1-SLM-Psychology

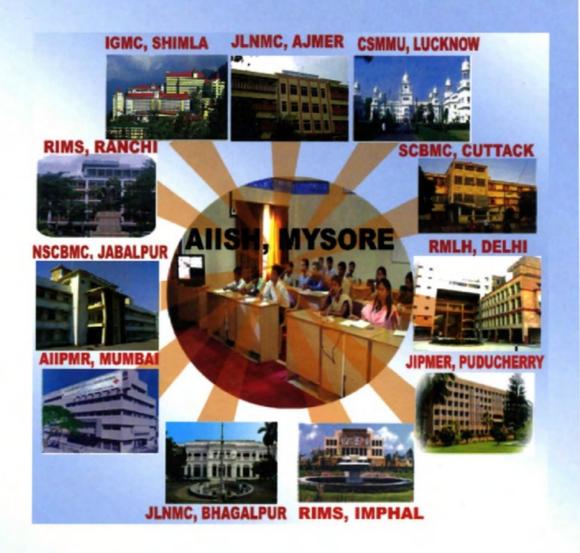
by Venkatesan S

FILE 1-SLM-PSYCHOLOGY.PDF (14.15M)

TIME SUBMITTED 29-OCT-2014 05:00PM WORD COUNT 13062 SUBMISSION ID 470724138 CHARACTER COUNT 72072

Self Learning Material for Diploma in Hearing, Language and Speech

Course IV Psychology





All India Institute of Speech and Hearing Manasagangothri, Mysore 570 006

Self Learning Material For Diploma in Hearing Language and Speech DHLS

Course IV Psychology



© 2912 II Edition

A publication of the All India Institute of Speech and Hearing

Inder the title

Self Learning Material for Diploma in Hearing Language and Speech

Course IV - Psychology

Telephone

0821-2514449 / 2515410 / 2515905

Telefax

: 0821 - 2510515

e-mail

aiish dir@yahoo.com, aiish academic@yahoo.com

Website

www.aiishmysore.com,

15

Work hours

9.00 a.m. to 5.30 p.m. - Monday through Friday

Holidays

Central government holidays

Editor

Dr. S.R. Savithri

Director

Author

Dr. S. Venkatesan

Professor

Dept. of Clinical Psychology

AIISH, Mysore

Published by

Dr. S.R. Savithri

Director

Manasagango

Mysere 570 006, India

Price Rs.100/-

Editorial

Communication is the essence of human life. It is also the most effective tool to cope up with day-to-day living. Verbal communication is unique to human beings and it is said to be the most efficient mode of communication. Communication disorders affect the quality of life of people. The spectrum of communication disorders include problems in speaking hearing and thinking such as delayed and/ or arrested speech and language development due to hearing impairment, mental retardation and other problems; voice disorders, phonological disorders (misarticulation), fluency disorders (stuttering & cluttering), and language disorders.

As per the national Sample Survey organization 2002 report, there are over 64 lakh persons with hearing and speech disabilities in the country. This include, for every one-lakh persons, 291 persons with hearing impairment, 94 persons with mental retardation and 107 persons with other speech impairments. As per WHO statistics, there are 278 million persons with hearing impairment alone in the world and the prevalence rate is 6.3%. Most of the communication disorders are not amenable for medical or surgical treatment. They have to be intervened with special therapeutic methods. Invariably the intervention process for most of the communication disorders is a long drawn process and hence the manpower requirement to cater to these problems is rather high.

There is an acute shortage of manpower in the country to cater to the needs of persons with communication disorders. Currently there are about 45 training centers in India, which are working towards manpower development in this area. These centers are not evenly distributed in the country. Most of them are located in urban areas in South India. It is estimated that the annual turn over of undergraduate and postgraduate courses is only about 615 and 215, respectively. Adding to this problem of slow rate of manpower development, the country is finding it difficult to retain the ones who are trained due to great demand of this category of manpower all over the world.

Realizing the acute shortage of manpower to serve persons with communication disorders in suburban and rural areas, diploma programs to train personnel have been initiated in the country. Diploma in hearing Language and Speech is one such program which would train speech and hearing assistants/ technicians. This skill based course recognized by the Rehabilitation Council of India aims at training candidates in identifying, and undertaking basic evaluation and also in rehabilitation of persons with communication disorders. The program comprises of six theory papers and a great amount of clinical training.

Ministry of Health & Family Welfare, Government of India has launched the National Program of Prevention and Control of Deafness in the country. The program was launched in the year 2008 and will be implemented through out India in stages to cover the whole country by 2012. The implementation of the program can only be successful if adequate manpower is available across the country at district, taluk and village level. Since the scenario of manpower in the country is rather bleak, as a small step towards meeting this near of the country, the All India Institute of Speech and Hearing, Mysore launched the Diploma in Hearing Language and Speech Program through distance mode. This Endeavour aims towards faster rate of manpower development at the assistant/technician level. In the first stage of the program, in 2007-08, the institute started study centers at Mysore, JIPMER Puducherry, RIMS Imphal, AIIPMR Mumbai

and MAMC New Delhi. In the year 2008-09, the institute roped in 6 more state medical colleges as study centers across the country viz., at Ajmer, Shimla, Jabalpur, Lucknow, Ranchi and Cuttack. This academic year in 2009-10, one more center at Bhagalpur, Bihar will be started. The program, even though is not typically a distance mode program, is unique as the theory classes are conducted from Mysore through Video Conferencing and students (20 in each study center) across the country will receive the same at the same time with a provision of one to one real time audio-video interactions. The clinical training is done in the conventional way at the respective study centers on day-to-day basis under the supervision of qualified professionals.

The self-learning material (SLM) for each course of the program has been developed to facilitate learning by the students. This self-learning material comprises of each topic, which is covered in the RCI syllabus, and the topics are explained in a very simple language to facilitate effective comprehension by the students. It is a supplement to the classroom lectures conducted through Video Conferencing. Senior faculty at the All India Institute of Speech and Hearing, Mysore have prepared and compiled these SLMs in a very effective way. The SLMs are expected to facilitate the understanding of the basic concepts in the area of speech-language pathology, audiology, psychology and special education.

In the third edition, the revised syllabus of RCI (2009-10) has been incorporated. Even though the numbers of courses have remained the same, the titles have changed with some revision/additions/deletions of topics covered in the previous syllabus. This edition has also considered the feedback received by the students/teaching faculty from time to time. It is also envisaged that the same is adapted to different regional languages.

I would like to convey my heartiest congratulations to the eminent faculty of the institute who have contributed in bringing out the 3rd edition of this very useful SLM.

This third edition of the SLM is revised/ written by Dr. S. R. Savithri, Prof. of Speech Sciences, Dr. Asha Yathiraj, Prof. of Audiology, Dr. S. Venkatesan, Prof. of Clinical Psychology, Dr. K. C. Shyamala, Prof. of Language Pathology, Dr. S. P. Goswami, Reader in Speech Pathology, Dr. G. Rajeswari, Professor in ENT, Dr. Animesh Burman, Reader in 3udiology, Ms. K. Yeshoda, Lecturer in Speech Sciences, and Dr. G. Malar, Reader in special Education.

The All India Institute of Speech and Hearing sincerely acknowledges Dr. R. K. Srivatsava, Former Director General of Health Services, Ministry of Health and Family Welfare, Government of India for assigning the program to AIISH and for all the guidance and support. The institute also acknowledges Karnataka State Open University for conducting a workshop for AIISH faculty to orient them about the preparation of Self-Learning Material. Sincere thanks to RCI for recognizing the program conducted at 11 centers in the year 2008-09.

I would like to congratulate the candidates who have enrolled in this program, as they will be working towards the noble task of improving the quality of life of persons with communication disorders. I also wish them happy reading of this study material.

Dr. S.R. Savithri Director & Editor

Table of contents

Unit no.	Title	Page No.
1	What is Psychology? Relevance to field of speech, hearing & language Dr. S. Venkatesan, Prof. of Psychology, All India Institute of Speech and Hearing, Mysore 6	1- 14
2	Meaning, stages and areas - relevance to field of speech, hearing & language Dr. S. Venkatesan, Prof. of Psychology, All India Institute of Speech and Hearing, Mysore 6	15 - 27
3	Definition, causes, assessment, psychosocial & educational implications – developmental skills: helping the child acquire Age appropriate developmental skills Dr. S. Venkatesan, Prof. of Psychology, All India Institute of peech and Hearing, Mysore 6	28 - 43
4	Psychological problems associated with speech and hearing disorders: attention deficit disorders – problem behaviors – autism – emotional disorders Dr. S. Venkatesan, Prof. of Psychology, All India Institute of Speech and Hearing, Mysore 6	44 - 62
5	Aims and factors affecting testing – developmental schedules and intelligence tests: importance Dr. S. Venkatesan, Prof. of Psychology, All India Institute of peech and Hearing, Mysore 6	63 – 77
6	Attitude of parents and client towards handicap and rehabilitation procedures Dr. S. Venkatesan, Prof. of Psychology, All India Institute of Speech and Hearing, Mysore 6	78 – 89
7	Behavior therapy and play therapy Dr. S. Venkatesan, Prof. of Psychology, All India Institute of Speech and Hearing, Mysore 6	90 – 102
	Glossary	103 - 109

BLOCK IV: INTRODUCTION TO PSYCHOLOGY

Unit 1: What is Psychology? Relevance to Field of Speech, Hearing & Language

1.1	Purpose
1.2	Introduction
1.3	History
1.4	Definition
1.5	Scope of Psychology
1.6	Relevance to Field of Speech, Hearing & Language
1.7	Questions
1.8	Answers
1.9	Key Words
1.10	Bibliography

1.1 PURPOSE

This unit explains the history, meaning, definitions and scope of psychology along with the relevance of this subject to the field of speech, hearing and language.

1.2 INTRODUCTION

Science is recognized as a body of systematized knowledge gathered by carefully observing and measuring events. It involves collection and organization of human knowledge to study and understand various kinds of natural phenomena. The events or happening around can be physical or mental. The physical sciences like chemistry or physics study physical phenomena. The natural sciences like botany or zoology study natural phenomenon. The social sciences like sociology or economics study the social happenings around us. Psychology is a behavioral science interested in the study of how, why, when and where of behavioral phenomenon.

Laymen relate psychology to ones ability to read/understand other people's behavior or mind. Some relate psychology to magic, hypnotism, or the study of supernatural events. The common sense question one confronts from others is: "Come on! Tell me, what is there in my mind?" Sometimes, people even confuse psychology with pseudo sciences like palmistry, astrology, numerology, gemology, crystal gazing, etc.

1.3 HISTORY

The interest in subject matter of psychology is as old as man. Human beings have always wanted to understand what and why of behaviors of fellow human beings. The first formal writing in Western history mentioning the word is the book titled 'Peri Psyche' written by the Greek philosopher Aristotle around 300 BC. In this book, the word psyche refers to 'soul'. The soul is seen as non-physical entity. It pervades in all human beings. It was even believed to travel across several births and deaths. In that sense, psychology (psyche: soul; logos: study of) was viewed as 'study of souls'.

Until seventeenth century, Rene Descartes (1596-1650), a French mathematician and philosopher, made a distinction between two kinds of reality phenomenon: matter and mind. He felt that physical sciences should study matter and the mental sciences should reflect on subjects related to the study of mind. Therefore, the definition of psychology was revised as 'study of minds'. Towards end of 18th century, another group of thinkers preferred that psychology could study consciousness. By the term consciousness, they meant a sense of awareness about oneself and about things around. This is a unique human quality not seen in non living things. They redefined psychology as the 'study of consciousnesses'. Around the same time, another group of scholars proposed that psychology should focus more on functions of human consciousness like sensation, perception, thinking, imagination, concept formation, etc. In short, they were interested in studying how consciousness works rather than how it looks. This group of psychologists was called 'functionalists'.

Their major preoccupation in the field of psychology was to study the functions of human consciousness.

The science of psychology was formalized with the establishment of a experimental laboratory at Leipzig in Germany by Wilhelm Wundt in 1879. To this day, he is revered as 'father' of psychology. In those days, their major preoccupation was to measure human senses like taste, hearing, vision, smell or touch by using a technique called 'psychophysics'. The German physicist-Fechner (1801-1887) was a famous proponent of this approach. The term 'mental test' was coined by James Mc Keen Cattell (1860-1944). He also developed the first tests of intelligence and personality.

Meanwhile, significant contributions came from psychologists like Sigmund Freud. He proposed a theory of human psyche, its parts, mechanism of its workings, about the conscious and unconscious, interpretation of human dreams, etc. Around the same time, different psychologists grew interested in studying special groups like animals, children, industrial workers, criminals, mentally defective or insane, etc.

During the 1950's, there entered a new wave regarding the subject matter of psychology. JB Watson, now hailed as the father of behaviorism, criticized the ongoing interest of psychology on study of abstractions and invisible entities like soul, mind, psyche or consciousness. He declared that all these entities are personal or subjective. Hence, they could never be the subject matter of a scientific subject like psychology. According to him, if psychology was to be a science, it must necessary study only objective, observable and measurable things. Therefore, it should study

behavior. Behaviors, he defined, are observable and measurable actions of living organisms. He redefined psychology as the 'scientific study of behavior'.

The entire history of psychology is succinctly worded by Woodworth as follows: 'First psychology lost its soul, then it lost its mind, much later its consciousness and now it is left with behavior of a kind'.

1.4 DEFINITION

Several definitions of psychology have been offered by different authors. According to Morgan and King (1986) psychology is defined as the 'systematic and scientific study of human and animal behavior'. To designate psychology as science implies that the discipline follows scientific methods. The following characteristics are important for any discipline to be recognized as science:

(a) Objectivity

This refers to a state, quality or attitude of being impersonal, external or uninvolved during the process of study of a phenomenon. It includes a cultivated sense of maintaining distance from the object under observation or study. It provides an outsider perspective on the matter of study.

(b) Replication

This refers to the performance of an experiment or procedure more than once under similar conditions in order to verify if one is deriving the same results. Most scientific phenomena can be replicated.

(c) Experimentation

This refers to the act, process or practice of controlled testing of a phenomenon being investigated. It is usually carried out with the purpose of discovering something unknown or verifying a statement or principle. This is usually, but not always, carried out within the four walls of an artificial situation called as laboratory.

(d) Prediction

This refers to a statement made about the future on the basis of scientific observation, experimentation and deduction of observed phenomenon. Scientific predictions in social and behavioral sciences are relatively less precise compared to those in physical or natural sciences.

(e) Generalization

Scientific experiments are often carried out in small samples or within the four walls of a laboratory. Their findings need to be generalized to the outer world of real phenomenon. For example, a child maybe taught or untaught to fear a teddy bear inside a laboratory. The same principle or procedure needs to be successfully applied to ever outside world situations.

(f) Methods

Science follows certain exact methods of observation, experimentation and prediction in order to understand cause-effect relationships of observed phenomenon. Some of the scientific methods used in the field of psychology are case history, observation, use of laboratory or field experiments, introspection, etc.

Since the discipline of psychology follows all the above mentioned features, it is also recognized as a science.

1.5 SCOPE OF PSYCHOLOGY

Psychology was recognized and defined as a science that studies human and animal behavior. Behaviors are observable and measurable actions. Human beings and animals perform a variety of behaviors in their daily lives. They sit, stand, walk, talk, read, shout and do so many other things at different times and under different situations. It is impossible for a single discipline to study all the forms of behaviors. Therefore, for the convenience of easy understanding and division of labor, the field of psychology has been divided into various branches. The different branches of psychology define the scope of the subject.

(a) General Psychology

This branch of psychology deals with the study of basic concepts and theories related to various dimensions of behaviors, such as, intelligence, personality, memory, thinking, problem solving, attitudes, aptitudes, etc. The study of this branch is necessary before specializing in other branches of psychology.

(b) Abnormal Psychology

This branch of psychology deals with the study of those kinds of behaviors that have been theoretically identified and labeled as abnormal. The word 'abnormal' is a relative term. What may be considered abnormal in one age or culture may not be considered the same in another. Some commonly recognized patterns of abnormal behavior which becomes the subject matter of this field are mental illnesses or disorders, such as, depression, schizophrenia, phobia, etc. The application of the understanding achieved in the field of abnormal psychology to actual clinical practice or treatment of such individuals is called as clinical psychology.

(c) Child/Developmental Psychology

This branch of psychology deals with the study of basic concepts and theories related to children. The child is not to be viewed as a miniature adult. It has its distinct entity and especially a developmental perspective is required to understand many of their behaviors. This branch of psychology attempts to understand children and their behaviors at different stages or ages of their development.

(d) Educational Psychology

This branch of psychology deals with the study of teaching and learning behaviors. Such behaviors occur not only in school or college settings. The process of learning occurs at all places and at all times. Educational psychology attempts to understand the types and factors in learning, strategies for betterment of learning, role of motivation in learning, etc.

(e) Social Psychology

This branch of psychology deals with the study of individual behaviors in a social context. Man is a social animal. Many human behaviors occur in and are influenced by the social surroundings in which one lives. This field covers topics like socialization, propaganda, inter group conflicts, racial prejudice, social self or other perception, social processes, etc.

(f) Industrial/Organizational Psychology

This branch of psychology deals with the study of behaviors in the context of human enterprise, work and industry. The concern of this field is on topics like work behavior, production of work, job satisfaction, staff burnout, recruitment, job stress, consumption of goods, organizational leadership, etc.

(g) Physiological Psychology

This branch of psychology deals with the study of body basis to human behaviors. An important basis for all human behaviors is their body comprising of so many organs and systems. The nervous system and endocrine system, for example, influence most of our behaviors. This field attempts to understand the physiological basis for all our behaviors.

(h) Animal Psychology

This branch of psychology deals with the study of animals through various experiments or observation in order to understand human behavior. The

study of animal behavior can give indirect clues on understanding the dynamics of human behavior.

1.6 RELEVANCE TO SPEECH, HEARING & LANGUAGE

Human behavior is a vast and varied subject. There are many forms of human behavior, such as, motor activities (sitting, standing, walking or writing), social behaviors (greeting, playing or meeting people), cognitive behaviors (like thinking, imagination and problem solving), etc. Speech, hearing and language are one of the forms of human behavior. They cannot be seen or understood as different or unconnected to the mainstream of human behaviors. Therefore, there is always an intimate link between psychology and the study of speech, hearing and language. The activities of the psychologists working in the field of speech, hearing and language can be summarized as follows:

(a) Understanding Normal Child Development

Developmental psychology has a wealth of information on normal child development including the development of speech, hearing and language. The psychological aspects of normal speech acquisition, language formation, learning of symbols, concepts and primary thought process in infants and children is an area of study common to both the disciplines. Several important psychological factors are involved in these developments, such as, primary socialization, parent child interactions, mother-child attachment, peer group influences, play, and others that are studied with great depth in the field of psychology. Norms are already available with developmental psychologist on the various ages or stages through which these processes are acquired in children. The knowledge of

normal child development is indispensable for the speech, hearing or language specialists.

(b) Psychological Testing

Psychological testing is useful aid to diagnosis and treatment of persons with speech, hearing and language disorders. There are several types of psychological tests available for measuring intelligence, personality, memory, aptitude, etc. These measures can help diagnose as well as plan or implement treatment/therapy programs.

(c) Diagnosis

The knowledge and information from the field of psychology is the basis on which several deviant or delayed speech, hearing or language problems are identified in individuals. The many disorders of speech and language like receptive or expressive language delays, articulation disorders, voice problems, stammering and stuttering, etc., are to be diagnosed and understood from the psychological perspective. Take the example of stuttering. Stammering cannot be viewed simply as a speech fluency disorder alone. Most persons with this problem either have or soon develop associated symptoms of anxiety, stress and depression. Similarly, children with expressive language delays soon find themselves out of tune with their age peers. They develop faulty social skills and sometimes even problem behaviors. The interaction of psychology with speech, hearing and language disciplines offer a useful and needed ground for enabling correct diagnosis of these conditions.

(d) Treatment or Therapy

The field of psychology offers several useful therapies which can serve as useful adjunct to the therapeutic stock of the speech and language professionals. Behavior therapy and behavior modification techniques like shaping, chaining, prompting and fading are commonly used by speech therapists working on language problems. The underlying or associated anxiety or stress conditions either as cause or consequence of stammering is to be addressed using relaxation techniques and supportive counseling. The low self-esteem of many of these patients with voice disorders needs to be exclusively addressed through confidence building measures and assertiveness training. Several times, speech and language or hearing disorders in children are associated with problem behaviors. Problem behaviors are undesirable, stressful and interfere in the learning or teaching of these children. They need to be tackled on priority through behavior modification techniques before actual speech or language therapies are initiated.

(e) Counseling

Parents, caregivers and patients having one or other speech, language or hearing disorder experience a series of psychological distress reactions. They feel difficulty, disbelief, doubt, depression, denial, despair or disappointment on having a child with speech or hearing disability. It becomes the role of professionals to understand and empathize about their frame of mind, guide and counsel them accordingly. They need guidance to accept the condition of the child as well as to work regularly on the therapeutic goals from time to time. There are several skills for good counseling like empathy, listening, non judgmental attitude, maintenance of confidentiality, or non-critical approach that every speech, hearing and

language professional needs to learn and cultivate for effective clinical practice.

1.7 QUESTIONS

- Define Psychology. Highlight the scientific features of psychology.
- Sketch the history of psychology.
- Elaborate on the scope of psychology
- d. Write short notes on;
 - (i) Clinical Psychology (ii) Educational Psychology
 - (iii) Social Psychology (iv) Animal Psychology
- e. Bring out the relevance of psychology to the field of speech, language and hearing.

1.8 ANSWERS

16

1.4 b.

1.3

c. 1.5

d. 1.5

e. 1.6

1.9 KEY WORDS

Psychology Objectivity Counseling Diagnosis

Therapy Replication Experimentation

1.10 BIBLIOGRAPHY

Kagan, J., and Segl, R. (1991). *Psychology: An Introduction*. 7th Edition. Philadelphia: Harcourt Brace Jovanovich College Publishers.

Parameswaran, E.G., and Beena, C. (2002). An Invitation to Psychology.

New Delhi: Neelakamal Publishers.

Rai, B.C. (1974). Social Psychology. Lucknow: Prakashan Kendra.

Sandhya, K.P. (2003). General Psychology. New Delhi: Anmol.

Wallace, P.M., and Goldstein, J.M. (1994). An Introduction to Psychology.

3rd Edition. Madison: Brown and Benchmark Publishers.

Wayne, W. (1990). Psychology. England: Cole Publishers.

BLOCK IV: CHILD DEVELOPMENT

Unit 2: Meaning, Stages and Areas - Relevance to Field of Speech, Hearing & Language

- 2.1 Purpose
- 2.2 Introduction
- 2.3 Child Development: Meaning & Principles
- 2.4 Areas of Child Development
 - (a) Physical Development
 - (b) Motor Development
 - (c) Cognitive Development
 - (d) Emotional Development
 - (e) Social Development
- 2.5 Questions
- 2.7 Answers
 - 2.8 Key Words
- 2.9 Bibliography

2.1 PURPOSE

This unit explains the history, meaning, definitions, assumptions and scope of child development. The relevance of this subject to the field of speech, hearing and language is explained. There are various misconceptions about children. The various areas of child development are briefly described.

2.2 INTRODUCTION

Many lay people think that children are miniature adults. We suppose that children think, act or feel exactly like adults. This is the reason why we tend to read adult feelings or thoughts in children. For example, if a child throws a tantrum or tells a lie, some of us assume that the child is doing it deliberately. This is not true. There is another misconception that all children are alike. This is the basis for making several sweeping comparisons made by some adults. "When the neighbor child can do it why can't you do it?" is a common catchword from overenthusiastic mothers and teachers. The fact is that the neighbor child is different from this child. In fact, there are wide individual differences between children within the same age, sex and/or even similar capacities. Another incorrect notion is that children are incapable of experiencing stress. This is also not true. Even infants and toddlers can and do experience psychological stress, abnormal emotions like severe depression, temperamental differences and behavior.

2.3 CHILD DEVELOPMENT: MEANING AND PRINCIPLES

Development is recognized as series of progressive, orderly, sequential and predictable changes in behavior spread over time. It begins at conception and proceeds till death of the individual. In this sense, development occurs throughout life. The direction of development is always forward rather than backward. The changes that occur during child development are qualitative as well as quantitative.

The quantitative changes, called physical 'growth', occur in terms of size, shape, body build, weight or height. For example, an infant of few kilograms gathers weight over the years. The qualitative changes, more appropriately recognized as 'development', refer to increase/improvement in complexity. During this process, there is disappearance of several old features and the appearance of new features. For example, crawling is lost as the infant turns into toddler. Secondary sexual characteristics appear in puberty. There are several rules that govern child development:

- Development involves change
- 2. Early development is more critical than later development
- Development is product of maturation and learning. Maturation is biological unfolding of characteristics. Learning refers to influences of teaching, training, practice or environment on the individual.
- Development pattern has specific characteristics during each age or stage. Infants learn to hold their neck steady as toddlers learn to walk steady.
- Development pattern is predictable. There are two recognized directions of child development. The law of 'cephalocaudal direction'

states that development proceeds from head to foot. The law of 'proximodistal direction' states that development proceeds from near to far. All development proceeds from general to specific

- There are individual differences in child development. All children do not reach the point of development at same age or same time.
- Child development proceeds stage by stage. There are periods in developmental patterns. The stages are commonly named as germinal, embryonic, fetal, perinatal, neonatal, infancy, toddler, middle childhood, late childhood, adolescence, etc
- There are well recognized developmental tasks during each stage or period. For example sucking is important in infancy, walking is crucial in toddler phase as toilet training comes later.
- There are various areas of child development: motor, language, social, cognitive, emotional moral, etc. Every area of development has potential hazards.
- The subjective feeling of happiness or satisfaction varies at different stages of development period
- 11. There are certain behaviors considered normal in one age or stage. The same is recognized as abnormal at another stage of child development.

2.4 AREAS OF CHILD DEVELOPMENT

There are various areas of child development: physical, motor, language, social, cognitive, emotional moral, etc.

(a) Physical Development

This occurs in terms of size, shape, body build, proportion, weight or height. For example, an infant of few feet at birth gathers height over the years. Physical development involves growth of bones, muscles, teeth and other parts of body. There are several factors that determine physical development in children, such as, nutrition, sex, race or ethnicity, prenatal influences, maternal or child health. The development of physical characteristics has important consequences on psychological development of the individual. Most societies value height for boys and not for girls. This has influence on the development of their self image. The psychological consequences of childhood obesity are becoming a major concern for mental health professionals. Delayed teething, falling of milk teeth, crooked or badly positioned teeth and consequent use of orthodontic braces are major concerns for development of lisping or poor speech in children.

(b) Motor Development

Motor development refers to movement. It is development of control over ones body movements through nerves and muscles. A purposeful behavior requiring coordination of senses, muscles and nerves to perform a goal directed activity is called skill. For example, throwing ball in a specified direction or aiming and hitting with bat is skill behavior. There are two types of motor behavior: fine and gross motor. Gross motor involves use of larger muscles in the performance of activities like sitting, standing, walking, jumping, etc. Fine motor involves use of smaller groups of muscles like grasping objects, buttoning, writing, etc.

Motor development depends on maturation of nerves and muscles. At birth, the infant is merely a bundle of reflexes. They startle at loud sounds, blink at bright lights, swim when thrown into still water, grasp when objects are inserted into their palms and so on. With maturation and learning or environmental training, the child gathers more control on own physical actions. An amount of maturational readiness is necessary for development of certain motor skills. For example, mastery over prewriting skills is essential for children to learn writing, copying and adequate penmanship. Motor development follows a predictable pattern. A child must hold neck steady before sitting or standing. There are developmental norms available for various motor developmental activities performed by children. Some important motor milestones are given below:

SI	Activity	Norm
No.		11
1	Thumb sucking	1 Month
2	Turns head side to side	2 Months
3	Neck steady	3 Months
4	Reaches and grasp	4 Months
5	Turns over	5 Months
6	Sits with supports	6 Months
7	Stands with supports	8 Months
8	Walks without supports	12 months

The quality of motor performance improves with age. The strength, speed of action, and accuracy of motor responses betters with age in the course of child development. It must be noted that, there are individual differences in quality, quantity and rates of motor development among children. Frequently, one comes across cases of children with delays in motor development. Such children should be identified early and referred to an early intervention/therapy program under supervision of physiotherapist, occupational therapists and/or developmental therapists.

(c) Cognitive Development

Cognitive development refers to changes in quality and quantity of mental activities related to sensation, perception, thinking, imagination, comprehension, intelligence, reasoning and problem solving. Jean Piaget (1896-1980), Swiss psychologist, explained the stages of cognitive development from infancy to adolescence. He proposed that there are four mains stages in cognitive development of children. The child thinks, reasons, imagines and views the world differently during each of these stages. Obviously, the child cannot and does not view the world like adults.

In the first sensorimotor stage (0-2 years), the child views the world as 'here and now'. The baby believes what is in front as true and real. The things or persons outside this range do not exist in the view of the child. The mother in front is existent. She moves out of sight, she is out of the child's existence. Thereafter, enters a stage of object permanence. This means that the baby begins to realize that people and things exist in their own right even if they are not in front of him or her. During the second preoperational stage (2-7 years) the child begins to use more of symbols and language to represent the real world outside. However, their thinking is self-centered. They cannot think or imagine like others by placing themselves in their perspective.

In the next concrete operational stage (7-12 years), the child can think or operate only at concrete level. All of us have two types of thinking: concrete and abstract. The child during this stage does not and cannot have abstract thinking. For example, when asked to tell similarity between 'cow' and 'horse', the child in concrete operational stage is likely to say

visible resemblances like both have legs or ears. They are unlikely to give abstract answers or say that both are animals.

In the next formal operational stage (11-15 years), the child has almost reached adult forms of cognitive development. He can reason, interpret, perform abstractions, make reversals, carry our deductive operations and define concepts. Children who enter adolescence without cognitively reaching formal operations stage are likely to have difficulties in performing these higher cognitive activities.

An understanding of the various stages of cognitive development is important for planning/programming appropriate therapy interventions for children with speech and language problems. For example, a child not formally trained in pre-academics will not cooperate if academics are introduced prematurely. Many problem behaviors in young children are an outcome of faulty program planning than due to some inherent defect in the child.

(d) Emotional Development

Emotional development refers to changes in children with regard to their feelings. Human beings are both thinking as well as feeling creature. Emotion is a mental state that arises spontaneously rather than through conscious effort. It is accompanied by physiological changes. Emotions mobilize the organism's resources. It energizes them to meet emergency situations.

The first sign of emotional response in an infant is 'general excitement'. With age and experience, one can differentiate the infant's emotions as pleasurable or unpleasant. Displeasure is expressed as crying, screaming or resisting. With age, the emotions become more and more refined. Some examples of emotions are interest-excitement; enjoyment-joy; surprise-startle; distress-anguish; disgust-contempt; anger rage; shame humiliation; fear-terror, envy-jealousy, etc.

There are several factors that influence development of emotions in children. They include maturation and learning, age, sex, intelligence and culture. The emotions of children are usually intense and short lasting. Their expression of emotion varies from one situation to another. Further, emotions of children can be easily identified from their overt behavior. The development of some important emotions in children is given below:

Sl. No.	Emotion	Norm 21
1	General excitement	Birth
2	Joy	6-8 Weeks
3	Anger	3-4 Months
4	Sadness-Fear	8-9 Months
5	Tender affection - Shame	12-18 Months
6	Pride	24 Months
7	Guilt - Envy	3-4 Years
8	Insecurity - Humility - Confidence	5-6 Years

Children need to be oriented on recognition and management of their emotions. This becomes part of their emotional intelligence. It involves the perception, understanding, and management of ones own as well as others emotions. It is about authentic use of emotions. The Emotional Intelligence of a person is measured in terms of an emotional quotient (EQ).

Children can and do suffer from emotional problems or disorders. It may be in the form of difficulties in establishing emotional contacts with others. It could manifest as excess fears, depression, shyness and social withdrawal, poor anger control, anxiety or sibling rivalries. The children with special needs have greater risk for emotional disturbances owing to the kind of responses and reactions they experiences from others.

(e) Social Development

Social development refers changes in behaviors of children in accordance to expectations of family and society. All human beings are social creatures. No man is an island. Every one of us lives in a group. This becomes the context for development of human beings. The process of 'adoption of behavior of the surrounding culture' is called socialization. It is the 'process by which infants and young children become aware of society and their relationship with others'. The major events during socialization process in early life of children include feeding situations, toilet training, sex typing, anger, or aggression control. Sex typing refers to the process of learning ones expected behaviors according to sex roles. For example, boys are expected to climb trees or be bold and adventurous as girls are instructed to play hopscotch or be soft, kind hearted and mild mannered. This is called gender socialization.

Social development helps the child to learn how to behave. It teaches the child to adopt only approved social roles. It also helps the child to develop social attitudes. All this is achieved through the psychological process of identification, modeling and role playing. Identification is a form of imitation of a person with whom one is closely or tied emotionally. Modeling is another form of imitation. Some children are found playing

the make believe games of a teacher or parent to scold their own toys or teddy bears. Role playing is a more elaborate form of imitation wherein the person takes the total aspect of someone else's behavior.

Erik Erikson has given a theory on psychosocial development in human beings. He describes the progress of social life in human beings through eight stages. During each stage there are certain themes to be worked out and conflicts to be resolved by the individual. The successful resolution of conflicts at each stage influences the behaviors during the next stage. The first five of the eight stages explained by Erickson, which are relevant to childhood and adolescence is:

- (i) Stage of Basic Trust versus Mistrust (Birth to One year)
- (ii) Stage of Autonomy versus Shame or Doubt (1-3 years)
- (iii) Stage of Initiative versus Guilt (3-5 years)
- (iv) Stage of Industry versus Inferiority (6-11 years)
- (v) Stage of Identity versus Role Diffusion (11-19 years)

Play is an important medium for social development in children. Play is a voluntary activity engaged for the enjoyment it gives without consideration of the end result. Play is also a medium through which the child is prepared to take up the role of adulthood. For infants and toddlers, play may be a medium for expending their surplus energy. There are many types of play seen in children depending on their age/developmental level.

At infant level, the play activity may simply involve clasping both the fists and banging ones own mouth. At an older level, the toddler may be enthused with a toy or doll play. Play does not always mean purchase of expensive toys. Children with special needs have poor opportunities for play with peers. The normal children may refuse to accept these children as play partners. This prompts these children to misbehave. As a result, they get even more separated from the normal kids. Some important social skills to be taught for children with special needs are listed below.

Sl. No. Social Activity

- 1 Hearing and Listening Skills
- 2 Looking and Seeing Skills
- 3 Pointing Skills
- 4 Eye Gaze or Eye Contact Skills
- 5 Observation Skills
- 6 Imitation Skills
- 7 Recognition of self or other belongings
- 8 Turn Taking Skills in play
- 9 Greeting Skills
- 10 Humor or Laughter Skills

2.5 QUESTIONS

- a. Highlight how children are different from adults.
- Differentiate between growth and development.
- c. Enunciate the various principles of child development
- d. Write short notes on;
 - (1) Physical Development
- (ii) Motor Development
- (iii) Cognitive Development (iv) Emotional Development
- (v) Social Development

2.6 ANSWERS

- a. 2.2 b. 2.3 c. 2.3 d. 2.4 (a)
- e. 2.4 (b) f. 2.4 (c) g. 2.4 (d) h. 2.4 (e)

2.7 KEY WORDS

Abstract Thinking Cephalocaudal Developmental Direction

Child Development Cognition

Concrete Operations Concrete Thinking

Environment

Formal Operations

Growth

Heredity

Maturation

Milestones

Motor

Object Permanence

Proximo Distal Developmental Direction

Sensory Motor

2.8 BIBLIOGRAPHY

Hurlock, E.B. (1972). Child Development. Tokyo: McGraw Hill.

Hurock, E.B. (1981). Developmental Psychology: A Life Span Approach.

New Delhi: Tata McGraw Hill.

Mussen, P. (1969). Psychological Development of the Child. New Delhi: Prentice Hall.

Panda, K.C. (1993). Elements of Child Development. New Delhi: Kalyani Publishers.

Rosser, R. (1994). Cognitive Development: Psychological and Biological Perspectives. Boston: Allyn and Bacon.

Sharma, P. (1995). Basics of Development and Growth of Child. New Delhi: Reliance Publishing House.

Shrivastava, P. (1991). Education, Nutrition and Child Development.
Allahabad: Reliance Publishing House.

Singh, D. (1995). Child Development: Issues, Policies and Programs.
Volume 1-3. Delhi: Kanishka Publishers.

BLOCK IV: MENTAL RETARDATION

Unit 3: Definition, Causes, Assessment, Psychosocial & Educational Implications – Developmental Skills: Helping the Child Acquire Age Appropriate Developmental Skills

3.1	Purpose
3.2	Introduction
3.3	Mental Retardation: Meaning & Definitions
3.4	Intelligence & Adaptive Behavior
3.5	Mental Retardation is not Mental Illness
3.6	Prevalence
3.7	Causes
3.8	Assessment and Programming
3.9	Associated Problems
3.10	Rehabilitation Programs
3.11	Questions
3.12	Answers
3.13	Key Words
3.14	Bibliography

3.1 PURPOSE

This unit explains the meaning, definitions, characteristics and causes of mental retardation. The meaning, approaches and methods of assessment of persons with mental retardation are described. The persons with mental retardation require a comprehensive psychosocial rehabilitation. Their learning and educational needs are highlighted. There are many developmental skills identified for training these persons. Their training in those skills helps them to normalize and mainstream in regular society.

3.2 INTRODUCTION

Human disabilities are permanent conditions. They usually manifest at birth, or sometimes, may be acquired later in life. The various types of disabilities are: Physical or locomotion, visual, hearing, mental, learning and multiple handicaps. This unit elaborates details on mental retardation or mental handicaps.

3.3 MENTAL RETARDATION: MEANING AND DEFINITIONS

Mental retardation has been long identified in the history of human civilization. In earlier days, the persons named as mentally deficient, idiots, imbeciles or morons. Nowadays, such insulting terms are not used. Instead, positive labels are preferred, such as, persons who are mentally challenged or as persons who are differently-abled.

Mental retardation is not a disease. It is not something that one has like blue eyes or skin complexion. It is not a medical disorder or mental disorder. It is a condition of low human intelligence. Mental retardation is a particular state of functioning that begins in childhood. It is characterized by limitations in intelligence and skills of adaptive behavior. The official definition of mental retardation has undergone several changes since 1900's owing to new information, changes in clinical practice and breakthrough in scientific research. Mental retardation is identified as 'significantly sub average level of intellectual functioning associated with deficits in adaptive behavior and manifesting during the developmental period' (Grossman, 1972). In a more recent definition, mental retardation is defined as a 'disability characterized by significant limitations both in intellectual functioning and adaptive behavior as expressed in conceptual, social and practical adaptive skills. The disability originates before age of eighteen' (AAMD, 2002).

3.4 INTELLIGENCE & ADAPTIVE BEHAVIOR

The core element in all definitions of mental retardation is concept of intelligence. Intelligence is defined as 'global capacity of an individual to think rationally, act purposefully and solve problems in life' (Wechsler, 1972). Intelligence is calculated using standardized tests of intelligence. It is expressed as a numerical index called 'intelligence quotient' (IQ). Their ability to adapt to demands of daily living is measured as 'social quotient' (SQ). In infants and preschoolers, IQ is more aptly measured as 'developmental quotient' (DQ)-which is lower extension of the same construct. Unlike IQ, DQ of young children are liable to change owing to growth and/or training.

The IQ of a person is calculated as percentage quotient against his/her chronological age. Thus, the IQ of a ten year old with equal mental age of ten years will be 100. A ten year old with mental age of 11 years will get an IQ of 110. A child of ten years with a mental age of five years will have IQ of 50. In sum, any person with intellectual capacity less than 70 per cent of his physical or chronological age is called as mentally retarded. There are several grades or severity levels of mental retardation.

Severity Levels	Range of IQ	
Mild MR	50-70	
Moderate MR	35-49	
Severe MR	20-34	
Profound MR	Below 20	

The persons with mental retardation shows typical features of slowness in mental development from birth or before end of their developmental period (which is considered as 18 years). The features of mental retardation are given below.

Sl Features

no.

- 1 Slow rates of development since birth in all areas
- 2 Discrepancy between physical and mental age
- 3 Poor academic performance with repeated failures at school
- 4 Dependence on others for carrying out day to day activities like bathing, dressing, etc
- 5 Appearance of being dull, being slow in understanding, memory, attentionconcentration, thinking, problem solving and decision making
- 6 History of delay in all developmental milestones
- 7 Difficulties in expression or control of feelings and emotions
- 8 Disturbances in expressive or receptive communication skills
- 9 Difficulties in managing money, lack of time skills for his age
- 10 Incompetence in performing vocational activities or lack of social skills for age
- 11 Associated features like behavior problems, fits or sensory handicaps may be present

3.5 MENTAL RETARDATION IS NOT MENTAL ILLNESS

Mental retardation is not mental illness. Most laymen confuse these two terms. Mental retardation is a condition or disability. It has its onset at birth or during childhood/ adolescence. It has to do with low levels of intelligence. Mental illness is a disease. It can occur at any time in a person's life. It involves disease symptoms like talking to self, laughing for no apparent reason, crying spells, hearing voices in the absence of any known source of such sounds, sleeplessness, irrelevant and incoherent talk, etc. Mental retardation requires habilitation of such persons on skills identified as deficits. Mental illness requires rehabilitation of learnt skills that have been lost owing to disease process.

There are many types of mental illness like psychoses (schizophrenia and mood disorder) and neuroses (anxiety, phobia, hysteria and obsessive convulsive disorder). There are medicines available for treatment of many mental illnesses. If they are identified and treated early, one can even cure the mental illness completely. In case of mental retardation, there can be no talk of 'cures'. It is a handicap like physical or locomotion disability. A lost limb cannot be re-grown using drugs, medicines or ointments. There can be only training and remediation using the remaining or intact limb. In the same way, there is teaching or training for the remaining intellectual abilities in the person with mental retardation.

Mental retardation is not to be confused with other childhood psychological problems or conditions like slow learners, autism, expressive language delays, conduct disorders, learning disabilities and so on. Slow learners are children in intelligencer range of 70-90. A child with average level of intelligence will have IQ range of 90-110. Autism is another childhood disorder characterized by severe disturbances in language and social behaviors. Their level of intelligence remains unaffected. Expressive language delays are seen in children with less than their age speech or language development. They are age appropriate in all other areas of child development. The children with conduct disorders have severe behavior problems. They throw tantrums, remain stubborn, play truancy, refuse to obey commands, throw things, bang their own heads, hurt others, etc. The children with learning disabilities have problems only in reading, writing, spelling and arithmetic despite having average or above average intelligence, good health, effective hearing and vision or adequate schooling.

3.6 PREVALENCE

The prevalence of disabilities, impairments and handicaps has been estimated differently in different countries. A WHO report suggests that 5.21 % of population in developing countries is disabled. This measures a colossal 50 million persons with disabilities in our country. There has been no nation wide survey on persons with disabilities in our country. Available information is based on sample surveys in different regions or locations across the country. According to these estimates, about 2-3 % of population is persons with mental retardation. There are reports on more number of people with mental retardation from rural than urban areas. It is found that in any given population, there is more number of mild than moderate, severe and/or profound mental retardation.

3.7 CAUSES

Mental retardation is the result of single as well as interaction of several causes in any affected individual. As known to modern medical science, there are more than five hundred identified causes of mental retardation. The cause for mental retardation in a given individual may vary. In all, one can identify the cause of mental retardation for only 60 % of the cases. For the remaining 40 % cases, even modern medical science cannot determine the exact cause of mental retardation. Nonetheless, the common causes of mental retardation are listed below. Almost half the cases of mental retardation can be prevented if identified early-before or immediately after birth. In recent times, the concept of Intra Uterine Growth Retardation (IUGR) has gained popularity. CAT Scans and MRI are available to look through the brain and spinal cord. Blood tests are available to deficient enzymes or excess metabolites. Amniocentesis and fetoscopy is used to screen health and developmental status of the growing fetus. Urine tests are available to rule out metabolic disorders. EEG is carried out to identify fits and seizures.

SI. No.	Category	Examples		
1	Prenatal	Maternal Illness - Harmful Effects of Drugs Consumed by Pregnant Woman - Falls or Trauma - German Measles in Pregnant Women		
2	Natal	Absent Birth Cry - Lack of Oxygen Supply to New Born - Low Birth Weight - Difficult or Delayed Labor - Infections at the time of Birth		
3	Post Natal	Fits after Delivery - Injury		
4	Chromosomal	Downs syndrome - Pataus Syndrome - Edwards Syndrome - Turners or XO Syndrome - Klinefelters		
tr Joile	and another the year	Syndrome Syndrome Syndrome Syndrome Syndrome		
5	Congenital	Microcephaly – Macrocehaly – Cleft Lip and Palate – Spina Bifida		
6	Nutritional	Protein Energy Malnutrition – Marasmus – Kwashiorkor		
7	Metabolic	Phenylketonuria (Excess of phenyanine) – Homocystinuria (Excess of Pyridoxine) – Galactosemia		
8	Hormonal	Hypothyroidism - Cretinism - Acromegaly		
9	Infections	Tubercular Meningitis – Japanese Encephalitis – Brain Fevers		
10	Familial/Genetic	Runs in Families		
11	Social Cultural	Impoverished Environment - Poor Environmental Stimulation		

3.8 ASSESSMENT AND PROGRAMMING

Medical screening, investigations and diagnostic assessment of children with developmental delays and/or mental retardation can be at best viewed only as beginning exercise. It helps in identifying the problem of mental retardation. The greater challenge lies in treatment and/or rehabilitation of persons with mental retardation. Assessment is defined as systematic collection, organization and interpretation of information about an individual and his situations in order to enable certain predictions about his or her behavior in new situations (Sundberg and Taylor, 1962). Persons with mental retardation require multi dimensional assessment by several rehabilitation professionals including clinical psychologist/

psychiatrist, speech therapist, audiologist, physiotherapist, occupational therapist, medical practitioner, social worker and special educator. Assessment is carried out in two stages:

- (i) Assessment for Diagnosis
- (ii) Assessment for Intervention or Program Planning

The aim of diagnostic assessment is to screen and confirm the verdict that a given person is functioning at level of mental retardation. The clinical psychologist uses a range of techniques like clinical interview, case history, observation and psychological tests to assess current level of intellectual functioning and adaptive behavior before grading the degree of mental retardation for an individual. Psychological tests are used to measure intelligence. Adaptive behavior scales are used to measure social competence. For infants and toddlers, developmental schedules are more appropriately used than tests of intelligence to measure their developmental quotients.

Some famous tests of intelligence used on persons with mental retardation in our country are Bhatia's Battery of Performance Tests of Intelligence, Ravens Progressive Matrices, Gessell's Drawing Test, Seguin Form Board, Porteus Maze Test, Malin's Intelligence Scale for Indian Children, Alexander Passalong Test, etc. Some famous developmental schedules used on young children with developmental delays in our country are Gessell's Developmental Schedules, Bayley's Scales of Infant Development, Developmental Screening Test, NIMH Developmental Assessment Schedule, etc. Some examples of adaptive behavior scales are

Vineland Social Maturity Scale, AAMD Adaptive Behavior Scale and others.

Assessment for Intervention or Program Planning is carried out following diagnostic assessment and confirmation of diagnosis. The simple logic behind this assessment is to discover what behaviors the given individual or child with mental retardation or developmental delay can or cannot do. Can he sit or stand? Can he speak in single or many words? Can he name colors or shapes? Can he button or unbutton own clothing? Can he count numbers? Can he follow commands or simple instructions? There are huge lists of such behavior activities available for discovering what a given child or individual with mental retardation can or cannot perform. Such readymade checklists are called behavior assessment scales.

A few important behavior assessment scales available for program planning in our country are Behavior Assessment Scales of Children with Mental Retardation (BASIC-MR), Activity Checklist for Preschool Children with Developmental Disabilities (ACPC-DD), Madras Developmental Programming System (MDPS), Assessment of Mentally Retarded for Grouping and Teaching, Functional Assessment Tools, Portage Program for Indian Preschool Children with Developmental Disabilities, etc. Most of these scales cover different areas of assessment like sensory, motor, language, social, play, activities of daily living, functional academics, time, money and prevocational activities.

For purpose of program planning and group intervention, special education categorizes children with mental retardation into five teaching groups/levels: preprimary, primary, secondary, prevocational and vocational respectively. The range and type of activities to be planned or taught for each level varies according to their mental ages. The preprimary level of children is typically exposed to sensory motor activities. The primary level of children is trained in pre-academics, play and self care activities. The secondary level of children is to be trained in functional academics. The prevocational level kids are trained in money, time and other functional living skills. The children placed in vocational level are exposed to community orientation.

After behavioral assessment, the psychologist or special educator typically draws a individualized program plan (also called Individualized Education Plan or IEP) on behavioral objectives to be taught or trained for a given child with mental retardation. A typical IEP format consists of details on what to teach, conditions for teaching, how much to teach and deadlines for the said teaching activity. For example, it may read as: 'Vina will search color red between red and yellow eight out of ten times before 75 practice sessions'. The instructor must prepare adequate and appropriate teaching materials for training the chosen behavioral objective. Thereafter, using the right techniques of behavior training, the child is taught the given activity. With the use of correct techniques and teaching devices all children with mental retardation can be taught to become relatively independent in most living skills.

The teaching for children with mental retardation should always proceed from *simple to complex* tasks. For example, teaching color must proceed from color matching, sorting, naming, identification and generalization. Their teacher should proceed from *familiar to unfamiliar*. For example, if

between the tasks of throwing, catching and/or kicking a ball the child knows throwing, start teaching at that step before leading onto other steps. Likewise, teaching these children should proceed from *concrete to abstract*. It is easy for these children to learn, understand or relate to tangible objects and events. They find difficulty in understanding abstract concepts.

3.9 ASSOCIATED PROBLEMS

Some children with mental retardation have additional or associated problems along with their primary condition. They may have fits or convulsions. In such cases, they have to be treated with appropriate medicines in the hands of a medical practitioner. Some children with mental retardation have behavior problems like temper tantrums, crying, shouting, throwing things, banging head, etc. These problem behaviors are not part of mental retardation. They develop owing to nature of some benefits these children may be deriving from their environments for indulging in these type of behaviors.

3.10 REHABILITATION PROGRAMS

It is erroneous to assume that all children with mental retardation need to go to special schools. The children below six years of age with developmental delays require infant simulation programs, preventive or genetic counseling for their parents. The school aged children with mental retardation between ages of 6-16 years require day care schools home based training programs and allied family intervention services. The adults with mental retardation require prevocational training in sheltered

workshops and training in functional living or community orientation activities.

(a) Infant Stimulation Programs

Young infants with development delays require intensive multi sensory stimulation programs. These programs attempt to stimulate their sense of hearing, vision, taste, smell movement and touch through several activities. Ready made infant and toddler behavior activity checklist are available for parents, teachers and caregivers to discover which of them their child can do and which other activities they cannot perform. For example, a child has problems in crawling or creeping appropriate stimulation exercises are given. If another child has poor auditory tracking or localization skills, hearing activities are given. It has been found that early infant stimulation can sometimes even improve the developmental quotients of kids by more than twenty points.

(b) Day Care Schools

Older children with moderate to severe levels of mental retardation require special schools. There are special teachers in such schools who are trained to teach these children using special methods or techniques. Teaching activities are tailor made to suit the individual needs of each of these children. They are combined with use of group and play activities. The chosen activities are functional. In other words, they have to be simple and directly related to activities of the daily living of each child. For example, there is no use of teaching ABC or spellings of words and performing mathematical operations. Sight reading or pre-academics is preferred. Day schools have different levels for grouping, such as, based on their mental rather than physical or chronological ages. One such classification divides

the classrooms into preprimary primary, secondary, prevocational and vocational classes respectively.

(c) Vocational Training Programs

Pre-adolescent and older children require prevocational and vocational training. Children with mild to moderate levels of mental retardation rarely cross primary or secondary levels of regular schooling. Therefore, there is no point in expecting them to pass high school examinations. Parents have to be guided to develop realistic academic expectations on or about their children with mental retardation. Otherwise, they end up forcing these children, feeling frustrated and making way for more failures in the child than success and a sense of confidence in t heir lives. Vocational training programs have to be planned according to family backgrounds, economic resources and ultimate life goals selected for each child with mental retardation. The job on which or for which the adolescent is trained must eventually become the source of his livelihood and vocation for the rest of his or her life. Nowadays, children with mild and moderate mental retardation are being encouraged to be admitted into regular schools. This is called inclusive education. The structure and load of syllabus, teaching environments, teaching practices, and time table for these children is tailor made in such a way as to encourage them to be with normal age peers. Special sports and arts are arranged and encouraged for the benefit of these children. The whole idea is to provide equal opportunities, mainstream and normalize these children.

Integration or inclusion has several advantages for the child with mental retardation as well as for their non retarded peers. For the child with mental retardation, it provides appropriate peer models to learn or imitate, provides opportunity for social learning, play and emotional bonding. Obviously, these children cannot and do not have to learn the same academic subjects as the regular school children. They are allowed to participate in games, play, art or other extra curriculum activities-although with certain concessions and adjustments. For the non retarded children, it is great opportunity to learn about persons with different abilities. They are also able to empathize, extend friendships and accommodate such persons into their lives. Inclusive education also mandates that the school infrastructure, furniture, teachers and teaching are adjusted to the needs of the children with special needs.

3.11 QUESTIONS

- a. Define mental retardation.
- b. What is intelligence and adaptive behavior?
- c. Highlight the clinical features of mental retardation.
- d. Explain how mental retardation is different from mental illness.
- e. Explain the prevalence of mental retardation.
- f. Elaborate on the causes of mental retardation
- g. What is diagnostic assessment? Discuss its role in mental retardation.
- Highlight the differences between intelligence tests and developmental schedules.
- i. Explain the need and importance of assessment for intervention or program planning
- Mention the associated problems seen in persons with mental retardation.
- k. Enumerate the rehabilitation programs available for persons with mental retardation.

3.12 ANSWERS

a. 3.3 b. 3.4 c. 3.4 d. 3.5

e. 3.6 f. 3.7 g. 3.8 h. 3.8

i. 3.8 j. 3.9 k. 3.10

3.13 KEY WORDS

Adaptive Behavior Chromosome

Congenital Developmental Quotient

Epilepsy Hormone

Intelligence Quotient Intelligence Quotient

Mainstreaming Mental Retardation

Natal Normalization

Post Natal Prenatal

Problem Behavior Schizophrenia

Social Quotient

3.14 BIBLIOGRAPHY

Peshawaria, R., and Venkatesan, S. (1992). Behavior Approaches to Teaching Children with Mental Retardation. Secunderabad: National Institute for the Mentally Handicapped.

Peshawaria, R., and Venkatesan, S. (1992). Behavior Assessment Scales for Indian Children with Mental Retardation. Secunderabad: National Institute for the Mentally Handicapped.

Venkatesan, S. (2007). Children with Developmental Disabilities: A Training Guide for Parents, Teachers and Caregivers. New Delhi: Sage Publications.

BLOCK IV: PSYCHOLOGICAL PROBLEMS

Unit 4: Psychological Problems associated with Speech and Hearing

Disorders: Attention Deficit Disorders – Problem Behaviors – Autism –

Emotional Disorders

- 4.1 Purpose
- 4.2 Introduction
- 4.3 Attention Deficit Disorders
- 4.4 Problem Behaviors
- 4.5 Autism
- 4.6 Childhood Phobias
- 4.7 Questions
- 4.8 Answers
- 4.9 Key Words
- 4.10 Bibliography

4.1 PURPOSE

This unit explains the common psychological problems associated with speech and hearing. The common problems include temper tantrums, hyperactivity, withdrawal behaviors, fears and phobias and autism. It is important to distinguish between these problems as add-on features associated with primary speech and hearing disorder from those where these problems are a primary disorder in themselves. The clinical features, characteristics and their management aspects are presented briefly and explained.

4.2 INTRODUCTION

Children and adults with speech or hearing disabilities face a unique set of psychosocial problems. They have to meet the challenge of understanding others in their environment just as others around have to adjust to their needs and requirements. In this interactive process, it is not unusual that the persons with disability find themselves loosing tempers or becoming aggressive and assaulting; or alternatively, becoming depressed and withdrawn, shy and timid of social contacts. Once such behaviors set in, they add more problems for the person with disabilities. The aggressive or assaulting person with impairments will be avoided or even faulted. This becomes a vicious cycle much to the disadvantage of the person with disability.

4.3 ATTENTION DEFICIT DISORDERS (ADDs)

ADDs were earlier called 'hyperkinetic disorders'. This disorder begins in children usually below age five. The three important symptoms of ADD are short attention span, over activity and impulsivity. This is called triad of ADD. This disorder is reported to occur in 2-3 % of school aged children. Luckily, the symptoms of ADD do not generally persist over adolescence or during adulthood. This disorder has a self remitting course. In other words, the disorder gets 'cured' on its own with or without treatment. This does not mean that one can simply wait with an ADD child at school or in a family to get better on own! The exact nature and severity of symptoms in a given child with ADD varies from case to case or even within same child from time to time.

Short attention span refers to difficulties in these children to selectively focus on particular events/activities from among several present around them. Even if they pay attention on a given task at hand, they are unable to sustain that attention over a period of time. They leave activities incomplete. They do not give close attention to details. They make frequent and careless mistakes in school work. During conversation, they seem not to listen when spoken to. They give impression that they are not following instructions. They show trouble in organizing activities. They avoid or dislike activities requiring attention to small details. Owing to their attention problems, they appear to be forgetful or loose things in their daily activities.

Over activity or hyperactivity is reflected as frequent off seat behaviors, squirming and fidgeting. In severe cases, they may not sit in one place. They run around. One may have to physically restrain them to keep them still. They are often 'on the go' as if driven by some motor. They talk excessively. They show trouble in enjoying leisure time activities.

Impulsivity is displayed as unpredictable behaviors. For one second they are at one place or seemingly doing one thing. The next moment they would have abandoned that activity to perform another. In classroom situations, they blurt answers even before questions are asked. In game/play, they show poor turn taking skills. They intrude and interrupt others in conversation. Impulsive behaviors are typically characterized by reckless, rash and accident prone behaviors. They get into disciplinary trouble due to their unthinking rather than deliberate breach of rules. They are socially uninhibited and often lack social reserve. Owing to their unpredictable behaviors, they are unpopular with peers. Parents experience immense stress in day to day management of these children in home settings.

All levels of IQ occur in ADD. It is important to distinguish ADD as primary condition and/or as associated feature to some other primary condition like mental retardation, hearing impairment, learning disability, etc. There are many times when a restless child seen briefly in a clinic (presumably tired after a long journey) is hastily diagnosed as ADD and even put on anti-psychotic or stimulant medication! It is important to resist our tendency to over diagnose a slightly restless, tired, frustrated or hungry child as ADD. It is important to exclude that the child does not suffer from any other primary condition like mental retardation, autism or some other child psychiatry disorder. The choice of ADD as diagnosis should be the last resort for any skilful diagnostician.

CASE EXAMPLES

Vimal is a six-year-old. Since two to three years his parents have observed that Vimal is excessively overactive. He does not sit at one place for more than a few minutes or complete any given activity. He is ever restless and unstable. Many times, parents would not be able to predict what Vimal would end up doing next. For one moment if he is on one activity, the next moment, he is on to something else. Someone has to continually monitor him all the time for fear that he would disturb somebody or something. At times, his mother felt so vexed of his antics that she ruefully wondered if she had "ever killed a monkey in her previous birth"-as punishment for which the gods had blessed her with such a child.

Sarita is five year old. From about age of two, her parents observed that the girl was unduly overactive. At first, the parents thought that the girl was probably over smart or highly intelligent. She would run around places, drop things, would sit still even for a moment to watch television or listen to music. Other children preferred not to let her in their group play. She slept very less and yet found greatly refreshed after short naps. The parents are finding the child to be unmanageable at home. They sometimes tie her to some pillar or post. They are seriously considering consulting a clinical psychologist or child psychiatrist.

ADD is not caused by poor parenting, family problems, poor teachers or schools, too much television, food allergies or excess sugar. One early theory proposed that ADD was caused by minor head injuries or damage to brain at birth or immediately thereafter. This is the reason that ADD was earlier called 'minimal brain damage' or 'minimal brain dysfunction'. The majority of

people with ADD do not have any history of head injury or brain damage. ADD is likely caused by biological factors which influence neurotransmitter activity in certain parts of brain. There is a possibility that it has strong genetic basis. There is evidence that ADD runs in families. If one person in a family is diagnosed with ADD, there is a 25-35 % probability that any other family member also has ADD, compared to a 4-6 % probability for someone in general population. Heavy alcohol use by pregnant women is reported to cause a condition called 'Fetal Alcohol Syndrome'. This condition leads to low birth weight, intellectual impairment along with symptoms of ADD. The use of drugs like cocaine by pregnant women also appears to have similar effects on the child. Toxins in environment, lead poisoning, or other environmental pollutants are reported to cause symptoms of ADD in young children.

As mentioned earlier, ADD has a self remitting course. The symptoms are likely to disappear with adolescence or adulthood. There is evidence to show that in about 5-8 % of cases, the symptoms continue to disturb the individual even as adults. However, all this does not avert the need for treatment when the symptoms are acute and the child is currently unmanageable at home or school. Clinical experience has shown that the most effective treatment for ADD is combination of medication (when necessary), behavior therapy as well as counseling or coaching for adults.

Medication is often used to normalize brain activity and control acute symptoms. Stimulant medications (Ritalin, Dexedrine, Methylphenidate) are commonly used because they have been shown to be most effective for most people with ADD. Many drug treatments have severe side effects. An overdose can render the child sleepy or sedated so much so that nothing can

be taught at all. Too less of the drug can keep them so over active that they cannot concentrate on anything to learn new. An optimum dose adjusted according to their body weight, nature and severity of symptoms is necessary for better results in management of these children. There is risk of developing tolerance or a kind of addiction to the use of some of these drugs. After some time of their regular use, lower doses do not work. The dose has to be periodically increased to get desired effects.

Behavior therapy and cognitive therapy are often helpful to modify certain behaviors and to deal with emotional effects of ADD. Many adults benefit from working with an ADD coach to help manage problem behaviors and develop coping skills, such as improving organizational skills and improving productivity. Specific behavior therapy techniques usually recommended for management of these children include reward training, contingency contracting or reinforcement, use of Premacks' principle, differential rewards technique, relaxation training, time out techniques, activity scheduling, etc. Teacher, parent or caregivers training program is critical for successful handling of these children in school and home settings.

Additionally, they have to be taught skills related to time management and activity management, use of planners and organizers. There is need for clarity, consistency and constancy in implementation of discipline techniques for these children. Social skills training programs should incorporate exercises on listening skills, turn taking, waiting skills, procrastination, etiquette and manners. Environmental manipulations are needed in classroom settings wherein routines are posted on board, or short attention span activities are used. Transitions are handled carefully between periods, physical activities

and exercises are channeled, or curriculum is adapted to individual needs of these children.

ADD is yet to be recognized as disorder certifiable as disability in our country. Therefore, it is quite a challenge for the practicing clinician to recommend regular school admission, or other environmental adaptations that can promote their living with other school children. These children often stand rejected and ridiculed, misunderstood and mistaken, denied and deprived even their basic right to existence with decorum and dignity.

4.4 PROBLEM BEHAVIORS

We perform several activities in our daily lives. We sit, stand, cry, listen, hate, fear, etc. For convenience of understanding, we can divide behaviors into two types:

- (a) Skill Behaviors
- (b) Problem Behaviors

Skill behaviors are positive behaviors which a child already has or must be trained for successful personal and social living. Examples: Indication of toilet, reading, writing, language, money calculation, telling time, etc. Obviously, any or all 'good habits' which we want to teach children are called skill behaviors.

Problem behaviors are negative behaviors. Their presence cause strain on caregivers. Such behaviors can be potential danger for the child or people around. The behavior is inappropriate for the age or developmental level of the child. They hinder teaching or learning of new skill behaviors or in performance of already learned skill behaviors in a given child or others around. Such behaviors may be socially deviant. Examples: Hits others, screams, stamps feet, sucks thumb, tells lies, throws things, bangs own head, etc.

All behaviors are learned. Both, skill behaviors as well as problem behaviors are learned. Whether a child 'throws a tantrum' or 'waves byebye'; both behaviors are learned. It is important to observe and understand what happens immediately after the occurrence of a behavior. In our example, let us say that the child is given a candy immediately after she throws a tantrum. This would make that child to throw a tantrum even the next time in order to get the candies. Behaviors followed by pleasant consequences are learned.

Sometimes, behaviors are learned to avoid unpleasant consequences. In our example, let us say that the mother stops giving candies after the child throws a tantrum. Instead, she starts giving the candies every time the child does not throw the tantrum. Soon the child will learn not to throw tantrums in order to get the candies. This means that behaviors can be both learned as well as unlearned.

Psychologists have understood many similar rules about how human behaviors are acquired or how they can be changed. Take the example of using rewards to change behaviors in children. Rewards are things or events that happen after a behavior. That thing or event is liked by the child. And, the child would behave again and again to receive that thing or event. Examples of rewards for children are eatables, toys, play materials, or even a simple verbal praise like saying 'Good'. It is found that children can be taught to behave in desirable ways by appropriately arranging to give rewards after the occurrence of those behaviors. For example, children who receive clapping of hands for reciting a nursery rhyme are likely to recite them for receiving their liked reward.

There are rules about what, how, when or how much to reward children. Giving the same reward for the same activity each and every time will not work. Or giving too much of reward for a small activity done by the child is not going to help. There are other rules about giving rewards clearly, consistently and constantly so that the child also understands those rules.

There are certain steps and techniques for identification and management of problem behaviors in children. Problem behaviors in children can be identified by observing the child or asking parents, caregivers or teachers about their occurrence. There are ready-made 'Problem Behavior Checklists' to help identify specific problem behaviors in children. Once the problem behaviors are identified or listed, they must be analyzed by asking some of the following questions:

- (ii) WHAT is the problem behavior/s in the child?
- (iii) WHAT is the event happening just before occurrence of the problem behavior/s?
- (iv) WHERE does (or does not) the problem behavior/s occur?
- (v) WHEN does (or does not) the problem behavior/s occur?
- (vi) WITH WHO does (or does not) the problem behavior/s occurs?
- (vii) WHAT is happening during occurrence of problem behavior/s?
- (viii) HOW many times or how long does the problem behavior/s occur?

- (ix) WHAT is happening immediately after occurrence of the problem behavior/s?
- (x) WHAT is the caregivers understanding of the 'causes' of the problem behavior/s?

An answer to all these questions on or about the problem behavior/s in children can help plan an appropriate behavior change program. Children develop problem behaviors,

- (i) To secure attention
- (ii) For self stimulation
- (iii) Owing to skill deficits
- (iv) To escape certain undesirable consequences
- (v) To secure benefits or rewards
- (vi) Owing to certain identified 'triggers'

When we confront a child with behavior problem we must try and analyze which one of the above mentioned factors could be precipitating it. Note that a given problem behavior may be mediated by more than a single factor at a time too. The selection of management techniques for problem behaviors depends on the identified functions or factors that are underlying them.

If a child's problem behavior is 'attention seeking' device, the best management technique for such a behavior is ignoring. If the problem behavior is due to skill deficits, skill training is called for. If the problem behavior indicates that the child is receiving a reward each time following that behavior, then such rewards need to be withdrawn. When a problem

1-SLM-Psychology

	ITY REPORT	Jiogy		
4%	TY INDEX	3% INTERNET SOURCES	2% PUBLICATIONS	1% STUDENT PAPERS
PRIMARY	SOURCES			
	www.rel	nabcouncil.nic.in		1%
	aiish.ac. Internet Sour			<1%
3	Rao. "Co	B. A. Mahalakshode Switching in ren", Theory and ge Studies, 2011	the Lexical C d Practice in	0/6
4	www.slic	deshare.net		<1%
	www.sb:	schools.org		<1%
	fsw.uca			<1%
/	hbacade	emy.org.uk		<1%
0	•	.S "Age of iden		

International Journal of Pediatric

Otorhinolaryngology, 201112 Publication

9	omlog.org Internet Source	<1%
10	www.nencki.gov.pl Internet Source	<1%
11	www.lifecoachmanchester.co.uk Internet Source	<1%
12	rehabcouncil.nic.in Internet Source	<1%
13	Submitted to Grand Canyon University Student Paper	<1%
14	www.togademus.co.uk Internet Source	<1%
15	www.dfas.mil Internet Source	<1%
16	www.defter.gen.tr Internet Source	<1%
17	distanceeducationju.in Internet Source	<1%
18	Thomas Kishore Madhavaram. "Intelligence Testing and its Implications for Disability Evaluation in Individuals with Mental Retardation", Psychological Studies, 05/06/2011 Publication	<1%



<1%

20

Sebastian, Swapna; Chengappa, Shyamala; Kumar R, Sunil and Ballraj, Achamma. "Agraphia and Anomia in Bilingual Individual with Left Temporal Lobe Lesion -- A Case Report", Language in India, 2012.

<1%

Publication

21

www.audit.wa.gov.au

Internet Source

<1%

EXCLUDE QUOTES ON

EXCLUDE ON

BIBLIOGRAPHY

EXCLUDE MATCHES OFF