characteristic of a balanced and developmentally appropriate program. By creating a nurturing and warm environment, children are more likely to feel comfortable and secure, which can enhance their overall development and well-being. Additionally, a caring and safe atmosphere can encourage positive social interactions among children and help them build relationships with adults who serve as positive role models

b. **Individual and Group Activities:** It's important for pre-schoolers to engage in both individual and group activities. Individual activities can include things like puzzles, drawing, and writing, while group activities can include circle time, singing songs, and playing games together. This helps children develop both independence and social skills.

c. **Developmentally appropriate:** The programme addresses the physical, motor, socio-emotional, cognitive, and language development of young children. Another important characteristic of a balanced and developmentally appropriate program is where children develop in multiple areas, including physical, motor, socio-emotional, cognitive, and language domains. A well-designed program considers all of these areas of development and provide activities and experiences that support each of them.

d. **Free and Guided Activities:** Free play activities allow children to explore their interests and creativity, while guided activities provide structure and help children learn specific skills. Examples of free play activities include playing with blocks, dress-up, and pretend play, while guided activities may include things like science experiments, math games, and guided writing exercises.

e. **Active and Quiet Play Activities:** Pre-schoolers have a lot of energy and need opportunities to be active, but they also need quiet and calm activities to help them relax and focus. Active play activities can include running, jumping, and playing sports, while quiet activities may include reading, drawing, or doing puzzles.

f. **Indoor and Outdoor Activities/Games:** It's important for children to have opportunities to play both inside and outside. Indoor activities might include arts and crafts, cooking, or music and movement, while outdoor activities might include playground games, nature walks, or gardening.

g. **Small Group and Large Group Activities:** Small group activities provide children with more individualized attention and allow for more interaction, while large group activities promote socialization and cooperation. Examples of small group activities might include playing a game with a few friends, while large group activities could be a whole-class sing-along or a group project.

h. **Child Initiated and Teacher Initiated Activities:** It's important to balance child-initiated and teacher-initiated activities to provide children with opportunities to explore their interests and ideas while also introducing them to new concepts and skills. For example, a child-initiated activity might be building a tower with blocks, while a teacher-initiated activity could be introducing a new math concept through a game or activity.

i. **Child-Guided and Teacher-Guided Activities:** Child-guided activities allow children to take the lead and explore their interests, while teacher-guided activities provide structure and direction. Examples of child-guided activities might include making a craft or playing dress-up, while teacher-guided activities could be leading a group discussion or introducing a new skill through a demonstration or activity.

j. **Concrete and Abstract:** Pre-schoolers learn best through concrete, hands-on experiences, but it's also important to introduce more abstract concepts and ideas. Examples of concrete activities might include playing with manipulative, exploring nature, or building with blocks, while abstract activities could be introducing new vocabulary or talking about feelings and emotions.

k. **Continuous evaluation:** The programme facilitates continuous evaluation of children and the programme ensures that it is meeting the needs of the children and the programme goals.

l. **Foundation for future learning:** The programme lay the foundation for the development of reading, writing, and math skills and promote the development of good habits and independence in children thus preparing children for later learning.

In summary, a balanced preschool programme should include a variety of activities that meet children's different needs and interests while promoting their overall growth and development.

29.1.4 Factors Influencing Programme Planning

All of these factors play a crucial role in determining the effectiveness of an ECE programme for young children.

There are various factors that can influence program planning for early childhood education. Here are some of them:

a. **Philosophy and objective of the program:** The program's philosophy and goals should guide the planning process, ensuring that the program is designed to meet its intended objectives.

b. **Policy support:** National, state, and local policies can affect the planning process, such as regulations or guidelines for teacher qualifications, safety standards, and curriculum requirements.

c. **Geographical, social, and economic background of the child:** A child's background, such as where they live and their family's income level, can affect program planning decisions, such as the resources and supports needed to meet their needs.

d. **Expectations of parents and the community:** Parent and community expectations can influence program planning, such as the types of services and activities offered.

e. **Location of the centre:** Urban, rural, and tribal areas may require different types of programs and resources to meet the unique needs of children and families in those areas.

f. **Infrastructure facilities available:** The availability of resources, such as space, equipment, and materials, can impact program planning decisions.

g. **Teacher-child ratio:** The number of teachers available in relation to the number of children enrolled in the program can affect the planning process.

h. **Age range of children within a group:** The age range of children in a group can influence program planning, as the activities and curriculum must be appropriate for each child's developmental level.

i. **Staff training and experience:** The qualifications and experience of program staff can affect program planning decisions, such as the types of activities and approaches used.

j. **Duration of the program per day:** The length of time the program is available can impact planning decisions, such as the number and types of activities offered during that time.

29.1.5 Important to borne in mind while planning a quality preschool programme

a. **The socio-cultural context** of the children is an important consideration in planning a preschool programme. Children from deprived households may not have had access to a stimulating environment and may therefore be at risk for developmental delays.

b. **Providing a stimulating environment:** The preschool environment should be designed to promote learning and development, with age-appropriate toys, books, and other materials that encourage exploration and play.

c. **Tailoring the programme to individual needs:** Teachers should be trained to assess the developmental needs of each child and provide appropriate support and guidance to help them achieve their full potential.

d. **Encouraging parental involvement:** Parents and caregivers can play a key role in promoting their child's development. Teachers should work with parents to provide information and resources to support their child's learning at home.

e. **Culturally responsive teaching:** Teachers should be aware of the cultural background of the children they are working with and incorporate culturally relevant materials and activities into the programme.

f. **Collaborating with community resources:** Preschool programmes can partner with community organizations to provide additional support and resources to children and families, such as health care, nutrition, and social services.

By addressing the experience gap between children, preschool programmes can help ensure that all children have the opportunity to reach their full potential and succeed in school and beyond.

INTEXT QUESTIONS ?

1) Which of the following is NOT a key consideration when planning a balanced preschool program?

   A. The interests and needs of the teacher

   B. The preferences of the parents

   C. The developmental needs of the children

   D. Latest Research findings on Preschool education

2) Which of the following is an example of a developmentally appropriate activity for a balanced preschool program?

   A. Memorizing alphabet and numbers

   B. Completing worksheets on reading comprehension

   C. Playing with blocks and other manipulative in small groups

   D. Sitting still and listening to teacher

3) Which of the following is a potential benefit of a balanced preschool program?

   A. Increased pressure on children to perform academically

   B. Reduced opportunities for children to engage in play and exploration

   C. Greater likelihood of developing social-emotional skills

   D. Limited exposure to different learning styles

4) When considering the needs of the children in a preschool program, which of the following factors is important to consider?

   A. Age and gender of the children

   B. The developmental level of the children

   C. Cultural background and experiences of the children

   D. All of the above

5) Which of the following is not a characteristic of a balance preschool programme?

   A. Provides a strict disciplinary environment

   B. Has both children initiated and teacher-initiated activities.

   C. Conducts indoor and outdoor activities

   D. Has scope for continuous assessment of the development in children.

29.2 Instructional Plan

An instructional plan is a written document that outlines the strategies and activities that will be used to achieve a specific learning objective or set of learning objectives. It

provides a framework for the teacher or instructor to effectively teach a particular topic or skill to students.

Teachers while planning the instructional lesson plans should consider the following three aspects, in the form appropriate characteristics of each plan

A) **Contents of activities:** what the children will experience pertaining to age and developmental level..... Referring to the content ... topic / theme/concept planned to be taken into consideration (separately for three different age groups 3-4 years, 4-5 years and 5-6 years.)

B) **Objectives of curriculum content:** are expected to be developed through the activities.

C) **Creation of the environment:** how to provide an appropriate environment to achieve the objectives of curriculum content.

29.2.1   Instructional Plans

Long Term and Short Term Planning

A) Long Term (yearly and monthly)

i.   **Yearly plan** is a type of instruction plan that outlines the activities and objectives for a whole school year, typically from June to April. The yearly plan is formulated by considering a child's developmental milestones in relation to the preschool curriculum. When creating the plan, it is important to carefully schedule annual events that mark the different stages of their development at preschool, in order to create a yearly plan that ensures children do not feel overwhelmed. Additionally, changes in the seasons should be taken into consideration, in order to encourage children to notice and appreciate the natural world and to develop their emotions through close contact with the seasons.

ii. **A monthly plan** This monthly plan should be detailed and take into account specific events happening during the month, as well as the developmental stage of the children in the preschool program. By carefully formulating a monthly plan, the larger yearly plan can be effectively implemented while also meeting the unique needs of the children during that specific time period.

B) Short-Term (weekly and daily)

i.   **A weekly plan** is a concrete instructional plan for a single week that effectively puts the monthly plan into practice, paying close attention to the sequence of key concepts and themes that have been planned for the entire year. This weekly plan should be practical and include specific activities and materials needed to successfully implement the plan. By carefully formulating a detailed weekly plan, the larger yearly plan can be effectively executed while also ensuring that the children in the preschool program are actively engaged and meeting developmental milestones. These plans help ensure that the curriculum is being effectively implemented and that children are receiving appropriate and engaging experiences that support their development.

ii. **Daily Plan** is an instructional plan for a single day that provides a detailed breakdown of the activities that preschool children will engage in. This plan should include a regular routine of activities that are appropriate for the children's age and developmental stage. The plan should be specific and highlight the different activities, games, and exercises that the children will be participating in throughout the day. By creating a detailed daily plan, it is possible to ensure that the children remain engaged and stimulated while also meeting key developmental milestones.

Teachers are responsible for formulating a daily plan of activities that creates a supportive and enjoyable environment for preschool children. While there is no standardized format for the daily instruction plan, some preschools use a consistent structure that includes both active and passive activities, as well as large group, small group, and individual activities. Ultimately, it is up to the teacher to work out and formulate the plan. Experienced teachers are often able to effectively consider various important aspects when formulating both weekly and daily plans, in order to ensure that they are cohesive and effective.

When planning the daily schedule for an early childhood education program, it is essential to ensure that it is developmentally appropriate, meets curriculum objectives and utilizes available resources. Here are some guidelines to consider:

29.2.2 Consider the Children's Developmental Needs

The daily schedule should be tailored to meet the developmental needs of the children in the program. This includes providing opportunities for active play, rest, exploration, and socialization.

i. **Plan for a variety of activities:** A well-rounded schedule should include activities that promote cognitive, physical, social, and emotional development. Examples of activities include story time, outdoor play, arts and crafts, and music and movement.

ii. **Allocate time for routines:** Children thrive on routine, so it is important to allocate time for daily routines such as snack time, rest time, and bathroom breaks.

iii. **Balance quiet and active activities:** The schedule should strike a balance between quiet activities, such as reading or drawing, and active activities, such as outdoor play or dance.

iv. **Be flexible:** It is important to be flexible and adjust the schedule as needed to accommodate unexpected events or changing needs of the children.

v. **Consider available resources:** Consider the resources available, such as materials, equipment, and staff, and plan activities that can be effectively delivered with the available resources.

vi. **Communicate with parents:** It is important to communicate the daily schedule to parents so they can reinforce routines and expectations at home.

By taking these guidelines into consideration, a daily schedule can be developed that promotes the well-being and development of young children in an early childhood education program.

29.2.3 Sample of Daily Schedule:

Table No:1

Time	Schedule
8.30 to 9.00am	Arrival, welcoming, greetings children, families, informal talk Interaction ● Teacher –child ● Teacher –parent ● Child- child ·
9.00 to 9.15am	Prayer ● Group meeting/ assembly ● News/ experiences /events ● Birthday celebration ● Calendar / weather report etc. ● Warning up activities
9.15 to 9.30 am	Settling of children
9.30 to 10.00	Circle –time – I ● Good habits ● Use of weather chart daily calendar ● Free conversation /free talk by children ● Followed with concept building ● Conversation /Rhymes etc ● Interaction with peer/teacher (language skill, listening / speaking, thinking and sequence)
10.00 to10.10 am	Transition- activity /snack time
10.10 to 10.30 am	Cognition- pre reading / number readiness activities
10.30 to 11.00am	Discovery time/ interactions in learning cornersindoor free play in small group
11.00 to 11.10am	Transition time
11.10 to 11.30am	Story time / dramatization /circle time II
11.30 to 11.50am	Pre writing activities / practice in workbooks
11.50 to 12.00 pm	Preparation for lunch
12.00 to 12.40pm	Lunch
12.40to 1.30pm	Nap/ rest
1.30 to 1.40pm	Hand wash – preparation for next activity
1.40 to 2.00pm	Numeracy related activities for older group 4 and half to 5and half year old children Nap rest may continue for younger children or free choice play
2.00 to 2.20pm	Free choice play/ manipulative play /Rhymes /Music and movement
2.20 to 3.10pm	Literacy related activities
3.10 to3.20pm	Transition activities
3.20 to 3.50pm	Clay work/ mother tongue/Telugu ,English
3.40 to 400	Recap and getting ready to go home

Source: WDCW Govt. Telangana – Preschool Programme

29.2.4 Sample Lesson Plan Format for a Concept (Shapes)

Concept: Shapes Age Group: 3-4 years

Expected learning outcomes:

- Children will be able to identify and name different shapes.
- Children will be able to draw shapes and identify objects that are shaped like them.
- Children will be able to create their own shapes using different materials.

Phase 1: Introduction:

Ask children if they know what shapes are, and encourage them to name different shapes.

Show pictures of different shapes and ask children to identify them.

Explain that they will be learning more about shapes in today's lesson.

Developing the concept:

- Introduce the circle shape, and explain that it is round and has no corners.
- Ask children to draw circles using a marker on a piece of paper.
- Show examples of objects that are circle-shaped, such as a clock or a pizza, and ask children to identify them.
- Introduce the square shape, and explain that it has four sides that are equal in length and four corners.
- Ask children to draw squares using a marker on a piece of paper.
- Show examples of objects that are square-shaped, such as a book or a block, and ask children to identify them.

Phase 2: Fixing the concept:

- Review the circle and square shapes, and ask children to name objects that are circle-shaped and square-shaped.
- Provide different materials, such as play-dough or blocks, and ask children to make different shapes.

Activities:

- Play a shape identification game, where children have to find shapes in the classroom.
- Provide shape puzzles, where children have to match the correct shape to its corresponding picture.
- Allow children to make their own shapes using different materials.

Phase 3: Assessment:

- **Observation:** Observe children during the lesson and note if they are able to identify and name different shapes, draw shapes, and identify objects that are shaped like them.

- **Worksheet:** Provide a worksheet with different shapes and ask children to identify and colour each shape correctly.

- **Art project**: Provide different materials and ask children to make a picture using shapes.

Overall, the assessment should focus on whether the children are able to apply the concept of shapes in different contexts and demonstrate their understanding of the concept.

29.2.5 Some Concepts for Preschool / Play Centre Programme

Concepts in preschool / Play centre serve as a central focus for organizing activities, lessons, and learning experiences around a particular topic. Concepts make learning more engaging and meaningful for young children. Preschools often rotate through different concepts to keep the curriculum fresh and exciting. Here are some common concepts used in preschool education:

- **Seasons:** Exploring the characteristics, weather, and activities associated with each season (summer, rainy, winter).

- **Animals:** Learning about different types of animals, their habitats, and characteristics.

Transportation: Exploring various modes of transportation like cars, trains, planes, boats, etc.

Community Helpers: Understanding the roles and contributions of different community helpers like doctors, teachers, police officers, etc.

Colours: Focusing on different colours through art, activities, and games.

Shapes: Identifying and exploring basic shapes like circle, square, triangle, etc.

Family: Celebrating family diversity and learning about family members and relationships.

Farm: Understanding farm animals, crops, and life on a farm.

Ocean and Underwater World: Discovering marine life and ocean ecosystems.

Insects and Bugs: Learning about various insects and their characteristics.

Fruits and Vegetables: Exploring different fruits and vegetables, their tastes, and benefits.

My Body: Understanding body parts, health, and hygiene.

Stories: Exploring classic fairy tales and folktales.

Shapes and Patterns: Investigating geometric shapes and patterns in everyday life.

Community and Neighbourhood: Learning about the local community, landmarks, and places of interest.

Space and Planets: Exploring the solar system and learning about planets and stars.

Weather: Understanding different weather conditions and their effects.

Cultures and Traditions: Introducing children to various cultures and their customs.

Festivals: Introducing children to the local, regional and national festivals

Five Senses: Exploring the five senses (sight, hearing, taste, touch, smell) and how they work.

Gardening and Plants: Learning about plants, gardening, and the growth process.

Shapes and Sizes: Comparing and contrasting different shapes and sizes.

Food and Nutrition: Understanding healthy eating habits and food groups.

Outer Space and Astronauts: Learning about space exploration and astronauts.

These concepts are just a starting point, and preschools can adapt and expand on them based on the interests and developmental needs of the children in their care. Concepts are designed to make learning exciting and relevant while promoting the holistic development of young learners.

INTEXT QUESTIONS ?

29.2

1. Which of the following is an example of a short-term plan for a preschool classroom?

    A) Developing a curriculum for the entire school year

    B) Conducting daily circle time activities

    C) Establishing partnerships with local businesses

    D) Creating a five-year strategic plan for the school

2. Which of the following is an example of a long-term plan for a preschool program?

    A) Planning a field trip for next week

    B) Purchasing new toys and equipment for the classroom

    C) Establishing a partnership with a nearby Primary school for ongoing collaboration

    D) Creating a daily schedule for the upcoming month.

3. State the following statement are true or false

    i) There is no need to have a programme plan for preschool as children are very young.   True/False

    ii) Developmental needs of children are to be considered while planning programme for preschool .   True/False

    iii) Instructional plan for long term and short term is essential for a quality preschool programme.   True/False

29.3 Assessment and Evaluation

Assessment and evaluation are critical to ensure that preschool programs are meeting the needs of all children and providing them with the foundation they need for future success.

Objectives

After going through the lesson, you will….

● Develop an understanding about the need and importance of evaluation and assessment in Early Childhood Education.

● Understand the evaluation process and learn how to use techniques to identify the progress of the child in different developmental areas.

29.3.1 Need for the Assessment

Evaluation and assessment play a crucial role in Preschool/Play centre programme. Here are some reasons why:

i. **Informing Instruction:** Assessment data allows teachers to tailor instruction to meet the individual needs of each child. This is especially important in ECE since children come from diverse backgrounds and have varying abilities.

ii. **Identifying Developmental Delays:** Assessment can identify potential developmental delays in children, allowing teachers to intervene early and provide additional support.

iii. **Monitoring Progress:** Regular assessments help teachers monitor the progress of each child and make necessary adjustments to the curriculum and instruction to ensure that all children are meeting developmental milestones.

iv. **Informing Parent-Teacher Conferences:** Assessment data can be shared with parents during conferences to provide a more complete picture of their child's strengths and areas for improvement.

v. **Program Improvement:** Evaluating the effectiveness of the overall program can help identify areas for improvement and guide decision-making about curriculum, instruction, and resources.

vi. **Accountability:** Assessment data can be used to demonstrate accountability to parents, administrators, and regulatory bodies, ensuring that the program is meeting expected standards and requirements.

The following picture shows the process, need and importance of assessment and evaluation.
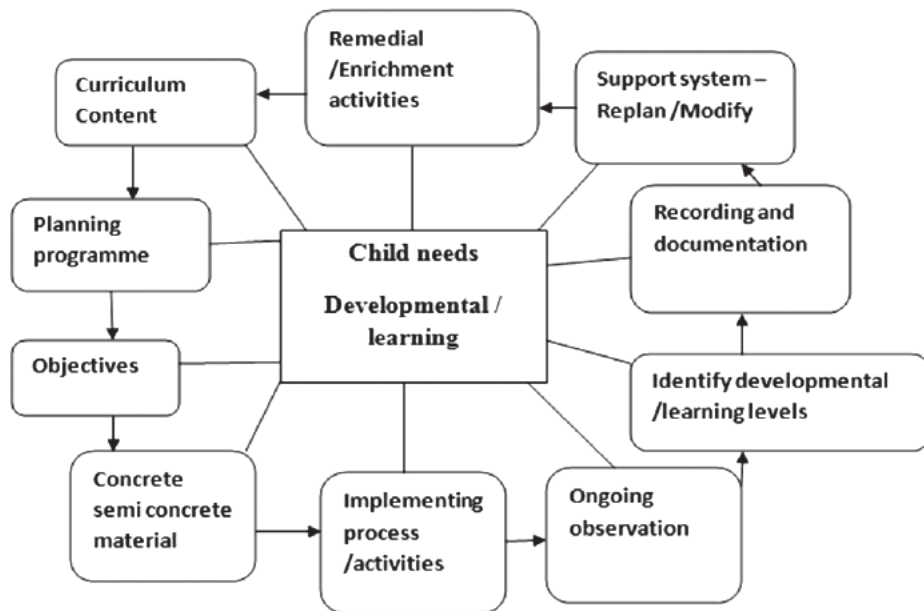
In conclusion, evaluation and assessment are essential tools in ensuring high-quality ECE programs that meet the needs of all children. They provide information for teachers to tailor instruction, identify developmental delays, monitor progress, inform parent-teacher conferences, improve the program, and demonstrate accountability.

29.3.2 How to do Assessment in Preschool/Play Centre:

Assessment refers to the process of gathering information about what a child knows, understands, and can do.

It is a tool used

● to evaluate the learning progress and developmental needs of children, and

● to identify areas where additional support or instruction may be needed.

The primary goal of assessment is to obtain meaningful information

● about children's skills,

● abilities, and

● knowledge,

which can then be used to guide instruction and improve learning outcomes.

a) How to observe children:

Assessment plays a crucial role in preschool education as it helps teachers to determine the developmental status of each child and track their progress over time. By continuously observing and assessing children, teachers can plan early learning experiences that meet each child's individual needs and challenge their abilities. Observation is a primary technique

used in preschool education to understand a child's growth and development and to evaluate the effectiveness of the educational program.

Observation involves

· actively watching and listening to children,

· recording their behaviours,

· interactions, and

· learning experiences.

Teachers should also establish

· a regular observation schedule,

· document their observations, and

· use that information to inform to parents and curriculum planning.

To conduct effective observation in preschool, teachers need to know

· what to observe,

· when to observe, and

· how to observe.

You should have a clear understanding of child development milestones and age-appropriate behaviours to identify areas of concern or delay.

In summary, observation is a critical component of assessment in preschool education. By actively observing and assessing children, teachers can develop a better understanding of each child's unique needs and abilities and provide individualized learning experiences that promote optimal growth and development.

A caution: Assessment is a crucial aspect of early childhood education, and there are various methods available for it. However, research suggests that observation-based assessment is the most effective approach for assessing young children. This recommendation has been endorsed by the Government of India, as evidenced by the publication of the 'Quality Standard for Early Childhood Care and Education (ECCE)' in 2014. The document emphasizes the need for caregivers to be sensitive to factors that may affect children's progress and to observe their learning and development while keeping a record of their progress towards set goals. It also emphasizes the importance of using observations to provide tailored interventions for individual children and employing continuous and ongoing assessment tools and strategies that are in the language understood by children. If done appropriately, assessment can help identify and nurture a child's potential, and it should not be viewed as a means of comparing a child's progress against external benchmarks. In summary, the significance of assessment in early childhood education cannot be overstated.

· **What is Evaluation?**

Evaluation is defined as the process by means of which changes in the behaviour of the learners are studied. Evaluation is a continuous process to identify the needs and levels of development of the individual and then provide appropriate experiences. Hence evaluation is concerned with learning and behavioural changes and is a continuous process.

Why of Evaluation?

a) Purpose of evaluation is to identify at what level the child is, in terms of different developmental areas as reflected in the behaviour, performance, participation, interaction, expression, etc.

b) Evaluation also helps to identity the learning needs of the children and make decisions to support them.

c) Evaluation is to help the teacher to reflect on strategies, materials and methods – Assessment based on skills the children are acquiring. This can help to determine the children's readiness for planned instruction and to gather information about how well children are learning from the activities presented to them in the class. This would also help the teacher to identify learning problems if any.

What to Evaluate?

Evaluation can be on any one or a group or all of the following :

a) Suitability of the programme – how far the programme is suitable to the group?

b) Programme implementation strategies – to what extent are the strategies are effective?

c) The child's participation – to what extent is the child's participation?

d) The child's learning outcomes – what are the learning outcomes suitable to process?

When to Evaluate

a) Evaluation is a continuous process and must go on throughout the teaching year and not just at the end of a term or the year. To a great extent it should be carried out informally and naturally.

b) Types of Evaluation:

- **Continuous evaluation:** observation of children's participation and response during various activities, including school readiness activities.

- **Formative evaluation:** assessment done after completing one concept of implementing a program, usually on a weekly or biweekly basis.

- **Summative evaluation:** assessment done at the end of a planned period to identify learning or developmental levels.

- **Competency-based evaluation:** assessment based on indicators of achievement, which can judge a learner's mastery or non-mastery. Competency refers to both quality and quantity.

In conclusion, evaluation and assessment are essential tools in ensuring high-quality Preschool / Play centre programs that meet the needs of all children. They provide information for teachers to tailor instruction, identify developmental delays, monitor progress, inform parent-teacher conferences, improve the program, and demonstrate accountability.

INTEXT QUESTIONS ?

29.3

1. What is the primary purpose of assessment and evaluation in preschool?

    A. To determine if children are meeting academic standards

    B. To compare children to their peers

    C. To identify areas where children need additional support and learning opportunities

    D. To determine teacher effectiveness

2. Which of the following is an example of an assessment tool used in preschool?

    A. A stopwatch to time how fast children can run

    B. A ruler to measure how tall children are

    C. An anecdotal record / observation of a child's behaviour during a lesson

    D. A pencil and paper test with multiple-choice questions

3. Which of the following is an example of an effective evaluation strategy in preschool?

    A. Comparing children's test scores to those of their peers

    B. Assessing only academic subjects and ignoring social-emotional development

    C. Using multiple assessment tools and sources to gain a holistic view of each child

    D. Giving children rewards for getting high grades

4. Which of the following is an example of a summative assessment in preschool?

    A. An informal observation of a child's play

    B. A portfolio of a child's artwork and projects

    C. A report card with grades for different subjects

    D. A checklist of skills a child has mastered by the end of the year.

5. Which one of the following is NOT correct

    Observation record helps …

    A. In parent-teacher communication by providing specific examples of a child's behaviour and progress.

    B. In providing evidence of a child's progress and development over time.

    C. To give ranks to children

    D. In early identification of any developmental delays in children.

Planning for inclusion in preschool refers to the process of creating a supportive and welcoming learning environment that accommodates the diverse needs of all children, including those with disabilities or special educational needs. Inclusion aims to ensure that every child, regardless of their abilities or differences, can actively participate in all aspects of the preschool experience and receive appropriate support to achieve their full potential.

29.4.1 How to Plan for an Inclusive Classroom?

- **Provide inclusive materials and resources:** Teachers can provide materials and resources that are inclusive of all children in the classroom. This can include books, toys, and other learning materials that feature diverse characters and cultures. It is also important to make sure that the classroom environment is accessible and accommodating for all children, including those with disabilities.

- **Promote inclusion and collaboration:** Teachers can promote inclusion and collaboration by encouraging children to work together on projects and activities, and by providing opportunities for children to learn from each other. This can help build empathy and understanding among children and promote positive relationships.

- **Provide support for individual needs:** Teachers should be aware of and provide support for the individual needs of all children in the classroom. This may include providing additional resources or accommodations for children with special needs or those who speak languages other than English.

Overall, creating a positive and inclusive learning environment in the preschool classroom requires ongoing effort and attention from teachers. By respecting and valuing diversity, celebrating differences, encouraging open communication, providing inclusive materials and resources, promoting inclusion and collaboration, and supporting individual needs, teachers can help create a safe and welcoming space for all children to learn and grow.

29.4.2 Features of a Inclusive Classroom

The defining features of inclusion that can be used to identify high-quality early childhood programs and services are

- *Access:* Create accessible learning environments
- *Participation*: Encourage play, learning, and membership
- *Support:* Helping parents and providers find information and assistance

29.4.3 What Does Inclusion Look Like?

- A sense of belonging where all children are valued for their abilities and potential
- Assistance and accommodations are planned so that they can participate as equal and active members of their class and peer group

- Acceptance, patience and support for those things they are still learning how to do
- Opportunities to participate equally in all aspects of their day (e.g., outdoor and indoor play, snack, lunch, circle time etc.)

In summary, Early childhood teachers/Preschool teachers need to develop their knowledge of each child's strengths, interests, cultures and abilities, and build strong relationships with families. Addressing classroom diversity in terms of gender, caste/class, religion, language, festivals, food, dress, and needs of children in different regions and situations is also important. The progress from preschool to early primary classes should be seen as a continuous process in a child's holistic learning.

INTEXT QUESTIONS ?

29.4

1. Inclusion means equal opportunities for all the children in the class irrespective of their abilities/culture / socio economic status / region and religion – True / False

2. The important features of an Inclusive classroom are access, support and ——.

29.5 Organizing a Feeding Programme in a Preschool/ Play Centre

Organizing a feeding program in a preschool is a crucial initiative that focuses on providing nutritious and balanced meals to young children during their time at school. Proper nutrition plays a vital role in supporting children's growth, development, and overall well-being, making a feeding program an essential component of a comprehensive preschool curriculum Organizing a feeding program in a preschool requires careful planning and attention to the nutritional needs of young children.

29.5.1 Significance of Organizing Feeding Programme in Preschool:

- **Nutritional support:** Feeding in school provides young children with an adequate meal that can meet at least one-third of their daily requirement of all essential nutrients. This is particularly important for children who come from underprivileged families and may not have access to healthy and nutritious food at home.

- **Learning good eating habits:** Eating in school together with other children provides an opportunity for them to learn manners, appreciate cleanliness and practice independence in eating on their own. It also helps them develop a habit of eating whatever is served and not fussing about it, which can be beneficial for their future eating habits.

- **Improved health and development**: Good nutrition is the foundation of good development. Providing healthy and nutritious food to children in school can help improve their overall health and development, including their physical, cognitive, and socio-emotional well-being.

- **Positive impact on academic performance**: A well-fed child is more likely to perform better in school as they have the energy and nutrients needed to concentrate, learn, and engage in academic activities.

- **Socialization and inclusion**: Eating together with other children in school promotes socialization and inclusion. It helps children build relationships with their peers, learn about different cultures and customs, and appreciate diversity.

29.5.2 Factors to Consider while Planning Feeding Programme in a Preschool

- **Nutritional requirements:** The nutritional requirements of children of different ages and body sizes may vary. It is important to consider these requirements when planning meals and snacks.

- **Cultural considerations:** The food customs and traditions of the families from where children come should be considered. This could include dietary restrictions based on religious or cultural practices.

- **Food allergies and intolerances:** Some children may have food allergies or intolerances, and it is important to be aware of these and accommodate them in the menu.

- **Food safety:** Proper food safety practices should be followed to ensure that the food served is safe and hygienic.

- **Cost-effectiveness:** The cost of food should be considered, and efforts should be made to provide nutritious meals and snacks at an affordable cost.

- **Staffing:** Adequate staffing is required to prepare and serve food, as well as supervise children during mealtimes.

- **Age-appropriate serving sizes:** Serving sizes should be appropriate for the age and body size of the children, and should be adjusted as necessary.

- **Schedule:** The feeding program should be scheduled at a time that is convenient for the children and fits in with the preschool's daily routine.

- **Variety:** The menu should be varied and include different types of food to encourage healthy eating habits.

- **Feedback:** Teachers should ask for feedback from children and parents to make improvements and adjustments to the feeding program as needed.

By considering these factors, a preschool can develop a feeding program that meets the needs of children and promotes their health and well-being.

29.5.3 Steps Involved in Planning the Menu for the Feeding Programme

ICMR (Indian Council for Medical Research) has provided the R.D.A. (Recommended Daily Allowance).

Calculation of the Food requirement

To calculate the amount of food required for the feeding program, one-third of the recommended daily allowance (RDA) of nutrients for children below six years old is multiplied by the total number of children in the play centre. This calculation ensures that the children

---

receive at least one-third of their daily nutrient requirements from the meal provided in the play centre.

According to ICMR (Indian Council of Medical Research), the following food items are recommended for children between the ages of 1 to 6 years in a day:

- Cereals and Millets: 100-150 grams
- Pluses: 20-30 grams
- Milk and Milk Products: 300-400 ml
- Roots and Tubers: 50-100 grams
- Green Leafy Vegetables: 50-100 grams
- Other Vegetables: 50-100 grams
- Fruits: 100-150 grams
- Oils and Fats: 10-15 grams
- Sugar and Jiggery: 10-15 grams
- Non-Veg Food (Fish, Meat, Poultry, and Eggs): Optional

It is important to note that the quantities mentioned above are approximate and may vary depending on factors such as age, weight, physical activity, and health status of the child

Selection of food to supply the nutritional requirements

Selecting the right food is crucial in ensuring that the children receive the necessary nutrients for their growth and development. The food selection should prioritize local and seasonal foods, which are usually more affordable and readily available.

Menu Planning

The menu should also provide a variety of foods from different food groups to ensure that children receive a balanced diet.

Estimation of food to be cooked

After selecting the menu, the next step is to estimate the quantities of food to be cooked for the children based on the number of children enrolled in the program. The quantities of food required for each item on the menu should be calculated based on the serving size and the number of children to be served. The total amount of each food item should be calculated by multiplying the serving size by the number of children, and then adjusting the amount based on any expected waste or leftovers.

Nutrition Education

Nutrition education is crucial in any feeding program for children. It helps to promote healthy eating habits, improve food choices, and prevent malnutrition. Nutrition education can be incorporated in various ways, such as teaching children about the different food groups and their functions, demonstrating healthy food preparation and cooking methods,

and encouraging parents to provide balanced and nutritious meals at home. By educating parents and children on proper nutrition and healthy eating habits, the feeding program can have a long-lasting impact on the overall health and well-being of the children

In conclusion, a feeding program can play a vital role in the success of a preschool program. Proper nutrition is essential for young children's growth, development, and learning. By including a feeding program in the preschool program planning, teachers can ensure that children have access to nutritious meals and snacks that support their physical and cognitive development.

In short, a feeding program is an important component of a preschool program that can support children's growth, development, and learning while promoting healthy eating habits and equity in the classroom.

INTEXT QUESTIONS ?

29.5

1. Why is nutrition education important in a feeding program for children?

    a) It helps to promote healthy eating habits

    b) It helps to prevent malnutrition

    c) It improves food choices

    d) All of the above

2. According to ICMR, the following food items are recommended for children between the ages of 1 to 6 years in a day: Tick the one which is NOT correct

    a) Roots and Tubers: 50-100 grams

    b) Green Leafy Vegetables: 50-100 grams

    c) Other Vegetables: 5-10 grams

    d) Fruits: 100-150 grams

The key to successful programme planning in a play centre is to strike a balance between structured learning experiences and unstructured play, as both are important for children's development. The planning process should also take into account the individual needs and abilities of each child, as well as the interests and cultural backgrounds of the children and their families.

In terms of the planning process, it typically involves the following steps:

1. **Assessment:** Assess the needs and interests of the children, as well as their developmental levels and any specific learning goals.

2. **Objectives:** Develop clear and specific learning objectives that align with the needs and interests of the children.

3. **Activities:** Select appropriate activities and materials that support the learning objectives, taking into account the individual needs and abilities of each child.

4. **Implementation:** Determine how the activities will be implemented, including scheduling, staffing, and any necessary adaptations or modifications.

5. **Evaluation:** Evaluate the effectiveness of the programme by monitoring children's progress, gathering feedback from parents and staff, and making necessary adjustments as needed.

WHAT YOU HAVE LEARNT 👍

Planning and Conducting Preschool Programme

1) Principles of preschool programme planning

❐ Considerations for programme planning

❐ Basic principles in programme planning

❐ Balanced preschool programme

❐ Factors influence preschool programme planning

2) Instructional Plan

❐ Long Term Planning
Yearly Plan
Monthly Plan

❐ Short Planning
Weekly Plan
Daily Plan

3) Assessment and Evaluation

❐ Need and importance of assessment and evaluation in preschool

❐ Assessment -Why , What , How and When

❐ Evaluation **-** Why , What , How and When
-Types of evaluation

4) Inclusive Preschool Programme

❐ What and How

5) Planning for organizing a feeding programme in preschool

❐ Significance

❐ Factors to consider while planning a feeding programme for preschoolers

❐ Planning a menu for the feeding programme.

◆ TERMINAL EXERCISE ◆

1. What are the key considerations when planning a preschool program?

2. Visit a preschool and observe a day's programme and critically analyse the components of the programme and write your observations.

3. Write a lesson plan for the concept FLOWERS for 4+ year old children in the given format.

4. Explain how to get insight into a child's learning progress.

5. How can teachers incorporate feeding programs into preschool program planning, and what are the benefits of doing so for children's development and learning?

ANSWERS TO INTEXT QUESTIONS

29.1

1-B , 2-C , 3-C , 4- D , 5- A

29.2

1 - B, 2 - C, 3 - i (False), ii - (True), iii (True)

29.3

1 - C , 2 - C , 3 - C , 4 - D , 5 - C

29.4

1 - True, 2 - participation

29.5

1 - D , 2 - C

HINTS TO TERMINAL QUESTIONS:

1. Refer to section 29.2

2. Refer to section 29.3

3. Refer to section 29.4

4. Refer to section 29.5

5. Refer to section 29.6

INVOLVEMENT OF PARENTS AND COMMUNITY IN A PLAY CENTRE

30

INTRODUCTION

Guiding the development of children is a collaborative effort that involves the participation of parents, teachers, and caregivers. Each of these individuals plays a unique and vital role in helping children to grow, learn, and thrive.

When parents and teachers work together effectively, children are more likely to succeed academically and socially, and to develop positive attitudes towards learning and personal growth. The quality of the teacher-parent relationship during the early years is critical in shaping a child's overall development and wellbeing.

OBJECTIVES

By studying this lesson, you will develop the ability to:

- *Describe the necessity of establishing relationships between play centres and homes;*

- *Comprehend the extent and methods of parental involvement in a play centre;*

- *Clarify the significance of community engagement in a play centre;*

- *List the functions of Mahila Mandals (women's groups) in a play canter; and*

- *Locate available support services for play centres.*

30.1 Importance of Home - School Connection

Play centres are designed to provide young children with a safe and nurturing environment where they can play, learn, and grow. However, for children to fully benefit from their experiences at a play centre, there needs to be a strong relationship between the centre and the child's home environment. This is because a child's experiences at home significantly shape their overall development, and it is essential for parents to be involved in their child's learning and growth. A strong play centre-home relationship ensures that parents are informed and supportive of their child's activities and experiences at the play centre.

The home-school connection is crucial for the success of preschool children as it supports their development and helps to ensure continuity in their learning experiences.

A strong home-school connection allows for open communication between parents and educators, which enables both parties to work together towards the child's development. Parents can provide valuable information about the child's interests, strengths, and areas of concern, which helps teachers to create individualized learning plans for each child.

Parental involvement in their child's learning at home can reinforce what is being taught in the preschool setting, which can improve the child's learning outcomes. Parents can assist with homework, read to their children, and engage them in educational activities, which helps to develop their cognitive and social-emotional skills.

Home-school connection can help to create a positive learning environment for the child. When parents are involved in their child's education, they demonstrate that they value education and support their child's learning, which can motivate the child to take an active interest in their own learning.

Overall, the home-school connection is critical in ensuring that preschool children receive the support they need to thrive both in school and at home. It is an essential partnership that benefits the child, the parents, and the educators.

INTEXT QUESTIONS ❓

30.1

State whether the following statements are true/false.

1. The home-school connection is not important for the success of preschool children.
   True / False

2. Open communication between parents and educators can help in creating individualized learning plans for preschool children. True / False

3. Parental involvement in a child's learning at home cannot improve their learning outcomes. True / False

4. The home-school connection does not have any impact on creating a positive learning environment for preschool children. True / False

5. The home-school connection is only beneficial for the child and not for parents or educators. True / False

30.2 Parental Involvement in a Preschool / Play Centre : Significance and Methods of Involvement

30.2.1 Significance

Parental involvement is significant in the education of preschool children as it has numerous benefits for the child, the parents, and the educators. Here are some reasons why parental involvement is important:

- **Improved development:** Research has shown that when parents are involved in their child's education, their academic performance improves. This is because parental involvement helps to reinforce what is being taught in the preschool setting and provides additional support for the child's learning.

- **Enhanced social-emotional development:** Parental involvement in preschool education can improve the child's social-emotional development. When parents take

an active interest in their child's learning, it creates a positive learning environment and helps to build a strong relationship between the child and their parents.

- **Better communication:** Parental involvement facilitates better communication between parents and educators. This allows for a better understanding of the child's needs and helps to create individualized learning plans.

- **Increased parental satisfaction:** When parents are involved in their child's education, they are more satisfied with their child's preschool experience. This can lead to a more positive attitude towards education and a higher likelihood of continued involvement in their child's education in the future.

Overall, parental involvement is significant in preschool education as it contributes to the child's academic and social-emotional development, strengthens the home-school connection, and leads to greater parental satisfaction.

30.2.2 Methods of Parental Involvement in the Preschool /Play Centre Programme

Parents can be involved in various ways in a play centre. They can volunteer their time to help with various activities, attend parent-teacher conferences, participate in workshops, and provide feedback and suggestions to the centre staff. Parents can also participate in play sessions and engage in activities with their child.

Preschools should provide opportunities for parents to be involved in their child's education, such as volunteering in the classroom, attending parent-teacher conferences, or participating in workshops and events. This involvement can help parents to understand their child's learning and development and support their child's progress.

Parent involvement in a preschool program can have a positive impact on a child's academic and social development, as well as their overall well-being. It is important for parents to stay engaged and supportive throughout their child's early years of education.

Parents can involve themselves in Preschool programme in the following ways…..

i) **Parent involvement can be sought by the preschool teacher in several ways.**

- As an additional adult to assist in handling small group activities, for example, creative activities, story-telling or to accompany children for outings etc.

- As a substitute teacher in case the preschool teacher is otherwise occupied

- As a resource for collecting waste/raw materials for use in the preschool centre

- Parents with specific talents or skills could make a contribution by using their skills for the benefit of the children.

For example, a carpenter could be asked to make some wooden toys, a mother who can sing could teach children songs, a painter could help paint the shelves, etc.

ii) **Consistency in routines and expectations:** Preschools and parents should work together to establish consistent routines and expectations for the child. This can include consistent sleep and meal schedules, as well as expectations for behaviour and learning. When the child experiences consistency between home and preschool,

they are better able to adjust and feel secure in their environments.

iii) **Shared learning experiences:** Preschools and parents can work together to create shared learning experiences, such as reading books or engaging in educational activities together. This can help to reinforce what the child is learning at preschool and provide opportunities for parents to support their child's development at home.

iv) **Respectful partnerships:** Preschools and parents should strive to create respectful partnerships, valuing each other's knowledge and expertise. This can help to create a supportive environment where the child feels valued and supported by both their preschool and home environments.

v) **Parent Education:** Parent education is essential in ensuring that children receive consistent and supportive care and development both at school and at home. Parents who are informed about their child's care and development are better equipped to support their child's growth and development.

There are several important issues that parents should be made aware of in parent education sessions.

- Firstly, a comprehensive approach to development is necessary, which includes cognitive, social, emotional, and physical development.

- Parents should understand that each child develops at their own pace and pushing a child beyond what they are ready for can have negative consequences.

- Parents should also be educated about the importance of child care, including the health and nutritional needs of their child at different stages of development. This includes proper feeding practices, immunizations, and maintaining a healthy and safe environment for their child.

- The role of play and early stimulation in a child's development should also be emphasized to parents.

- Parents should be encouraged to engage in play activities with their child and provide opportunities for play and exploration as play is crucial in promoting a child's cognitive, social, and emotional development

- The play way methodology followed in preschool programs should also be explained to parents. This method focuses on learning through play and hands-on activities, and helps children to develop cognitive and social skills. Parents should understand the need and purpose of this approach and how it can support their child's development.

Overall, parent education is crucial in ensuring that parents are informed and equipped to support their child's growth and development. By providing parents with the necessary knowledge and skills, they can become active partners in their child's learning and development, both at home and in school

vi) **Build relationships:** Building positive relationships with parents is essential for effective communication. Take time to get to know parents and their child, and show that you value their input and feedback.

vii) **Communication:** Effective communication is key to building strong partnerships between preschools and parents, and supporting the child's development and learning. By using these strategies, educators can help to ensure that parents are informed and involved in their child's education.

- **Be clear and concise:** When communicating about a child's development, use clear and concise language that is easy to understand. Avoid using jargon or technical terms that may be confusing for parents.

- **Be specific:** When sharing information about a child's development, provide specific examples of the child's strengths and areas of improvement. This can help parents to better understand their child's progress and provide more targeted support at home.

- **Be timely:** Communicate regularly with parents about their child's development, and provide timely updates when there are changes or significant progress. This can help to build trust and confidence in the preschool and the child's caregivers.

- **Use a variety of communication methods:** Use a range of communication methods, such as parent-teacher conferences, daily reports, emails, online platforms, or newsletters. This can help to ensure that parents receive information in a format that works best for them.

- **Listen actively:** When communicating with parents, listen actively and show that you value their input and feedback. Encourage parents to share their observations and concerns about their child's development, and work together to create a plan to support the child's progress.

Parent involvement in a preschool program can have a positive impact on a child's academic and social development, as well as their overall well-being. It is important for parents to stay engaged and supportive throughout their child's early years of education.

INTEXT QUESTIONS ?

30.2

1. Fill in the blanks:

i) Parental involvement in their child's education at home can create a positive _____ environment and motivate the child to take an active interest in their own learning.

ii) A strong home-school connection allows for open _____ between parents and educators, which enables both parties to work together towards the child's development.

iii) Parents can engage their child in all activities at home to reinforce what they are learning in _____.

iv) _____ involvement in a preschool program can have a positive impact on a child's development.

The community includes all the members in the families in the immediate neighbourhood, community workers and personnel working in various institutions.

Community involvement is crucial in a play centre as it promotes a sense of belonging and creates a supportive environment for families. Community members can contribute resources, expertise, and time to support the centre's programs and activities. Additionally, community members can provide valuable feedback and suggestions to improve the centre's services and offerings.

30.3.1 Significance of Community Involvement in Preschool / Play Centres.

- Firstly, community involvement can help create a sense of belonging and ownership among the parents and caregivers of the children attending the preschool. When the community feels invested in the preschool, they are more likely to support it and contribute to its success.

- Secondly, community involvement can provide valuable resources and support for the preschool. Community members can volunteer their time, donate materials, and offer their expertise to support the preschool's activities and programs. This can help reduce the burden on the preschool staff and provide additional opportunities for children to learn and grow.

- Thirdly, community involvement can help bridge the gap between the preschool and the broader community. Preschools can serve as a hub for community engagement and outreach, connecting families to local resources, services, and programs. This can help build stronger relationships between families and their communities and support the overall well-being of the children and families.

- Finally, community involvement can help promote diversity, inclusion, and cultural awareness in preschools. Community members from diverse backgrounds can share their experiences, traditions, and perspectives with the children, helping to create a more inclusive and welcoming environment.

30.3.2 Use of Community Resources

The involvement of the community is essential in providing resources to the play centre. Some of the resources that can be contributed by the local community include:

a) Supply of food materials such as grains and pulses, which can be procured during harvesting season.

b) Local vegetables, particularly green leafy and yellow vegetables.

c) Local fruits.

d) Equipment for the play centre like old tires, wooden beams, etc.

e) Waste materials from households or artisans such as empty plastic boxes, cartons, beads, old toys, pieces of cloth, wool, old newspapers, magazines, pieces of wood, potter's clay, etc.

By providing these resources, the community can play a significant role in strengthening the play centre and supporting the development of young children.

INTEXT QUESTIONS ❓

30.3

1. The involvement of the community is important for the success of preschool education, as it provides _____ for the children.

2. Providing a _____ that can be used for the preschool, such as a community hall, can be a significant contribution from the community.

3. Community involvement can help bridge the gap between the ———————— and the broader community.

4. Community members can contribute resources, ———————— and time to support the centre's programs and activities

30.4 Role of Community in the Mangement of Preschool/Play Centres

The role of the community in preschool education is vital in creating a nurturing and enriching learning environment for young children. The community refers to the network of parents, caregivers, local organizations, businesses, and individuals who actively support and contribute to the preschool's goals and activities.

An engaged and supportive community can play several essential roles in the preschool setting:

30.4.1 Use of Community Resources

Community resources can be an excellent addition to preschool/Play centre programme, as they provide opportunities for children to learn and explore beyond the traditional classroom setting. Here are some ways in which community resources can be used to enhance preschool /play centre programme:

- **Field trips:** Field trips to local museums, libraries, parks, and other community resources can provide valuable educational experiences for preschoolers. These field trips can be used to teach children about different cultures, history, science, and the natural world.

- **Guest speakers:** Community members can be invited to speak to preschoolers about their experiences or hobbies. This can expand children's thinking and inspire them to explore the world.

- **Volunteer opportunities:** Community members can be invited to volunteer in the preschool program, either as story tellers, play with children or as helpers in the classroom. This can provide additional support for the preschool staff and offer children the opportunity to interact with different people in their community.

·	**Outdoor learning:** Community resources such as parks, playgrounds, and nature can provide preschoolers with opportunities for outdoor learning and exploration. Outdoor activities can promote physical activity, enhance cognitive and social development, and foster an appreciation for the natural world.

In conclusion, community resources can be used to enhance preschool programs by providing opportunities for children to learn and explore beyond the traditional classroom setting. Field trips, guest speakers, volunteer opportunities and outdoor learning can all enrich the preschool experience and contribute to children's overall growth and development.

30.4.2 Advantages of Involvement of the Members of the Community in Preschool / Play Centre Activities

Indeed, involving members of the community in various aspects of running a play centre can have many benefits. Here are some potential advantages:

● **Building community ownership:** By involving community members in the operation of the play centre, the community can feel more invested in the success of the program. This can lead to a sense of ownership and pride, which can help ensure the long-term sustainability of the program.

● **Sharing responsibility:** The involvement of community members can help ease the workload for the teacher or other staff members. This can allow for more time and attention to be devoted to the children and their educational needs.

● **Promoting community engagement:** The play centre can serve as a hub for community engagement, bringing together community members of all ages to collaborate and support one another. This can help build stronger relationships and foster a sense of community spirit.

● **Diverse perspectives and skills:** Community members bring diverse perspectives and skills to the program, which can enrich the experience for both the children and the staff. For example, an older community member may have valuable knowledge about gardening, while a teenage volunteer may be skilled in music or drama.

● **Cost savings:** Involving community members in the operation of the play centre can help reduce costs associated with hiring additional staff or purchasing supplies. This can help ensure the program remains affordable and accessible to all members of the community.

Overall, involving members of the community in the operation of a play centre can have many benefits, including building community ownership, sharing responsibility, promoting community engagement, diverse perspectives and skills, and cost savings.

30.4.3 Ways to Involve Community Members in Preschool / Play Centre Programme

The involvement and participation of community members in preschool education programs are crucial as it helps them to understand the needs of children and their families better. To achieve meaningful community participation, teachers must know the community, including their occupations, activities, resources, and cultural context.

This can be accomplished by:

- Creating awareness in the community through mediums such as folk songs, street plays, puppet shows, jathas, etc. Only when the community is aware of the needs of children can they contribute meaningfully.

- Organizing events such as festival celebrations, sports events, Bal-Mela, etc. to make the preschool centre more visible and involve the community in the program.

- Providing workshops and training sessions for parents and community members on topics related to child development, parenting, health, and hygiene.

- Involving parents and community members in the planning and implementation of preschool activities and events.

- Encouraging community members to volunteer and contribute to the preschool program by sharing their skills, resources, or time.

- Seeking feedback and suggestions from the community for improving the preschool program.

INTEXT QUESTIONS ?

30.5

1. What is the role of the community in the management of preschools?

   A) To solely provide funding for the preschools

   B) To hire and train all the staff for the preschools

   C) To provide resources and support for the preschools

   D) To make all the decisions regarding the preschools

2. How can the community contribute to the success of a preschool?

   A) By providing financial support only

   B) By providing resources and support

   C) By taking over the management of the preschool

   D) By only providing food for the children

3. What are some resources the community can provide for a preschool?

   A) Food for the children only

   B) Materials for teaching only

   C) Furniture, equipment, and play materials

   D) None of the above

4. What is the importance of community involvement in preschools?

   A) It is not important for the community to be involved

   B) It can help to provide resources and support for the preschool

   C) It can create a negative learning environment for the children

   D) It can cause conflicts between the community and the preschool

30.5 Support Services

Establishing partnerships with local organizations, such as NGOs, businesses, and government agencies, to support the preschool program and involve the community in its activities.

- Community resources that promote health in children are essential for their well-being. These resources can include Central Government Organizations, State Government Organizations, and Non-Governmental or Voluntary Agencies that provide access to healthcare, immunization, nutrition, and other health-related services for children.

- Recreational centres that serve as community resources can also be beneficial for children's education and development. These resources can include public parks, libraries, museums, and community centres that offer educational programs, after-school activities, and other recreational opportunities.

30.5.1 Non-Profit Organizations

Non-profit organizations that focus on child development or community building can also be helpful in establishing a play centre. They may provide resources such as grant opportunities, training and support for staff, and networking opportunities.

30.5.2 Government Agencies

Government agencies such as local parks and recreation departments or state departments of education may also provide support and resources for establishing a play centre. They may be able to offer funding or assistance with securing permits and licenses.

The organisations that help in establishing a play centre are:

- Central Social Welfare Board, New Delhi.
- Indian Council for Child Welfare, New Delhi.
- Directorates of Social Welfare in different states.

These organizations sponsor play centres/ crèches / preschools for the needy groups of children

These agencies are discussed briefly below.

A) **The Integrated Child Development Services** (ICDS) is a program operated by the Indian government, which provides a range of services to children, pregnant women, and nursing mothers. The program includes non-formal preschool education,

supplementary feeding, immunization, and regular health check-ups for children. The ICDS program is particularly useful for children from weaker sections of society who may benefit from the services provided by the program.

B) **The Indian Council for Child Welfar**e is a leading national organization that focuses on promoting and implementing child welfare activities in India.

C) **Primary Health Centres and Government Hospitals:** These centres provide health facilities for children

D) **UNICEF,** or the United Nations International Children's Emergency Fund, is a specialized agency of the United Nations that was founded in 1946. The organization is dedicated to promoting and protecting the rights and well-being of children worldwide. UNICEF focuses on several key areas, including maternal and child health, nutrition, environmental sanitation

E) **Mahila Mandals** are women's self-help groups that are prevalent in many rural and urban areas of India. These groups can play an important role in supporting play centres by mobilizing resources, providing volunteers, and contributing to the centre's programs and activities. Mahila Mandals can also facilitate communication and collaboration between the play centre and the local community.

In conclusion, community involvement is crucial for the success and effectiveness of preschools. It can help create a sense of belonging and ownership, provide valuable resources and support, bridge the gap between the preschool and the broader community, and promote diversity and inclusion.

INTEXT QUESTIONS ❓

30.5

1) Social support is not an important protective factor in organizing a play centre.
   True/False

2) Mahila Mandals can be very effective in promoting community participation.
   True/False

3) NGOs support only higher education   True/False

4) UNICEF protects the rights of all children   True/False

WHAT YOU HAVE LEARNT 👍

❒ Parent and community involvement is crucial for the success of preschool programs.

❒ Their participation can provide support and resource❒s for children, teachers, and the preschool program.

❒ Local organizations, such as NGOs, businesses, and government agencies, can provide additional resources and support.

❒ Involvement can create a positive and supportive learning environment for young children.

❑ This can lead to better outcomes for their education and development.

Involvement of Parents and Community in a Preschool/Play Centre

1. Importance of Home – School connection
2. Parental Involvement in a Preschool/Play Centre:
   - Significance and
   - Methods of involvement
3. Community Involvement
   - Significance
   - Use of community Resources
4. Role of Community in the management of Preschool/Play centres
5. Support Services

❧ TERMINAL EXERCISE ❧

1. Parent and Community Involvement in Preschool: Why it Matters
2. Write about the resources that are available in your community which can be used in a preschool.
3. Attend a parent teacher meeting in a school and write the way communication has taken place between teacher and the parent.
4. Connect with the local NGOs and find out the services they provide to a preschool.
5. Write the role of the Mahila Mandal in preschool programme.

ANSWERS TO INTEXT QUESTIONS

30.1 1-False , 2-True , 3 – False , 4-False , 5-False

30.2 1-learning , 2-communication , 3-preschool ,4-parent , 5-parent education.

30.3 1- resources, 2-space, 3-preschool, 4-expertise

30.4 1-C, 2-B, 3-C, 4-B

30.5 1-False, 2-True, 3-False, 3- True

HINTS TO TERMINAL QUESTIONS

Refer to sections 30.1 to 30.6