

Paper-2

UNDERSTANDING CHILD DEVELOPMENT AND CHILDHOOD

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UNIT1: Introduction to Child Development



1.0 Introduction:

Studying Child Development is crucial in understanding and improving Health and well being of the child.

- During the first 5 years of Child's life, there are many rapid changes in most of the Domains of development .Understanding Theories of Child development helps in understanding

1.1.1 Meaning and scope of Child development



Child development refers to the sequence of physical, language, thought and emotional changes that occur in a child from birth to the beginning of adulthood.

- During this process a child progresses from dependency on their parents/guardians towards increasing independence.

- Child development is strongly influenced by genetic factors (genes passed on from their parents) and events during prenatal life. It is also influenced by environmental facts and the child's learning capacity.
- It is a scientific study of the changes in a child's biological, social, cognitive, emotional and behavioral domains across the span of childhood.

1.1.2 Scope of Child Development:

- Understand normal course developmental milestones.
- Study individual differences in child development.
- Understand foundations for adult behavior.
- Informing teachers for guiding and modifying a child's learning and behavior.
- Discovering characteristic behaviors of children at different ages.
- Opportunity for early detection, intervention and prevention of disabilities.

Hence before studying how knowledge of Child development helps in understanding developmental milestones and specific characteristic behaviours at different ages ,let us examine the basic concepts of Child Development.

1.1.3 Difference between Growth (Quantitative) and Development (Quantitative & Qualitative):



Development	Growth
1) Development is an all-inclusive process designed to analyze various aspects of your child's life.	1) Growth focuses on one aspect of child's life.
2) Development isn't confined by time or age.	2) Growth takes place within a limited scope of time.
3) Development dictates change in the character of an individual.	3) Growth dictates changes in physical appearance.
4) Development is an internal process.	4) Growth is an external process.
5) Development is the gradual transformation of behavioral and skill set changes.	5) Growth is associated with the progressive physical change from one stage to another.
6) Development is a consistent process and continues throughout life.	6) Growth ends at maturation.
7) Development is associated with both qualitative and quantitative improvement.	7) Growth mainly focuses on quantitative improvement.

1.1.4 Maturation:

- Maturation is the process by which we change, grow, and develop throughout life.
- Developmental psychologists look at many different types of maturation throughout the lifespan.
- Maturation is the process of development that occurs as we grow and change.

There are many types of maturation including physical and cognitive:

Physical maturation:

- ❖ Physical maturation occurs when our body grows and changes as we get older.
- ❖ A child goes through some very distinct physical maturity as they progress through all their development stages.
- ❖ For example, in the early stages of development, a child depends on reflexes majorly.
- ❖ Then as children grow they develop their motor skills and coordination. They also grow taller and add more weight.
- ❖ Their body goes through hormonal changes as they leave adolescence and enter early adulthood.

Cognitive maturation:

- ❖ Cognitive maturation is the process of development in the way we think as we grow.
- ❖ This refers to the cognitive development of children from birth to adulthood.
- ❖ It refers to how babies think, learn, interact with their environment, etc.
- ❖ Some important aspects of cognitive development are the processing of information, language development, reasoning skills, development of intellects and memory.
- ❖ This process of cognitive development begins right at infancy.
- ❖ An infant uses his/her sensory organs to explore the surroundings.
- ❖ By three months infants can actually distinguish faces and sounds.
- ❖ And as they go through adolescence and their teenage years, the cognitive development continues.

- ❖ Each stage is earmarked with certain benchmarks that the teachers can focus on to chart the child's cognitive maturity.

1.1.5 Learning:

Child development refers to the changes that occur as a child grows and develops in relation to being physically healthy, mentally alert, emotionally sound, socially competent and ready to learn.

Maturation vs. Learning:

- ❖ Learning is the gathering of knowledge and skill with the help of study.
- ❖ This is with respect to formal learning. Informal learning begins from birth, the learning that comes from observation and experiences.
- ❖ Maturation, on the other hand, is an act of maturity.
- ❖ It refers to physical and mental development. So the ability to act, react and behave responsibly comes from maturity.
- ❖ So while learning comes from experiences and practice, maturity comes from individual growth without any external stimuli.
- ❖ In fact, we can say that maturation is essential for learning skills. Attaining maturity enables in learning new skills.
- ❖ This is one important factor that teachers must keep in mind.
- ❖ Because if learning precedes maturity, it can be a wasted effort. So learning must begin when the child is mature enough for that particular lesson.

Growth, Development, Learning and Maturation are very important concepts in understanding the behavior, learning style, and maturity level and development pattern of the children during different stages of life. As Health, Nutrition, emotional well being and Education are the major issues that are to be studied for understanding progress of the child, one need to understand the interdisciplinary basis of child development

1.2. Interdisciplinary basis of Child Development:

- One of the definitions of child development is that it is the science of development and behaviour of children. Behaviour patterns in childhood pave the way to behaviour patterns in adulthood.
- During the early period, scholars confined the study of child development only to the developmental pattern.
- Their followers integrated the information from varied other sources of allied sciences such as nutrition, health, education and social work.
- These entities which permit objective and quantitative measurements strengthen the subject of child development.
- Today one of the major tasks of child development is the integration of the findings of various fields into a harmonious unity of knowledge as explained in the following

1.The Contribution of Psychology:

1. Psychology deals primarily with man's behaviour and his adjustment to his environment. Developmental psychology is concerned with chronological and progressive changes in man's capacity to deal with his environment.
2. Understanding and measuring the individual differences, personality development, the learning process
3. Interpersonal relationships and the nature of adjustments made by individuals in achieving and maintaining healthy social behavior.
4. All these areas have significance to the study of child development especially in understanding the laws and principles that govern the unique development and behavioural pattern of each individual child. Thus psychology helps to get an insight into the intricacies of our common heritage, human nature. It also unfolds the amazing depth and the endless possibilities of the human mind.



2. **Anthropology**

a. It contributes to the understanding of human beings by pointing out the cultural influence on the developing personalities. Anthropology, which is the study of the human species in their cultures, has two aspects; cultural and physical.

b. Cultural anthropology seeks to throw light on man's nature and social behaviour in relation to his intentions.

c. Physical anthropology is concerned with man as physical being. It deals with physical status and characteristics and his origin and evolution. Through careful measurements of the human body and its parts at different periods and stages of development, the field assesses the nature of the growth process.

3. **Sociology**

a. It refers to the total personality as a function of human relationships.

b. Sociology is scientific knowledge about the behavior of human beings in relation to other human beings. It is concerned directly with man's behaviour in relation to the various human groups in which he holds membership, especially those with which he is closely identified, and in which he participates directly

c. Sociologist helps to interpret the nature of the family and other social groups which play a vital role in the development of the child and how the nature of the society and the various institutions in society influence the thoughts, feelings and actions of the child and adults

d. Sociology explains the powerful role played by the different socializing agencies such as the home, school, and community in the personality development of the child. The basic nature of the child cannot be separated from the social environment, the milieu in which the human personality is moulded.

4. **Pediatrics:**

a. The physician is concerned with more than keeping records of heights and weights, diagnosing and treating the usual childhood diseases and prescribing medicine.

b. The physician has to rely heavily on a thorough knowledge of human growth and development.

- c. Psychiatry, another interrelated field is a specialized branch of medicine concerned with prevention of mental and emotional illness.
- d. The psychiatrist must be familiar with normal human development in all aspects: Physical, mental, social and emotional.
- e. He must be able to discriminate between normal variations in individuals and signs of illness or pathological behaviour which indicate serious disturbances and call for special treatment.
- f. The discipline of pediatrics deals with child health and medicine, emphasizes the developmental history of understanding of the child; information about prenatal factors and nutritional influences.
- g. Pediatrics is also concerned with norms and assessment of developmental status of the child.
- h. Pediatricians have a critical role to play in protecting the integrity of childhood by advocating for all children to have the opportunity to express their innate curiosity in the world and their great capacity for imagination.
- i. For children with special needs, it is especially important to create safe opportunities for play.

5. Neuro Science:

- Although developmental psychology and developmental neuroscience share interests in common problems (e. g., the nature of thought, emotion, consciousness), there has been little cross-fertilization between these disciplines.
- To facilitate such communication, we discuss 2 major advances in the developmental brain sciences that have potentially profound implications for understanding behavioral development.
- The first concerns neuro imaging, and the second concerns the molecular and cellular events that give rise to the developing brain and the myriad ways in which the brain is modified by both positive and negative life experiences.
- Recurring themes are that

(1) Critical, new knowledge of behavioral development can be achieved by considering the neurobiological mechanisms that guide and influence child development, and

2) These neurobiological mechanisms are in turn influenced by behavior.

Hence it is said from the above concept that understanding the contributions of different allied subjects also very helpful in understanding child development very well as development in one domain is interconnected to other domain.

We had examined Meaning and scope of Child development, important concepts in child Development like Growth, Development, Learning and Maturation and interdisciplinary basis of child development. In order to have a better concept on Child development it is essential to study development occurring at different stages in the life of children.

1.3 Stages of development in lifespan

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

This list reflects unique aspects of the various stages of childhood and adulthood that will be explored in this book. So while both an 8 month old and an 8 year old are considered children, they have very different motor abilities, social relationships, and cognitive skills. Their nutritional needs are different and their primary psychological concerns are also distinctive. The same is true of an 18 year old and an 80 year old, both considered adults. We will discover the distinctions between being 28 or 48 as well. But first, here is a brief overview of the stages.

1. Prenatal Development

Prenatal development refers to the process in which a baby develops from a single cell after conception into an embryo and later a foetus.

Prenatal development starts with fertilization, in the germinal stage of embryonic development, and continues in foetal development until birth.



2. Infancy and Toddlerhood

Infancy begins with Birth but now According to WHO birth to one month period is called as Neonatal period and infancy starts from 2 months and extends to two years. It is the stage of rapid development.

Between birth and 3 months babies track objects with eyes. From 4-6 months babies roll over from front to back and back to front. By 6 months of age, infants can discriminate between faces of parents and strangers. They discriminate colours also. By the age of 8-9 months, a baby can crawl and try to sit with support and sit without support between 10-12 months. By one year of Age, babies walk, can associate sounds, and say dada, mama, or bye-bye By the age of 2 years a baby walks, speaks and cooperates with Adults and playmates.

3. Early Childhood

Early childhood is also referred to as the preschool years consisting of the years which follow toddlerhood and precede formal schooling. As a three to five-year-old, the child is busy learning language, is gaining a sense of self and greater independence, and is beginning to learn the workings of the physical world. This knowledge does not come quickly, however, and preschoolers may



have initially have interesting conceptions of size, time, space and distance.

Early childhood years are critical in a child's life. This is because the rate of development is more rapid during these years. The child begins to use more cognitive abilities. Thus learning is at faster rate.

4. **Middle Childhood**

The ages of six through eleven comprise middle childhood and much of what children experience at this age is connected to their involvement in the early grades of school. Now the world becomes one of learning and testing new academic skills and by assessing one's abilities and accomplishments by

making comparisons between self and others. Schools compare students and make these comparisons public through team sports, test scores, and other forms of recognition. Growth rates slow down and children are able to refine their motor skills at this point in life. And children begin to learn about social relationships beyond the family through interaction with friends and fellow students.



5. **Adolescence**

Adolescence is a period of dramatic physical change marked by an overall physical growth spurt and sexual maturation, known as puberty. It is also a time of cognitive change as the adolescent begins to think of new possibilities and to consider abstract concepts such as love, fear, and freedom. Ironically, adolescents have a sense of invincibility that puts them at greater risk of dying from accidents or contracting sexually transmitted infections that can have lifelong consequences.





6. Early Adulthood

The twenties and thirties are often thought of as early adulthood. (Students who are in their mid 30s tend to love to hear that they are a young adult!). It is a time of focusing on the future and putting a lot of energy into making choices that will help one earn the status of a full adult in the eyes of others. Love and work are primary concerns at this stage of life.

7. Middle Adulthood



The late thirties through the mid-sixties is referred to as middle adulthood. This is a period in which aging, that began earlier, becomes more noticeable and a period at which many people are at their peak of productivity in love and work. It may be a period of gaining expertise in certain fields and being able to understand problems and find solutions with greater efficiency than before. It can also be a time of becoming more realistic about possibilities in life previously considered; of recognizing the difference between what is possible and what is likely.

8. Late Adulthood

This period of the life span has increased in the last 10 years, particularly in industrialized countries. Late Adulthood is the stage of life from 60s onward. More physical and intellectual changes occur during this period. Reduction in stamina, diminishing vision, lowering of Muscle and bone strength are most common during this stage.

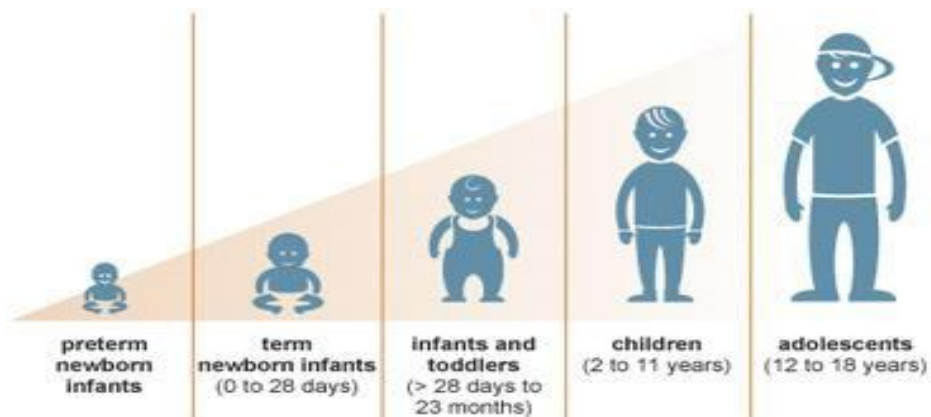




Of course, there is a certain discomfort in thinking about death during Late Adulthood.

We discussed already about Stages of Development in which specific Characteristic features of each stage was described. Now let us examine Different domains of development in order to have a better knowledge on the process of Development.

1.4. Domains of Development:



In relation to human

development, the word "domain" refers to specific aspects of growth and change. Major domains of development include social-emotional, physical, language and cognitive.

Kids often experience a significant and obvious change in one domain at a time, so it may seem that a particular domain is the only one experiencing developmental change during a particular period of life.

Physical

- The physical domain covers the development of physical changes, growing in size and strength, and the development of both gross motor skills and fine motor skills.
- This domain includes the development of the senses and using them.

Cognitive

- This domain includes intellectual development and creativity.
- Children develop the ability to process thoughts, pay attention, develop memories, understand their surroundings, make and implement plans and accomplish them.
- Creativity is also expressed. Jean Piaget outlined four stages of cognitive development: sensory-motor stage from birth to age two, the preoperational stage from ages two to seven, the concrete operational stage from age seven to 12, and formal operational stage from age 12 to adulthood.

Social-Emotional

- This domain includes the growth of a child in understanding and controlling their emotions.
- They also identify what others are feeling.
- The child develops attachments to others and learns how to interact with them.
- They develop the ability to cooperate, show empathy, and use moral reasoning.
- Children and adolescents develop many relationships, from parents and siblings to peers, teachers, coaches, and others in the community.
- Children develop self-knowledge during this stage and they learn how they identify with different groups.
- Their innate temperament also comes into play.

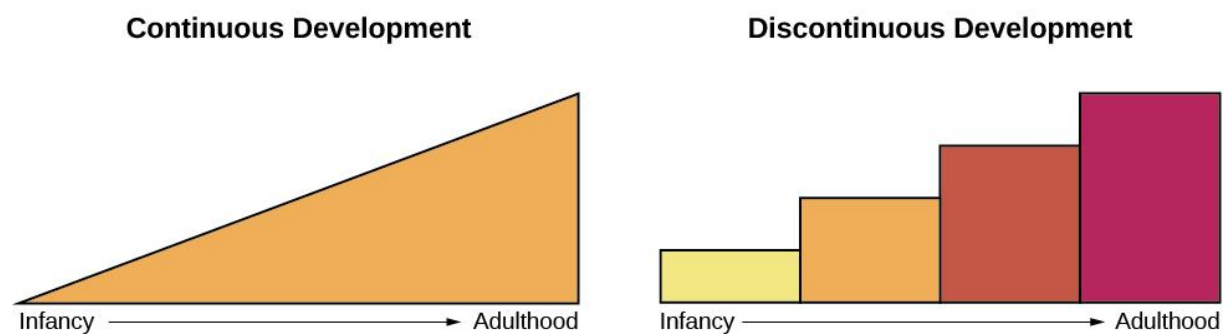
Language

- Language development depends on other developmental domains. The ability to communicate with others grows from infancy.
- Aspects of language include phonology (creating the sounds of speech), syntax (grammar -- how sentences are put together), semantics (what words mean), and pragmatics (communicating in social situations both verbally and non-verbally).
- Children develop these abilities at different rates.

As we all know Development is a continuous process, we need to study the nature of development process and how the interrelationship of continuous and cumulative nature of Development affects the process

1.4.1. Inter- relationship of continuous and cumulative nature of development:

- Continuous development views development as a cumulative process, gradually improving on existing skills. With this type of development, there is gradual change.
- Consider, for example, a child's physical growth: adding inches to her height year by year.
- In contrast, theorists who view development as discontinuous believe that development takes place in unique stages: It occurs at specific times or ages.
- With this type of development, the change is more sudden, such as an infant's ability to conceive object permanence.



- Among the most compelling stories emerging in the early 21st century from the science of child development have been the extraordinary developmental

processes by which a microscopic assembly of embryonic neural cells gives rise to the human brain—the most complex physical object in the known universe.

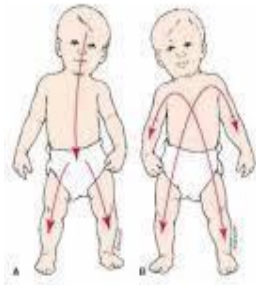
- These remarkable developmental events contribute to the entire, elaborate array of individual life attributes and trajectories, from personality, intelligence, and individual achievement to lifelong risks for disease, disorder, and criminality.
- The course of brain development also shapes a child's growing capacities (or incapacities) for learning; complex thought; and supportive, empathic involvement with others—capacities that powerfully influence life chances for success, productivity, and satisfaction.
- The profusion of *possible* futures and life paths grounded in the character, course, and timing of early brain development is guided and sustained by continuous, bidirectional interactions between human biology and social and educational environments.
- Such interactions, strongly influenced by the quality of the care and teaching and the learning environments that families and societies provide, co-determine over time the developmental, educational, biological, and health outcomes that progressively characterize individual lives.
- Although much complexity—at the behavioral, neurobiological, cellular, and molecular levels—awaits further elucidation, much has already been learned about the nature, timing, and consequences of neuron developmental events and how they interact with the environments in which children develop, learn, and engage with adults and peers.
- New knowledge of these developmental processes has yielded a rich and useful harvest of insights for those who care for, teach, protect, and support young children.

Having Knowledge about the Meaning and scope of child development, different important concepts of development, stages and domains of development would not provide a complete idea on nature of development and the way it affects the development process. Hence in addition to all these, the Principles of development are to be studied which gives a complete picture of child development

1.5 Principles of Development:

Cephalocaudal Principle:

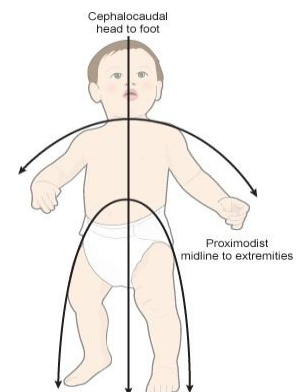
1. Cephalocaudal



- Development proceeds from the head downward. This is called the Cephalocaudal principle.
- This principle describes the direction of growth and development.
- According to this principle, the child gains control of the head first, then the arms, and then the legs.
- Infants develop control of the head and face movements within the first two months after birth.
- In the next few months, they are able to lift themselves up by using their arms.
- By 6 to 12 months of age, infants start to gain leg control and may be able to crawl, stand, or walk.
- Coordination of arms always precedes coordination of legs.

Proximodistal Principle :

- Development proceeds from the center of the body outward.
- This is the principle of proximodistal development that also describes the direction of development.
- This means that the spinal cord develops before outer parts of the body.
- The child's arms develop before the hands and the hands and feet develop before the fingers and toes.
- Finger and toe muscles (used in fine motor dexterity) are the last to develop in physical development.



Hierarchical integration:

- The **principle of hierarchical integration** states that simple skills typically develop separately and independently, but that these simple skills are integrated into more complex ones.
- Thus, the relatively complex skill of grasping something in the hand cannot be mastered until the developing infant learns how to control—and integrate—the movements of the individual fingers.

The Principle of the Independence of Systems:

- Finally, the principle of the independence of systems suggests that different body systems grow at different rates.
- For instance, the patterns of growth for body size, the nervous system, and sexual maturation are quite different.

Now let us discuss about Heredity and Environment which play very important role in the development of a child.

1.6 Role of Heredity and Environment:

Heredity: Every human being is born as a result of conception which takes place due to certain biological factors and processes.

- Heredity is the passing on of traits from parents to their offspring.
- The child carries with himself several physiological and psychological peculiarities that are present in the parents.
- In fact it is the heredity that determines structure, complexion, structure of hair, height.
- Facial features nasal index etc. of the child. Thus different types of the genes help in the formation of a body.
- Heredity is responsible for all the inborn traits, the instincts, emotions, I.Q., reflex action and physical traits.

The individual's personality is the product of both heredity and environment.

- In some cases heredity may overpower development and in certain other cases environment may very strongly influence growth and development.
- It is because of this difference, individuals differ in physique, character and other personality traits.
- A Child's development represents the interaction of Heredity and Environment.
- Heredity determines the potential of a child, while the Environment influences the extent to which that potential is achieved.

Environment: Environment is nothing but the sum total of the surroundings in which an individual has to live.

- Psychologically an individual's environment is related to all those stimuli which a person faces from the moment of fertilization till death.
- Environment is generally divided into two categories- natural and social.
- Environment is one's surroundings.
- Environment Factors
Familial Influences
- Geographical Influences
- Socio-Economical Status and Its Influence
- Both heredity and environment have their share in molding the life and personality of the individual.
- Environment is responsible for the growth and development of the physical, mental and social traits.
- The two forces heredity and environment are not opposed to each other, but are complementary like seed and soil.
- The heredity is the raw material out of which the object is to be prepared, and environment is the technique and other material for the manufacture.
- Two individuals of the same heredity might differ when put in dissimilar environments.

→ Again two individuals of differing heredity would probably differ in spite of identical environments.

Ecological systems theory:

→ So we can predict that if we change either factor, the product is changed.

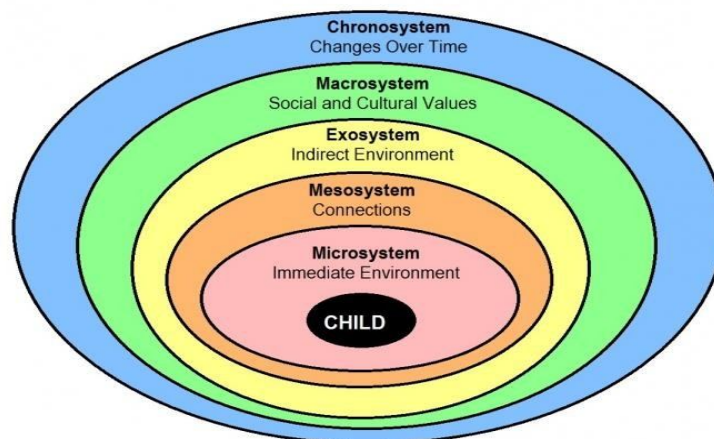
→ No person can be born without heredity and genes cannot develop without proper environment.

→ The presence of adverse environmental conditions, the physical growth of children can decline.

→ Example: Bhopal Gas Tragedy. Flood. Earthquake. Terrorist Attacks.

We have discussed already how Environment affects the development. Now let us discuss of the contributions in the form of a Theory explained by Bronfenbrenner.

Bronfenbrenner's Ecological Systems Theory



★ Ecological systems theory provides one approach to answering this question.

The ecological systems theory was developed by Urie Bronfenbrenner.

★ Bronfenbrenner believed that a person's development was affected by everything in their surrounding environment.

- ★ He divided the person's environment into five different levels: the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem.

Microsystem

- ❖ We will begin with the first level of Bronfenbrenner's theory: the microsystem.
- ❖ The microsystem is the system closest to the person and the one in which they have direct contact.
- ❖ Some examples would be home, school, daycare, or work.
- ❖ A microsystem typically includes family, peers, or caregivers.
- ❖ Relationships in a microsystem are bi-directional.
- ❖ In other words, your reactions to the people in your microsystem will affect how they treat you in return.
- ❖ This is the most influential level of the ecological systems theory.
- ❖ Let's look at the microsystem Alex lives in.
- ❖ The first part of his microsystem is his home environment.
- ❖ This includes his interactions with his parents and little sister.
- ❖ Alex's school is also part of his microsystem.
- ❖ His regular school interactions are with his kindergarten teacher and the other children in his class.

Mesosystem

- ❖ The next level of ecological systems theory is the mesosystem.
- ❖ The mesosystem consists of the interactions between the different parts of a person's microsystem.
- ❖ The mesosystem is where a person's individual microsystems do not function independently, but are interconnected and assert influence upon one another.
- ❖ These interactions have an indirect impact on the individual.
- ❖ One aspect of Alex's mesosystem would be the relationship between his parents and his teacher.

- ❖ His parents take an active role in his school, such as attending parent/teacher conferences and volunteering in his classroom.
- ❖ This has a positive impact on his development because the different elements of his micro system are working together.
- ❖ Alex's development could be affected in a negative way if the different elements of his micro system were working against one another.

Exosystem

- ❖ The exosystem pertains to the linkages that may exist between two or more settings, one of which may not contain the developing children but affect them indirectly nonetheless.
- ❖ Based on the findings of Bronfenbrenner, people and places that children may not directly interact with may still have an impact on their lives.
- ❖ Such places and people may include the parents' workplaces, extended family members, and the neighborhood the children live in.
- ❖ For example, a father who is continually passed up for promotion by an indifferent boss at the workplace may take it out on his children and mistreat them at home.

Macrosystem

- ❖ The macrosystem is the largest and most distant collection of people and places to the children that still have significant influences on them.
- ❖ This ecological system is composed of the children's cultural patterns and values, specifically their dominant beliefs and ideas, as well as political and economic systems.
- ❖ For example, children in war-torn areas will experience a different kind of development than children in peaceful environments.

Chronosystem

- ❖ The Bronfenbrenner theory suggests that the chronosystem adds the useful dimension of time, which demonstrates the influence of both change and constancy in the children's environments.

- ❖ The chronosystem may include a change in family structure, address, parents' employment status, as well as immense society changes such as economic cycles and wars.
- ❖ By studying the various ecological systems, Bronfenbrenner's Ecological Systems Theory is able to demonstrate the diversity of interrelated influences on children's development.
- ❖ Awareness of the contexts that children are in can sensitize us to variations in the way children may act in different settings.
- ❖ For example, a child who frequently bullies smaller children at school may portray the role of a terrified victim at home.
- ❖ Due to these variations, adults who are concerned with the care of a particular child should pay close attention to his/her behavior in different settings, as well as to the quality and type of connections that exist between these settings.

INTRODUCTION TO CHILD DEVELOPMENT:

FILL IN THE BLANKS:

1. Child development is strongly influenced by _____ factors.
2. Ecological systems theory was formulated by _____
3. Maturation involves _____ & _____ types.
4. Environmental factors that lead to birth defects are known as _____
5. Pediatrics is concerned with _____ status of the child

SHORT ANSWER QUESTIONS:

1. Write about scope of child development
2. What is the difference between Growth and maturation
3. Enumerate stages of Lifespan development
4. Write about any 2 domains of development
5. Maturation Vs Learning

ESSAY QUESTIONS:

1. Explain about principles of development
2. Write in detail about Ecological systems theory

ASSIGNMENT:

1. Observe a child's actions and write a report on Action and corresponding domain of Development.
2. Observe an Adolescent and write the characteristics features of that period.

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Unit 2: Prenatal Development



2.0 Introduction:

Studying Prenatal development is important for understanding process of development of foetus, understanding signs of pregnancy and having an insight into complications during pregnancy. Pregnancy is a crucial period in life. Proper care taken during pregnancy helps in producing a physically healthy baby. Early nurturing and bonding experiences lay the foundations for positive mental health of the baby. Having knowledge on care to be taken during pregnancy period and measures to be followed during complicated pregnancies helps in producing a healthy baby.

Now let us discuss about the definition and description of prenatal development.

Definition:

Prenatal development refers to the process in which a baby develops from a single cell after conception into an embryo and later a foetus.

Description:

The average length of time for prenatal development is 38 weeks from the date of conception. During this time, a single-celled zygote develops in a series of stages into a full-term baby. The three primary stages of prenatal development are the germinal stage, the embryonic stage, and the foetal stage.

Stages of prenatal development:

Germinal stage:

The germinal stage is the stage of development that occurs from conception until 2 weeks (implantation). *Conception* occurs when a sperm fertilizes an egg and forms a zygote. A zygote begins as a one-cell structure that is created when a sperm and egg merge. At the moment of conception, the mother's and father's DNA are passed on to; the genetic makeup and sex of the future foetus are set at this point. During the first week after conception, the zygote rapidly divides and multiplies, going from a one-cell structure to two cells, then four cells, then eight cells, and so on. This process of cell division is called *mitosis*. Mitosis is a fragile process, and fewer than one-half of all zygotes survive beyond the first two weeks. After 5 days of mitosis there are 100 cells, and after 9 months there are billions of cells. As the cells divide, they become more specialized, forming different organs and body parts. During the germinal stage, the cells necessary for the placenta, umbilical cord, and amniotic fluid will differentiate to form the embryo. The mass of cells has yet to attach itself to the lining of the uterus; once this attachment occurs, the next stage begins.

Embryonic stage:

The embryonic stage begins after implantation and lasts until eight weeks after conception. Soon after implantation, the cells continue to rapidly divide and clusters of cells begin to take on different functions called differentiation. A process called gastrulation leads to the formation of three distinct layers called germ layers: the ectoderm or outer layer, the mesoderm or middle layers and the endoderm or inner layer. As the embryo develops, each germ layer differentiates into different tissues and structures. For example, the ectoderm eventually forms skin, nails, hair, brain, nervous tissue and cells, nose, sinuses, mouth, anus, tooth enamel and other tissues. The mesoderm develops into muscles, bones, heart tissue, lungs, reproductive organs, lymphatic tissue and other tissues. The endoderm forms the lining of lungs, bladder, digestive tract, tongue, tonsils and other organs.

Differentiation:

The process of differentiation takes place over a period of weeks with different structures forming simultaneously. Some of the major events that occur during the embryonic stage are as follows:

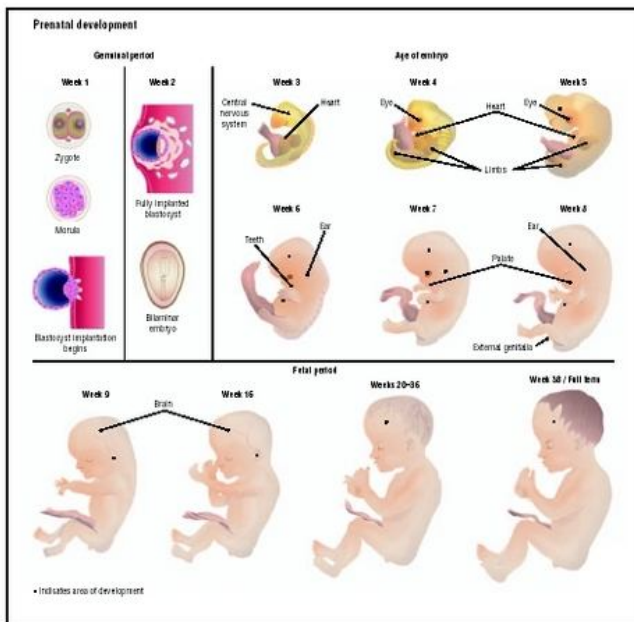


Illustration of prenatal development, from the two cell, or zygote, stage through the embryonic stage, in which the major body systems develop, to the foetal stage, during which the baby's brain develops and the body adds size and weight.

Week 3: Beginning development of heart, brain, blood cells, circulatory system, spinal cord and digestive system.

Week 4: Beginning development of bones. Facial structures and limbs (presence of arm and leg buds) continuing development of heart (which begins to beat), brain and nervous tissue.

Week 5: Beginning development of eyes, nose, kidneys, and lungs continuing development of heart (formation of valves). Brain, Nervous tissue and digestive tract.

Week 6: Beginning development of hands, feet and digits continuing development of brain, heart and circulation system.

Week 7: Beginning development of hair follicles, nipples, eyelids and sex organs (testes and ovaries). First formation of urine in the kidney and first evidence of brain waves.

Week 8: Facial features more distinct, internal organs well developed, the brain can signal for muscles to move, heart development ends, external sex organs begin to form.

By the end of the embryonic stage, all essential external and internal structures have been formed. The embryo is now referred to as a foetus.

Foetal stage:

Prenatal development is most dramatic during the foetal stage. When an embryo becomes a foetus at eight, it is approximately 3 centimeters (1.2 inches) in length from crown to rump and weighs about 3 grams (0.1 ounce). By the time the foetus is considered full term at 38 weeks gestation, baby may be 50 centimetres (20 inches) or 3.3 kilograms (7.3 pounds). Although all of the organ systems were formed during embryonic development, they continue to develop and grow during the foetal stage.

Examples of some of the major features of foetal development by week are as follows.

Week 9-12: the foetus reaches approximately 8cm (3.2 inches) in length. The head is approximately half the size of the foetus. External features such as the face, neck, eye lids, limbs, digits and genitals are well formed. The beginnings of teeth appear and red blood cells begin to be produced in the liver. The foetus is able to make a fist.

Week 13-15: the foetus reaches approximately 15cm (6 inches) in length. Fine hair called lanugo first develops on the head, structures such as the lungs, sweat glands, muscles and bones continue to develop. The foetus is able to swallow and make sucking motions.

Week 16-20: the foetus reaches approximately 20cm (8 inches) in length. Lanugo begins to cover all skin surfaces and fat begins to develop under the skin. Features such as finger and toenails, eyebrows and eyelashes appear. The foetus becomes more active and the mother can sometimes begin to feel foetal movements at this stage.

Week 21-24: the foetus reaches approximately 28.5cm (11.2 inches) in length and weighs approximately 0.7kgs. Hair grows longer on the head and the eyebrows and eyelashes finish forming. The lungs continue to develop with the formation of air sac called alveoli, the eyes finish developing. A startle reflex develops at this time.

Week 25-28: the foetus reaches approximately 38cm (15 inches) in length and weighs approximately 1.2 kgs. The next few weeks mark a period of rapid brain and nervous system development. The foetus gains together control over movements such as opening and closing eyelids and certain body functions. The lungs have developed sufficiently that air breathing is possible.

Week 29-32: the foetus reaches approximately 38-43 cm (15-17 inches) in length and weighs approximately 2kgs. Fat deposits become more pronounced under the skin. The lungs remain immature but breathing movements begin. The fetus's bones are developed but not yet hardened.

Week 33-36: the foetus reaches approximately 41-48cm (16-19 inches) in length and weighs 2.6 – 3.0 kgs. Body fat continues to increase, lanugo begins to disappear and finger nails are fully grown. The foetus has gained a high degree of control over body functions.

Week 36-38: the foetus reaches 48-53 cm (19-21 inches) in length and weighs 2.6-3.0 kgs. Body fat continues to increase, lanugo begins to disappear and fingernails are fully grown. The foetus has gained a high degree of control over body functions.

Week 36-38: the foetus reaches 48-53cms (19-20 inches) in length is considered to be full term by the end of this period. Lanugo has mostly disappeared and is replaced with thicker hair on the head. Finger nails have grown past the tips of the fingers. In a healthy foetus, all organ systems are functioning.

Many sperm cells are released with the possibility of just one managing to adhere to and enter the thick protective layer surrounding the egg cell called ovum. The first sperm cell to successfully penetrate the egg cell donates its genetic material DNA to combine with the DNA of the egg cell resulting in a new organism called the zygote.

The zygote will develop into a male if the egg is fertilized by a sperm that carries a Y chromosome, or a female if the sperm carries an X chromosome. The Y chromosome contains a gene, SRY, which will switch on androgen production at a later stage leading to the development of a male body type. In contrast, the mitochondrial DNA of the zygote comes entirely from the egg cell.



We had discussed till now about meaning of prenatal development and stage wise development in which week –wise growth of foetus was discussed.

Now we will discuss about signs and symptoms of pregnancy which gives a clear picture of indications of pregnancy.

1.3 Presumptive signs and symptoms of pregnancy

- a. **Amenorrhoea:** It is the discontinuation of monthly period.
- b. **Breast change:** Fullness and tenderness of breasts is noticed at 6 weeks of pregnancy and they become harder later.
- c. **Nausea/Morning sickness:** It is mostly accompanied by vomiting. Many occur in the early months; it becomes severe between 6-8 weeks and passes off by the end of 3rd month of pregnancy. It could be due to hormonal changes which take place during this period. An empty stomach also often leads to nausea.
- d. **Quickening:** It is the sensation of the child's movements the mother experiences.
- e. **Bladder irritation:** It comes in 8th week of pregnancy. There is a frequent urination due to the irritation of the bladder.

1.3.1 Probable signs and symptoms of pregnancy:

Enlargement of abdomen: It can be seen at the 16th week. Uterus may be enlarged due to the increased length of the muscle fibre and growth of certain new fibres and increased number of connective tissue and blood vessels are seen.

Softening of the cervix: It can appear from the 8th week of pregnancy. It becomes a jelly like substance more visible in primi gravida (First pregnancy) than multi gravida (Later Pregnancy).

Intermittent uterine contractions: These contractions can be felt from 16th week by keeping a palm on the uterus.

Uterine softee: It is a sound of blood running through the enlarged uterine arteries. It is heard with the help of a stethoscope.

1.3.2 Positive signs of pregnancy:

- ✓ The fetal heart beat can be heard after 24 weeks of pregnancy.
- ✓ Fetal movement can be felt around 24 weeks of pregnancy.
- ✓ Fetal parts can be detected by 16th week of pregnancy.

1.4 Minor discomforts during pregnancy:

Many women go through pregnancy without any difficulty; others suffer to certain extent from a few discomforts such as

- ❖ **Frequent urination:** this can be seen in the early and later stages of pregnancy.
- ❖ **Constipation:** May be incident at the beginning or the end of pregnancy caused by the pressure of the uterus on the intestines.
- ❖ **Hemorrhoids' or piles:** Are dilated blood vessels in the rectum resulting from constipation.
- ❖ **Heart burn:** Is a common occurrence during the last 3 months of pregnancy when the foetus presses against the stomach and interferes with digestion.
- ❖ **Mucus discharge from vagina:** It is observed in some women. If it is in red colour immediately she should consult a doctor.
- ❖ **Drowsiness:** Some feel extremely sleepy during first trimester.
- ❖ **Muscle cramps:** Due to the enlarged size of uterus, the circulation of blood to legs tends to be slow, leading to varicose veins; enlarged veins appear just below the surface of legs. Leg cramps are also caused by the slower circulation of blood. Pelvic pains come from the stretching of abdominal muscles.
- ❖ **Shortness of breath:** Enlargement of uterus may put pressure on the lungs. The pregnant woman should lie down with her shoulder and head on a raised pillow to avoid shortness of breath.
- ❖ **Backache:** It is caused due to increased pressure of the foetus on the back muscles.
- ❖ **Insomnia:** It is a condition of sleeplessness. It may be caused due to different reasons. By avoiding heavy meals late at night, using well ventilated room and taking a glass of lukewarm milk in the night to some extent it can be reduced.

1.5 Major discomforts during pregnancy:

Hyperemesis gravidarum: It is a condition of excessive vomiting in pregnancy which is very serious. It leads to loss of appetite and moisture from the body and may cause damage to the liver which is hazardous for both mother and the foetus.

Abortion: Termination of the foetus. If any deformities in the uterus or any diseased conditions in the mother like typhoid, diabetes, hypertension, Rh incompatibility, physical deformities in the foetus or ectopic pregnancy are present spontaneous abortion may occur.

Cervical Incompetence: Due to any injuries to the cervix, it opens long before the term. Cervix should be stitched and tightened to avoid leakage and loss of fluid.

Ectopic pregnancy: Fertilization takes place outside the uterus.

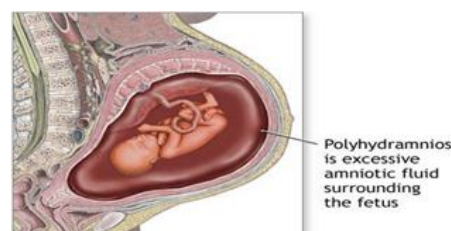
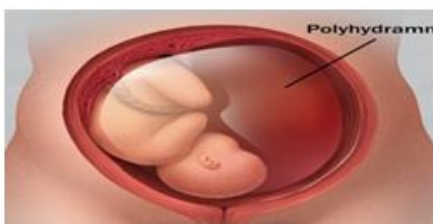
Hydatidiform mole: This is a condition when the fertilized ovum goes haywire.

2.1 Complications during last trimester of pregnancy:

Anti-partum hemorrhage: Abnormal bleeding during first trimester of pregnancy.

Placental insufficiency: If placenta does not mature properly it may supply insufficient nutrients to the baby which in turn may lead to 'small for date' baby. Deterioration of placenta may be due to toxemia or diabetes in the mother. Separation of placenta before birth of a child may cause death of foetus in the uterus.

Abnormalities in the quantity of the amniotic fluid: The normal amount of amniotic fluid is 1 litre. If it is less, it hampers the growth of the foetus. If the amount is too much the condition is known as **polyhydramnios**. It is also harmful to the foetal survival; usually this condition is seen in twin pregnancy.



Prolonged pregnancies: If delivery does not take place after 40 weeks, the post term baby may have wrinkled skin, lose weight, with loss of subcutaneous fat, hair and nails may be longer than normal. The symptoms and complications of pregnancy must be understood to identify as well as safeguard the pregnancy and to also take sufficient precautions to prevent untoward conditions during pregnancy as well as at the time of delivery of the baby.

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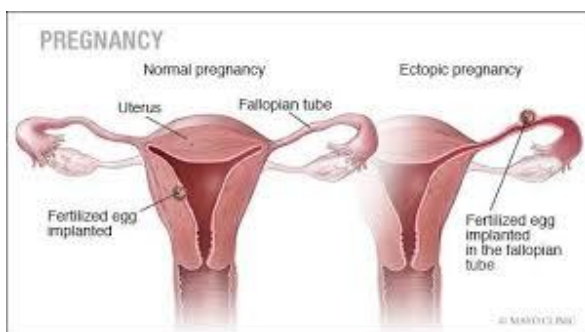
Now we will discuss about different types of pregnancies.

2.2 Types of pregnancies:

Pregnancy seems like a simple term. However, there are different kinds of pregnancy that one needs to be aware of. There are various reasons ranging from physical differences between women to multiple egg release among others. Read on to find out more about different kinds of pregnancies in women.

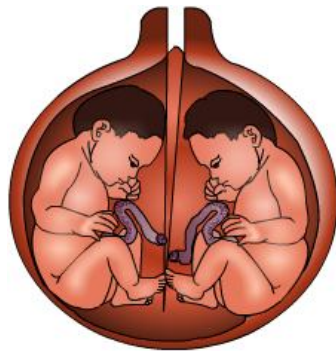
1.Ectopic Pregnancy:

Usually implantation takes place in the uterus, but sometimes it occurs outside of the uterus, most commonly in the fallopian tube, but occasionally in the abdomen or ovary. This condition is known as ectopic pregnancy, occurs in about one in every 100 pregnancies. The main cause for this is damaged fallopian tubes. These pregnancies cause abdominal pain and irregular vaginal bleeding and are dangerous to the health of the mother if it were not terminated.



2. Multiple pregnancies

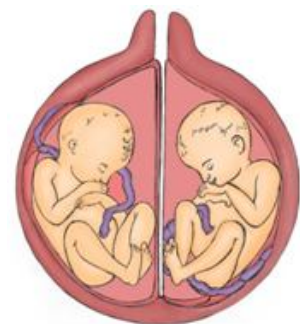
Identical Twins: When ovum is divided into two and united with the sperm, a zygote divides into two and separates forming two individuals with the same chromosomal composition. These individuals are referred as monozygotic twins, because they come from a single zygote. They are always of the same sex and similar in physical appearance.



Non-identical Twins: It occurs as a result of multiple ovulations in the same cycle. Two ova are united with a sperm at the same time. Each egg is separately fertilized and develops independently in the uterus. These individuals are referred as dizygotic twins that are two egg twins. They can be of different sexes and genetically may not resemble each other. However they may share same prenatal environment. Approximately 1 in 90 pregnancies results in twins, most commonly dizygotic twins.

3. Intrauterine Pregnancy

Normal pregnancies where the foetus or foetuses are implanted inside the uterus. The placenta is attached to the inside of the uterus to the uterine muscle.



4. Molar Pregnancy

Molar pregnancies are of two kinds- complete and partial. Complete molar pregnancies occur when the placenta is formed in the uterus without a foetus to support. Partial molar pregnancies result when two sperms fertilize one egg, however, two foetuses don't develop. The

placenta is not normal with the foetus having too many chromosomes. This eventually leads to a spontaneous abortion as the foetus cannot develop in a safe and healthy manner.

4. Tubal Pregnancy

Tubal pregnancies, on the other hand, occur when the fertilized egg implants itself in the fallopian tube instead of the uterus. Again, such a pregnancy is considered unsafe and needs to be terminated if the miscarriage does not occur naturally.

5. Intra-Abdominal Pregnancy

Most intra-abdominal pregnancies follow after cesarean delivery. The scar left behind after a C-section may weaken and tear, allowing the foetus to slip into the abdominal cavity. The practicality of the pregnancy will depend on the gestational age of the foetus at the occurrence of the tear. Some intra-abdominal pregnancies remain undetected and can complete a full term. However, a complete hysterectomy may be needed after birth.

6. Singlet Pregnancy

Singlet pregnancy is when one egg meets one sperm, and only one foetus develops.

7. Breech Birth

If the baby's position is head-up in the uterus with the buttocks or feet close to the cervix, it is termed as a breech pregnancy. Most babies are breech at the start of pregnancy and turn to the headfirst position closer to the due date. Breech birth can be divided into the complete breech, frank breech and incomplete breech (footling breech).

8. High-Risk Pregnancy

Women aged over 35, diabetic, pregnant with multiples and other health condition that could affect pregnancy fall under the high-risk pregnancy category. In some cases, if medication is required to control medical conditions, the pregnancy could be termed as high-risk. A history of any prior complications in childbirth could also lead to high-risk pregnancies.

We had discussed about signs, complications and different types of pregnancies. Now we will discuss about different types of delivery

2.3 Types of delivery:

Caesarean Section: A caesarean section, or C-section for short, is a surgical procedure performed when vaginal delivery is not possible. Sometimes, a caesarean section is planned beforehand. Sometimes, the doctor may switch to a caesarean section during a vaginal delivery if problems arise. The process is pretty straightforward. First, the mother is anesthetized. Then, an incision is made through the abdomen and the uterus to reveal the baby. Delivery occurs through the incision. The entire process can take anywhere from one to two hours and will require an extended hospital stay—between two and four days—after the baby is born.

Natural Vaginal Delivery: Natural vaginal delivery is when your baby is born through the birth canal. This is the most common way to give birth because it is the body's natural method. In fact, roughly [sixty-eight percent of women](#) give birth vaginally every year. Vaginal delivery reduces the risk that your infant will develop respiratory problems, asthma, food allergies, and lactose intolerance. That's not to say that this birth method isn't without risk. The baby can undergo physical trauma while passing through the birth canal. This can lead to bruising, swelling, and, in rare cases, broken bones. Complications during labor can also lead to additional problems if not properly handled.

As mentioned, natural vaginal delivery is a very common birth method. Sometimes, though, the mother needs a bit of assistance. This is where the first variation of this birth method occurs.

Assisted vaginal deliveries are still vaginal deliveries so this isn't a completely new birth method. Rather, as the name implies, it depends on the type of assistance you receive from your doctor during labor. Those types of assistance are discussed below.

Induced Labor: A doctor will induce labor for a wide variety of reasons. Chief amongst these reasons are a past-due pregnancy, ruptured membranes, a smaller-than-average infant, or high blood pressure in the mother.

Episiotomy: An episiotomy is a surgical incision made in the skin between the vagina and the anus. It allows the baby's head to pass more easily through the birth canal and helps prevent the skin from tearing.

Amniotomy: An amniotomy is the purposeful rupture of the amniotic sac. This rupturing is done for multiple reasons: to induce labor, to assess the baby's health, or to check for the baby's first stool.

Forceps Extraction: In a forceps delivery, an instrument shaped like salad tongs is used to grasp the baby's head to guide it through the birth canal.

Vacuum Extraction: During a vacuum extraction, a soft cup attached to a vacuum pump is applied to the baby's head to help guide it through the birth canal. Now that we've discussed some of the variations in the basic natural vaginal birth method, let's examine common physical hazards during prenatal period.

2.4 Common physical hazards during prenatal period

1. Period of the ovum

A. Starvation: The ovum will die of starvation if it has too little yolk to keep it alive till it can lodge itself in the uterine wall.

B. Lack of uterine preparation: Implantation cannot occur, if the uterine walls are not prepared in time to receive the zygote due to glandular imbalance.

C. Implantation in the wrong place: If the zygote gets attached to a small fibroid tissue in the uterine wall or to the wall of fallopian tube, it cannot get nourishment and will die.

2. Period of the Embryo

A. Miscarriages: Falls, emotional shocks, malnutrition, glandular disturbances, vitamin deficiency and serious diseases like pneumonia and diabetes can cause the embryo to become dislodged from the uterine wall, resulting in miscarriage between 10th and 11th weeks after conception.

B. Developmental irregularities: Any of the unfavourable environmental conditions present during the period of the embryo also affect the development of fetal features and retard the whole pattern of development. Maternal malnutrition, vitamin and glandular deficiencies, excessive use of drugs, alcohol, tobacco, diabetes, German measles interfere with normal development, especially embryonic brain.

3. Period of the Foetus

A. Miscarriages: Are always possible up to fifth month of pregnancy, especially during the normal regular menstrual period of woman.

B. Prematurity: Is a condition in which the newborn baby is relatively unfit to lead extra uterine life because his prenatal development has not been completed.

C. Complications of delivery: Maternal conditions can affect uterine contractions and are likely to lead to complications during birth.

2.5 Factors influencing prenatal development:

Emotional factors/ maternal stress: Emotional disturbances in the mother can produce chemical changes which may be responsible for both structural and psychological abnormalities in the developing foetus. For example it is believed that emotional disturbance during first ten weeks of pregnancy have caused some children to be born with a cleft palate. Studies have also shown that anxiety in the mother during pregnancy is related to the amount of crying behaviour in the new born child.

Drugs: Drugs include medication, alcohol and narcotics.

Consuming these during pregnancy may lead to their effects passing through the placenta to affect the foetus. For instance, streptomycin, tetracycline, anticoagulants, antidepressants and artificial hormones are found to be harmful for fetal development.

Alcohol is harmful in the sense for creating fetal alcohol syndrome, with symptoms such as abnormally small head, under developed brain, eye defects and congenital heart problems.

Narcotic drugs can lead to underweight, premature birth, vulnerable to respiratory infections and addiction to the drug.

Radiation: Excessive radiation by the way of numerous abdominal X-rays is harmful to the developing foetus. Radiation is not healthy and hence not recommended during the first four months of pregnancy.

Smoking: Heavy smoking is related to premature delivery, low birth weight which places the infant under a severe handicap. There is evidence of still births too.

Diseases: If the expectant mother suffers from certain diseases and illness, then the infection may be passed on to the foetus, which leads to many complications. For instance, German measles in mother during pregnancy can lead to congenital deafness in child. AIDS in mother can be transmitted to the child.

Accidents: Any accidents or undue strain may result in ante-partum haemorrhage causing malformation, foetal death or premature delivery.

Deficiency: Deficiency of nutrients and rest can also greatly affect the developing foetus, resulting in malformation or mental retardation in the baby. It may also lead to toxemia or miscarriage.

Maternal Age: Pregnancy risks increase as the mother gets older. Mothers over 35 years are at risk for having a child with

Down syndrome: They are also at risk of developing physical deformities and intellectual deficits.

Parity: Generally women's endocrine system takes 4 months to return to pre-pregnancy condition. Infants born before this period are at a disadvantage, a pregnancy within three months of delivery is classified as a high risk pregnancy.

We discussed about factors influencing prenatal development. Now let us examine about care during pregnancy

2.6 Care during pregnancy:

Pregnancy is a natural, normal physiological process. The hazards of pregnancy are in fact comparatively few and the discomforts are more often determined by the woman's own psychological attitude towards her particular pregnancy than by anything else. A woman receiving prenatal care from a doctor is expected to See

- The doctor regularly – once a month initially and twice or more often in the later stages. Undergo all tests advised by the doctor.
- Do what her doctor tells her and not listen to misinformation peddled by well-meaning friends or popular literature written by persons with limited expertise on the subject.
- Report promptly to the doctor any unusual signs or symptoms of disease or any sudden change in her condition.

Diet and Nutrition:

Diet is an important matter. The infant in one sense is a parasite, drawing from the mother's blood stream all the food elements it needs. Furthermore a woman's basal metabolism goes up by 5-10% during pregnancy reflecting many psychological and hormonal changes in her body.

A good balanced diet of about 2500 calories a day is prescribed in pregnancy. The diet of a woman during pregnancy must be one that contains all the essential foods without imposing any unnecessary strain upon her excretory organs. An adequate and balanced diet should provide:

1. Calories 2500-3000
2. Proteins 55 gm
3. Iron 40 gm
4. Calcium 1 gm

Exercise:

If the pregnancy is on a normal course walking, driving, gardening, light house-work, bending are good and help strengthen stomach muscles. The only rule is not to overdo and avoid too vigorous exercises. A small afternoon nap could help get the required rest.

Personal hygiene: Personal hygiene is very important. A daily bath, preferably with lukewarm water is a good tonic. A bath at bed-time refreshes and cures insomnia. During the last two months, clean nipples daily, gently with soap and water. Dental care is important, as gums often swell and bleed easily in response to hormonal changes.

Dress and attire: With regard to attire wear anything that is loose and comfortable, made of material that suits the season of the year.

Social support: Pregnancy is a family affair. A supportive and nurturing environment protects by creating a favourable condition for both mother and the child. Having a partner, relatives, neighbours, and friends helps to minimize the negative effects of stress and also helps in dealing with physical demand and complications that arise during pregnancy.

Immunization: Early in pregnancy, TT-1 injection, one month later TT-1, TT-2 or TT booster must be given. Anaemic women must take Iron tablets. Pregnancy is a normal physiological condition, which requires attention in terms of understanding of all the problems that can affect it and the care that is required during the period to overcome the problems.

Unit 2 Prenatal development

Fill in the blanks:

1. Prenatal development is also called as _____ development.
2. _____ stage is the 1st stage of prenatal development.
3. Excessive vomiting condition in pregnancy is known as _____
4. Fertilization outside the uterus is known as _____
5. Prenatal period is _____ weeks date of conception

Short answer questions:

1. Briefly explain about Embryonic stage of Prenatal development
2. Write about factors influencing prenatal development
3. Enumerate complications during pregnancy
4. What are the common Hazards during pregnancy.
5. Write about Ectopic and Molar pregnancy

Essay questions

1. Explain in detail about stages of prenatal development
2. Write in detail about common complications and care during pregnancy

ASSIGNMENT

1. Visit an Antenatal clinic and interact with pregnant women to know about signs and complications during pregnancy.

UNIT 3: NEONATAL STAGE



Introduction

Birth is not the beginning of life, but an interruption in the developmental pattern that begins at the time of conception. It is the time when individual must make from the internal environment of the mother's uterus to the world outside the mother's body. In doing so the baby must adjust from being a parasite, completely dependent on the mother for survival, to being independent.

3.1 Transition from Intrauterine to Extra Uterine Period of Adjustment and Stabilization.

The Neonatal Period: Definition

Neonate is a term applied to child from birth to about one month. Many significant and exciting changes take place during this period. The first month is a very critical period in the baby's life. It is distinguished from rest of infancy because during this time the baby must adjust from closed and protected environment of the mother's womb to open independent environment. During this time, the newborn undergoes physiological and anatomical changes as it adapts to his or her new environment. During the neonatal period, the newborn's body learns to breathe air, to nurse and digest milk, to excrete waste and learns to control its body temperature.

Physical appearance / Characteristics of a new born

- Skin is smooth and covered with vernix. It has relatively large flat nose, high forehead, receding jaws.
- Eyes appear dark blue mostly and have blank gaze.
- The head looks too big for the body. There are some spots on the skull i.e. fontanel, one is above the eyebrow and the other is on the crown of the head.
- The palms of hands are finely lined, nails are thin and creases are seen at the wrist.
- The legs are often drawn up against the abdomen and the tender legs measure shorter compared to the arms.
- The knees stay slightly bent and legs are more or less bowed.
- Trunk gives a peculiar look such as short neck, small slopping shoulders, large rounded abdomen, slender narrow pelvis and hips. On feet only heel bone is visible. Other bones are cartilages.

APGAR Test:

- One of the most useful and popular measure of the physical condition of the infant at birth is 'Apgar' instrument devised by Virginia Apgar in 1953.
- The test is designed to assess the basic life processes of the infant. It is administered immediately after the birth of the child.
- It measures the skin color, heart rate, reflex irritability, muscle tone and respiration.
- A perfect Apgar score is 10 points. A score of 7 or more is considered normal. Scores below 7 generally have body processes mal-functioning and require at least observation and perhaps special attention. A score of 4 or less requires immediate emergent measures.

How old is a newborn?

***Newborns** or neonates are **babies** up to 28 days. They're called infants after that. They say a baby is considered a **newborn** until 3 months, and then they're considered an infant. In most classifications, **newborn** is birth to 1 month*

Transition from Intrauterine to Extra Uterine

Birth represents transition from a parasitic life of a sheltered existence in a relatively invariable environment to physiologically autonomous existence in a less protected and highly

variable environment. Immediately after the birth the neonate starts respiration for its survival. Birth cry becomes the first sign of life after birth. After birth newborns must accomplish four major tasks for survival.

They are breathing on their own: During gestation, the partially collapsed lungs are filled with amniotic fluid and exhibit very little metabolic activity. Several factors stimulate newborns to take their first breath at birth. First, labor contractions temporarily constrict umbilical blood vessels, reducing oxygenated blood flow to the fetus and elevating carbon dioxide levels in the blood. High carbon dioxide levels cause acidosis and stimulate the respiratory center in the brain, triggering the newborn to take a breath.

Changing blood circulation: The process of clamping and cutting the umbilical cord collapses the umbilical blood vessels. With the first breaths of air, the lungs start to expand, and the ductus arteriosus and the foramen ovale both close. The baby's circulation and blood flow through the heart now and function like an adult's.

Controlling body temperature. Birth exposes newborns to a cooler environment in which they have to regulate their own body temperature. Newborns have a higher ratio of surface area to volume than adults. This means that their body has less volume throughout which to produce heat, and more surface area from which to lose heat. As a result, newborns produce heat more slowly and lose it more quickly. Newborns, however, do have a special method for generating heat, **no shivering thermogenesis**, which involves the breakdown of **brown adipose tissue**, or brown fat, which is distributed over the back, chest, and shoulders.

Ingesting food: The ability of newborns to digest, absorb, and metabolize foodstuff is adequate but limited in certain functions. Enzymes are adequate to handle proteins and simple carbohydrates. Deficiency of pancreatic lipase limits absorption of fats, especially with ingestion of foods with high saturated fatty acid content such as cow's milk. Human milk, despite its high fat content, is easily digested because the milk itself contains enzymes such as lipase, which assist in digestion.

Elimination

Within few minutes or hours after birth, the excretory organs begin to function eliminating waste

products from the body. Healthy full-term newborns show a predictable pattern of behavioral changes, behavioral states and cues, sensory abilities, and physiologic adaptations during the first 6- 8 hours following delivery. This transitional period is divided into an initial period of reactivity and inactivity and a second period of reactivity.

The first period of reactivity, occurs in the first 30-60 minutes of life and is described by an alert, exploratory and active newborn. Suck is strongest at this time therefore this is the best time to breastfeed. The period of relative inactivity takes place 2 -3 hours after birth. The newborn becomes less interested in external stimuli and falls asleep for a few minutes to several hours. During deep sleeps, the baby is difficult to arouse. Feeding may be difficult. Heart rate should stabilize at 100 - 140 bpm and the respiratory rate decrease to 40 to 60 breaths per minute. The second period of reactivity occurs between 4 - 6 hours after birth.

3.2 Breast feeding and care

Care of all newborns includes immediate and thorough drying, skin to skin contact of the newborn with the mother, cord clamping and cutting after the first minutes after birth, early initiation of breastfeeding, and exclusive breastfeeding. Newborns who do not start breathing on their own by one minute after birth should receive positive pressure ventilation with room air by a self-inflating bag and mask.

After the first hour of life, newborns should receive eye care, vitamin K, and recommended immunizations (birth dose of OPV and Hepatitis B vaccine). They should be assessed for birth weight, gestational age, congenital defects and signs of newborn illness. Special care should be provided for sick newborns, those who are preterm and/or low birth weight.

Breastfeeding is one of the most important contributors to neonatal, infant and child health, growth and development. The benefits are enhanced if breastfeeding starts within one hour after birth. Many neonatal health problems hypothermia, neonatal hypoglycemia, infections and neonatal jaundice can be avoided or reduced by such a pattern of breastfeeding.

Breastfeeding has important psychological benefits for both mothers and babies. Breastfeeding helps a mother and baby to form a close, loving relationship, which makes mothers feel deeply satisfied emotionally. This process is called bonding. Babies cry less and they may

develop faster, if they stay close to their mothers and breastfeed from immediately after delivery. Mothers who breastfeed respond to their babies in a more affectionate way. Breast-milk contains white blood cells and a number of anti-infective factors, which help to protect a baby against infection.

Colostrum is the thick, yellowish or clear milk that women produce in the first few days after delivery. Colostrum helps to prevent the bacterial infections that are a danger to newborn babies. The antibodies help to prevent developing allergies and intolerance to other foods. Colostrum has a mild purgative effect, which helps to clear the baby's gut of meconium (the first rather dark stools). This clears bilirubin from the gut and helps to prevent jaundice. Colostrum contains growth factors, which help a baby's immature intestine to develop after birth. Colostrum is richer than mature milk in some vitamins – especially vitamin A. Vitamin A helps to reduce the severity of any infections the baby might have.

3.4: Height And Weight, Preterm And Low Birth Weight Babies

The average weight of a normal full term newborn is about 2.9 kg with a variation of 2.5-3.9 kg or more. The weight is very variable from country to country. The newborn loses 5% to 10% of its birth weight during the first week of life, then regains the birth weight by 10th day and gains weight rapidly afterward. Neonates born weighing less than 2.5kgs are of low birth weight. Infants who arrive before their due date are preterm or premature, and these babies may or may not have a low birth weight. Babies who arrive on or shortly after their due date are full-term. Infants who arrive 2 or more weeks after their due date are post mature. Both premature and post mature babies are at higher risk of complications such as sickness, brain damage, or death, than are full-term babies.

3.4 : Early Sensory Capabilities

- **Vision / sight:** The retina of the eye does not reach its maturity at birth. Fixation of the eye will be very immature.
- **Hearing:** Hearing of all the sensory activities, hearing is at the lowest stage of development at birth. The average new born gives no evidence of hearing ordinary sounds during the first few days of life.

- **Smell:** The sense of smell is well developed at birth. They can react to different smells.
- **Taste:** Sense of taste is also well developed at birth. Reaction to sweet is positive and negative for sour, bitter and salty tastes.
- **Skin sensitivities:** Skin sensations are touch, pressure, temperature, pain, which are present at birth. Some parts of body are, however, more sensitive to touch than others especially the lips. Skin on thigh, trunk, forearms and the other parts of the body are less sensitive. The child is more sensitive to cold than heat.
- **Organ sensitivities:** Hunger contractions are fully developed at birth and they occur at more frequent intervals compared to adults.
- **Reflex irritability:** The new born child will show irritability in various parts of the body, if we touch in different areas. It is otherwise called as reflex action.

When can a newborn see?

***Newborns can** only **see** blurry shapes because they are very nearsighted. At birth, a **newborn's** vision is between 20/200 and 20/400. Your baby's best vision is about 8 to 12 inches away. As babies grow, vision improves so that by the end of 3 months they **can** recognize familiar faces even at a distance*

3.5 Reflex

Behaviour patterns that are well integrated and which are excited by a specific stimulus are called reflexes. “Automatic response to a stimulus is also known as reflex”. It is defined as an ‘involuntary reaction to some environmental stimulus’.

Types of reflexes

Rooting reflex: It occurs when infant’s cheeks are touched. The infant turns head towards the object that touches his cheek with his mouth wide open. This reflex disappears by 9 months.



Sucking reflex: Once an object touches his lips the infant automatically begins to suck. It disappears by 6 months.



Palmar reflex: It is otherwise called as Darwinian or grasp reflex. When an object touches the infant's palm, the infant automatically grasps the object. At birth, it is so strong that infants can support their full body weight while clinging and being lifted. It disappears at 3 months.



Babinski reflex: An infant fans and extends his toes outwards in response to a slight tickle / stroke on the sole of the foot. It disappears between 2 – 9 months.



Moro reflex / Embrace / startle reflex: Occurs when the infant is held in a way to create an impression of falling or to a sudden noise. Infant throws arms outwards and then brings them together to the center of his body. It disappears by 3 –6 months.



Stepping / walking reflex: When an infant is held upright with his feet against a flat surface and is moved forward, he will attempt to walk. It disappears by 2 – 3 months.



Swimming reflex: An infant will attempt to swim, in a coordinated way if placed in water in a prone position. Disappears by 6 months.

Pupillary reflex: Pupils of an infant will narrow in bright light and widens in dim light. This reflex is permanent.

Tonic neck reflex: When an infant's head is turned to outside, he will extend his arms and legs to that side and throws his arm and leg on opposite side as in a fencing position. Disappears after 4 months.



Ocular neck reflex: An infant will tilt his head back and away from a light shining directly into his eyes.

Plantar reflex / toe grasp reflex: Similar to grasp reflex, when an object is placed near soles of an infant's foot the infant tries to flay his foot. Disappear by 8-12months.



Withdrawal reflex: If we prick the sole of the foot with a pin, the new born withdraws his foot.



3.6 Care of Newborn Baby

The most important need for the new born immediately after birth is a clear airway to enable the newborn to breath effectively ,since the placenta has ceased to function as an organ of gas exchange. It is in the maintenance of adequate oxygen supply through effective respiration that the survival of the newborn greatly depends.

- Wipe mouth and nose of secretions after delivery of the head.
- Suction secretions from the mouth and nose, compress bulb syringe before inserting suction mouth first, then the nose insert bulb syringe in one side of the mouth.
- A crying infant is a breathing infant. Stimulate the baby to cry if baby does not cry spontaneously or if the cry is weak. Do not slap the buttocks rather rub the soles of the feet. Stimulate to cry after secretions are removed ,The normal infant cry is loud and husky and observe if abnormal cry is seen.
- Remove mucus and other particles that may cause obstruction because newborns are obligatory nose breathers.
- Warmth is provided by keeping the baby dry and wrapping the baby with adequate clothing in two layers, ensuring head and extremities are well covered because baby loses heat through evaporation, radiation, conduction and through convection.
- Baby should be kept by the side of the mother, so that the mother's body temperature can keep the baby warm. Baby can be placed in skin to skin contact with mother to maintain temperature of infant and facilitate breathing. Ambient atmospheric temperature to be kept warm adequately (28 -32 c) and if the temperature falls below 25c then the baby should be kept under incubator to maintain the normal temperature of the baby.

- The baby must be cleaned off blood, mucus and meconium by gentle wiping before he/she is presented to the mother. During hospital stay no bath should be given to the infants and do not reduce the incidence of neonatal infections, No vigorous attempts should be made to remove the vernix caseosa as it provides protection to the delicate skin. Each baby should have own separate clothing and articles for care to prevent cross infection.
- The umbilical cord is cut about 2 to 34 cm from the navel with aseptic precautions during delivery and tied with sterile cotton thread or disposable plastic clip. The cord must be inspected afterwards for bleeding which commonly occurs due to shrinkage of cord and loosening of ligature. No dressing should be applied and the cord should be kept open and dry. Normally it falls off after 5 to 10 days but may take longer especially when infected
- Eyes should be cleaned at birth once every day using sterile cotton swabs soaked in sterile water or normal saline. Each eye should be cleaned using a separate swab. The eyes should be observed for redness, sticky discharge or excessive tearing for early detection of problems and prompt management
- Shortly after birth vitamin K is administered as a single intramuscular dose of 0.5 to 1 mg to prevent hemorrhagic disease of the newborn also called vitamin K deficiency bleeding.
- The baby should be put to the mother's breast within half an hour of birth or as soon as possible the mother has recovered from the exertion of labor. All babies should invariably receive the colostrums during first three days of life. Mothers should be informed about the importance and technique of breastfeeding. Initially the feeding should be given in short intervals of 1 to 2 hrs and then every 2 hrs.

3.7 Summary

Neonate physical health is usually measured by the Apgar scale, a test of five indicators of neonate physical condition. New born spend disproportionate of time sleeping. They possess several reflexes which have survival value, like the sucking and rooting reflex. Neonates sensory system are functioning at birth, although some, such as, vision, function poorly but develop rapidly over the following months. Neonates primary means of communication is through crying.

3.8 Exercises

Assignment

1. Observe a newborn baby reflexes and document the observations
2. Explain the main challenges that the new born face to adapt to the life outside.

Fill in the blanks

1. The newborn baby's reflex that aids in survival by assisting them to find a nipple for food is known as _____.
2. _____ is the psychological process by which the human brain processes the sensory data collected by the sensory organs
3. Infants who arrive before their due date are _____
4. Neonates born weighing less than _____ are of low birth weight.

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UNIT 4 (a) : PHYSICAL DEVELOPMENT



Introduction

Physical development covers the aspects of development that we can see happening. For example, relatives often comment on how much a child has grown. They are commenting on how a child has grown in terms of size, height and weight. With growth, there is also a dramatic change in body proportions. It refers to the development of body structure and its components. It includes height, weight, skeleton, muscles, bones, teeth and body proportions.

4.1 Growth and Development

Growth is the progressive increase in the size of a child or parts of a child. It refers to quantitative changes in the body. Growth indicates an increase in body dimensions. These changes can be measured in terms of height, weight, head circumference etc.

Development is a progressive acquisition of various skills (abilities) such as head support, speaking, learning, expressing the feelings and relating with other people. Growth and development go together but at different rates. Development refers to the different aspects of a child's personality. According to Clarke, the developmental changes are systematic, progressive, permanent and occur over a period of time.

“Development means a progressive series of changes that occur in an orderly, predictable pattern as a result of maturation and experience” E.B. Hurlock.

How to measure growth?

There are various measurements that are used to measure growth. These are:

- weight,
- height,
- head circumference,
- mid-upper arm circumference (MUAC)
- chest circumference

To be useful, these measurements must be taken accurately using reliable equipment and correct measuring techniques.

1. Measuring weight: For measuring the weight, a beam balance or spring balance is used. Before weighing a child, check the weighing scale to ensure it is working properly. Then proceed as follows:

- Hung the scale securely with the dial of the scale at your eye level for correct reading. If you use the Salter scale, hang the weighing pants on the hook of the scale. Adjust the pointer of the scale to zero (“0”) by turning the knob on the top of the scale to account for the extra weight of the weighing pants;
- Ask the parent to remove any heavy clothes and shoes including the nappies and to dress the child in the weighing pants.
- Once the child wears the weighing pants, ask her to lift the baby and fasten the loop of the pants to the hook of the weighing scale. Ask the mother to let go of the child but to continue standing nearby and talk to keep talking to the baby. The child’s feet should be off the ground.
- If the child is upset, ask the mother to calm him or her. When the child stops moving, note the weight quickly, reading to the nearest 10gm in infants and 100 gm in children.

2. Measuring the Head Circumference The head circumference is measured by encircling the head with an unstretchable tape measure, or a piece of string in the absence of a tape measure. This is passed over the most prominent part of the occipital posteriorly and just above the supraorbital

ridges anteriorly to obtain the greatest distance around the head. The piece of string used in the absence of a tape measure is then measured with a ruler to obtain the head circumference.

3. Measuring the mid-upper arm circumference (MUAC)The mid-upper arm circumference is measured using tape or string in the absence of tape. The tape or string is placed around the left upper arm, midway between the elbow and the shoulder bone. Care is taken not to pull the tape or string too tightly. The measurement is read. The string used in the absence of a tape measure is then measured with a ruler to obtain the mid-upper arm circumference.

4. Measuring the Length/Height The length is measured using a horizontal measuring board also called Infantometer. The child is laid on his back with the head against the fixed headboard. A helper holds the child's head so that the body is straight. With one hand of the health worker, the child's knees are pressed down to straighten the child's legs fully while, with the other hand, the sliding footboard is placed to touch the child's heels firmly. With the footboard in place, the child's length is read on the meter scale.

To measure the height of a child who can stand a Height rod can be used.

To measure the height, a barefoot child stands with the feet together. The heels, the buttocks lightly touch the measuring device. The sliding headpiece is lowered to rest firmly on the head. The height is read and recorded.

5.Measuring chest circumference

The infant lies on his back. With an automated tape device, measure the circumference of the chest at the level of the nipples during normal breathing. An assistant is required to assure that the infant is in the correct position.

From birth to about 1 year, the head circumference is greater than the chest circumference. After 1 year, Chest circumference is greater than the Head circumference.



Measuring weight in infants



Measuring the Head Circumference



Measuring the mid-upper arm circumference



Measuring the length/height

Measuring the chest circumference

Weight Growth Pattern

An average term newborn weighs 3.5 kg (range 2.5 kg- 4.6 kg). Within the first 3-4 days, a term newborn loses 5-10 % of the birth weight. This weight loss is usually regained in 2 weeks by term babies and longer by premature babies. An average term baby doubles the birth weight in 4-6 months, triples it by one year and quadruples it by two years of age.

Head Circumference Growth Pattern.

The head circumference measurements are used for estimating the growth of the brain. At birth, the head circumference of a term baby averages 34 cm (see Table.2). The head circumference grows most rapidly in the first year: 2 cm monthly in the first 3 months, 3 cm during the next 3 months, and 3 cm in the last 6 months. This means that the average head circumference is 44 cm at 6 months and 47 cm at 12 months of age. Thus, the head circumference grows by 12 Cm during the first year.

Mid Upper Arm Circumference Growth Pattern:

The measurements of mid-upper arm circumference (MUAC) are used for determining whether the child is well nourished or malnourished.

The mid-upper arm circumference increases fairly rapidly to about 16 cm by the age of one year. In the period 1 to 5 years, the mid-upper arm circumference increases by only 1 cm. So, irrespective of age, the mid-upper arm circumference of well-nourished children ranges 16 -17 cm in the period 1-5 years. Conversely, if the mid-upper arm circumference of a child of 1 to 5 years of age is less than 16 cm, that child has malnutrition and corrective intervention should be carried out.

Length/ Height Growth Pattern

An average term baby is 50 cm long. The length increases by 50% in the first year. In the second year, the average height growth is about 12 cm. The birth length doubles by 4 years of age. After the second year of age, the annual height growth averages 5-6 cm until the beginning of the adolescent growth spurt. Height growth stops at about the age of 18 years in girls and at the age of about 20 years in boys.

Note :

- The process of physical development is not uniform throughout the human life span.
- Certain aspects of physical growth are at a faster rate while others may grow very slowly.
- There are major sex differences in growth pattern between boys and girls. This variation in growth and development gives rise to a specific body structure for boys and girls.
- There are individual variations in physical growth. These may be due to heredity or environment.

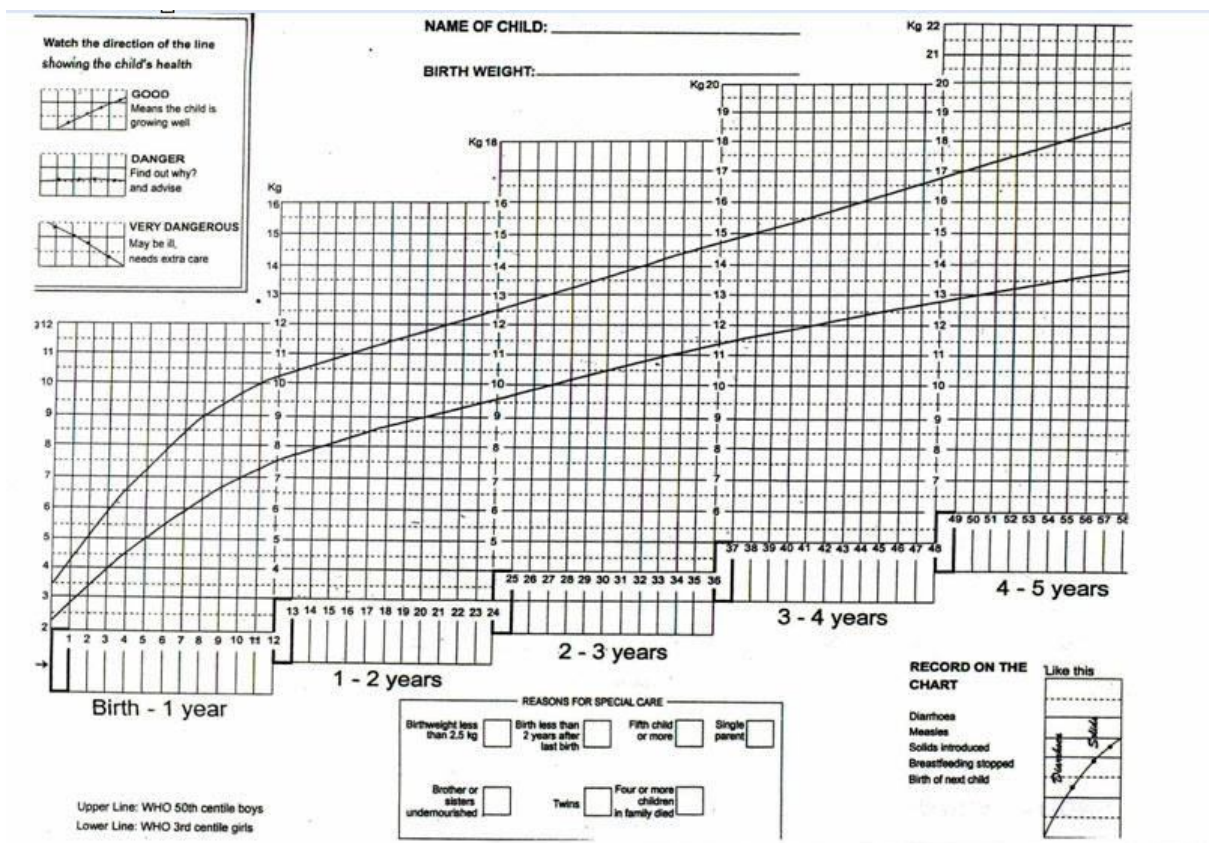


Fig 1: Growth Chart

Growth Monitoring: Growth monitoring is the process of maintaining regular close observation of a child's growth. It starts with measurements of weight daily, weekly, monthly, bimonthly etc. To determine an individual child's growth pattern, weight measurements from birth are plotted on the growth chart of the child health card. The plotting produces a line or graph. This line constitutes that individual child's growth pattern or curve.

A constantly upward curve parallel to the printed lines shows GOOD growth. By looking at the direction of the child's growth curve, the health worker and the mother can see at a glance whether the child is gaining weight appropriately or not. A horizontal (flat) growth curve means the child is not growing and is a sign of disease, especially malnutrition. A child who is malnourished cannot grow properly, cannot resist diseases, and is in danger of getting killer diseases. Mother should be encouraged to give the child food containing enough calories, protein, vitamins and minerals.

A curve deviating indicates a VERY DANGEROUS situation. The child is losing weight. The child needs extra care immediately. The baby may be suffering from malnutrition, tuberculosis, AIDS or other medical conditions. The mother is advised to take the baby to the hospital for investigations and treatment.

Any infant who does not gain weight for one month or a child who does not gain weight for two months should receive urgent attention. Such an infant or child is becoming malnourished.

Importance of Growth Monitoring:

Health workers and parents should monitor the growth of children for the following reasons

- For early detection of abnormal growth and development
- To facilitate the early treatment or correction of any conditions that may be causing abnormal growth and development.
- To provide an opportunity for giving health education and advice for the prevention of malnutrition.

Development of teeth

The time of eruption of the first tooth varies and depends on heredity, nutrition and health. Girls are slightly advanced in teeth development over boys. The sequence of eruption is more important than their time of the eruption, as it may lead to developmental irregularities. The first teeth to make an appearance are the lower incisors around 6-8 months followed by upper incisors. The molars appear later. By one year the baby has 4-6 teeth and by second year 16 teeth.

After the temporary teeth have erupted, much activity goes on inside the gums as the permanent teeth begin to calcify. The order of calcification is the same as the late order of eruption. On average the child of six years has 1 or 2 permanent teeth; at 10 yrs 14-16; and at 13 yrs 27 or 28. The last four permanent teeth, the wisdom teeth erupt between the ages of 17 and 25 yrs, if they appear at all.

Development of the skeleton/body frame: It includes

- **Bone development:** The earliest form of bone is cartilage which is very soft, has a pliable structure. The cartilage gradually becomes bone through the process of **Ossification**.
- The process involves the deposition of calcium and other minerals on the surface of the cartilage to make it hard and rigid. As most bones are not ossified during infancy, they are softer, more pliable and more sensitive to pressure and sudden movements. The rate of ossification differs for various bones. Some of the bones of the head and wrist ossify very early in life while others mature later. The soft spots in the skull ossify completely by 2 years.) Sex variations are seen in bone growth; girls are developmentally more advanced than boys.
- **Development of muscles:** the neonate has all muscle fibres. These fibres are small in relation to the overall size of the infant. However, during the infancy period, the muscles grow in size, increase in length, breadth, and thickness. Muscle growth follows a cephalo-caudal and proximo-distal direction, that is head and neck muscles develop earlier than the muscles of the trunk, arms and legs.

Development of body proportions

Small children differ from adults in size as well as in body proportions. After birth, the trunk and limbs of the body grow faster while head growth slows down giving rise to the smaller head and longer limbs as the child grows older. An infant is rather chubby with a big head and small limbs. By the time the child reaches six years his body proportions are equal and appear like those of an adult. The ratio of muscles and fat tissue contribute to a physique which characterizes each individual. The physique is usually established well by childhood and is continued into adulthood. Boys have more muscle tissue and girls have more body fat.

4.2 BRAIN DEVELOPMENT

Fetal and neonatal brain developments are also rapid. The lower, or subcortical, areas of the brain (responsible for basic life functions, like breathing) develop first, followed by the higher areas, or cortical areas (responsible for thinking and planning). Most brain changes occur prenatally and soon after birth. From birth to age 5, a child's brain develops more than at any other time in life. At birth, the average baby's brain is about a quarter of the size of the average adult brain. Incredibly, it doubles in size in the first year. It keeps growing to about 80% of adult size by age 3 and 90% – nearly full grown – by age 5. The mature brain is composed of more than 100 billion neurons. *Neurons* are the information processing cells in the brain. Neurons make connections with other neurons to form the information processing networks that are responsible for all of our thoughts, sensations, feelings and actions. The cerebral cortex is the thin layer of the brain that covers the outer portion (1.5mm to 5mm) of the cerebrum. It is covered by the meninges and often referred to as gray matter. The cortex is gray because nerves in this area lack the insulation that makes most other parts of the brain appear to be white. The cortex also covers the cerebellum. The cerebrum is the most highly developed part of the human brain and is responsible for thinking, perceiving, producing, and understanding language. Most information processing occurs in the cerebral cortex. The cerebral cortex is divided into four lobes that each have a specific function. These lobes include the frontal lobes(thinking), parietal lobes(sensory information), temporal lobes (language), and occipital lobes(processing visual information). **Lateralization** refers to the localization of assorted functions, competencies, and skills in either or both hemispheres. Specifically, language, writing, logic, and mathematical skills seem to be located in the left hemisphere, while the creativity, fantasy, artistic, and musical skills seem to be located in the right hemisphere. Although the hemispheres may have separate functions, these brain masses almost always coordinate their functions and work together.

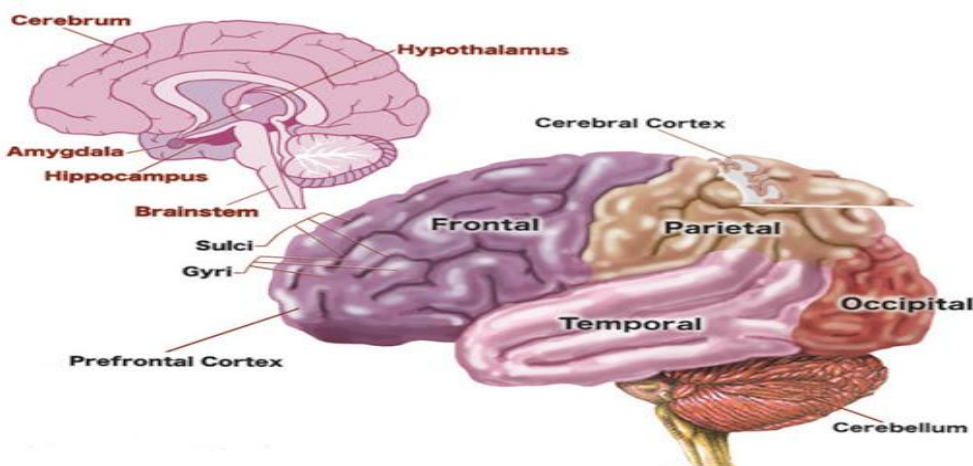
Brain and nervous system developments during early childhood also continue to be dramatic. The better developed the brain and nervous systems are, the more complex behavioral and cognitive abilities children are capable of.

Plasticity: If a specific region of the brain, or even an entire hemisphere, is injured or destroyed, its functions can sometimes be assumed by a neighbouring region in the same hemisphere or the

corresponding region in the other hemisphere, depending upon the area damaged and the patient's age. When injury interferes with pathways from one area to another, alternative (indirect) connections may develop to communicate information with detached areas, despite the inefficiencies.

The two cerebral hemispheres develop at different rates, with the left hemisphere developing more fully in early childhood (ages 2 to 6), and the right hemisphere developing more fully in middle childhood (ages 7 to 11). The left hemisphere predominates earlier and longer, which may explain why children acquire language so early

The period from birth to the age of three is a time of rapid growth and represents a singular opportunity to provide a child with a strong nutritional and immunological foundation. Intellectual and physical growth is the most rapid, with doubling of brain size and quadrupling of body weight. If a child is malnourished during these early years, much of the damage that occurs is irreversible.



4.2 contd : EFFECT OF NUTRITION ON GENERAL GROWTH AND BRAIN

Growth is directly related with nutrition. The human body requires an adequate supply of calories for its normal growth and this need of requirements vary with the phase of development. As per studies, malnutrition is referred as a large-scale problem in many developing countries. They are more likely to be underweight, much shorter than average, and of low height for age, known as stunting.

If the children are malnourished, this slows their growth process. There are nine different amino

acids which are necessary for growth and absence of any one will give rise to stunted growth. Other factors like zinc, Iodine, calcium, phosphorus and vitamins are also essential for proper growth and deficiency of anyone can affect the normal growth and development of the body. Small doses of minerals, vitamins and trace elements can mean a difference between life and death for mothers and children. Micronutrients – particularly iron, vitamin A, iodine and folate – play a vital role in the mother's survival in pregnancy and childbirth, and in the child's development. Your child's body needs the right amount of Carbohydrates, Proteins, Vitamins, and Minerals for his/her physical development. For example, Calcium is important for the development of bones, Vitamin E for developing the immune system, iron is important for immunity, proteins build body strength and Vitamin A is essential for vision in poor lighting. If not provided proper nutrition, your child's growth might get stunted.

4.3 GROWTH OF INTERNAL ORGANS

Development of teeth

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4.4 MILESTONES IN PHYSICAL DEVELOPMENT

Infant -- birth to 1 year

- Able to drink from a cup
- Able to sit alone, without support
- Babbles
- Displays social smile
- Gets first tooth
- Plays peek-a-boo
- Pulls self to standing position
- Rolls over by self
- Says mama and dada, using terms appropriately
- Understands "NO" and will stop activity in response
- Walks while holding on to furniture or other support

Toddler -- 1 to 3 years

- Able to feed self neatly, with minimal spilling
- Able to draw a line (when shown one)
- Able to run, pivot, and walk backwards
- Able to say first and last name
- Able to walk up and down stairs
- Begins pedaling tricycle
- Can name pictures of common objects and point to body parts
- Dresses self with only a little bit of help
- Imitates speech of others, "echoes" word back
- Learns to share toys (without adult direction)
- Learns to take turns (if directed) while playing with other children
- Masters walking
- Recognizes and labels colors appropriately
- Recognizes differences between males and females
- Uses more words and understands simple commands
- Uses spoon to feed self

Preschooler -- 3 to 6 years

- Able to draw a circle and square
- Able to draw stick figures with two to three features for people
- Able to skip
- Balances better, may begin to ride a bicycle
- Begins to recognize written words, reading skills start
- Catches a bounced ball
- Enjoys doing most things independently, without help
- Enjoys rhymes and word play
- Hops on one foot
- Rides tricycle well
- Starts school

- Understands size concepts
- Understands time concepts

4.5 : DEVELOPMENTAL TASKS- activities to be conducted in preschool

Robert J. Havighurst introduced the concept of developmental tasks. He believed that human development is a process in which people attempt to learn the tasks required of them by the society to which they are adapting.

Developmental task is a task which arises at a certain time in the life of an individual, successful achievement of which leads to happiness and also success with later tasks, while failure leads to unhappiness and difficulty with later tasks (Havighurst, 1972).

- ✚ At each stage of development, one faces a new set of developmental tasks consisting of a set of skills and competencies that contribute to increased mastery over one's environment.
- ✚ These tasks reflect areas of accomplishment in physical, cognitive, social, and emotional development as well as development of the self-concept.
- ✚ The tasks change with age because each society has age-graded expectations for behaviour. The individual, who learns these tasks, receives satisfaction and reward and does not suffer unhappiness and social disapproval.
- ✚ Most people learn developmental tasks at the time and in the sequence appropriate to their society. If a particular task is not learned during the sensitive period, learning it may be much more difficult later on.

Sensitive Period: It is the period of time when the person is most ready to acquire a new ability.

Purpose of developmental tasks

- Developmental tasks are guidelines that enable individual to know what society expects of him at a given stage of life.
- It motivates individual to do what the social group expects him to do at a certain age.

- It gives an insight to individual on what is expected of him in the following stages of development.

Life Stage	Developmental Task	Specific Skills
Infancy (birth to 2 years)	Maturation of sensory, perceptual (become aware of something through the senses), and motor functions, Attachment Sensory motor intelligence and early causal schemes, Understanding the nature of objects and creating categories, Emotional development	Learning to walk Learning to take solid foods Learning to communicate verbally Learning to control body wastes Learning to gain adequate muscle coordination
Toddlerhood (2 and 3 years)	Elaboration of locomotion(movement or the ability to move from one place to another) Language development Fantasy play Self –control	Attaining complete control over body movements Achieving physiological homeostasis(It is the body's attempt to maintain a constant internal environment.) Learning to relate oneself emotionally to others Learning sex differences and modesty Learning to distinguish right and wrong Learning to be social, cooperative and sharing
Early School age (4 to 6 years)	Gender Identification Early moral development Self-theory Peer play	Identification of gender roles Early moral development Peer play
Middle childhood (6 to12 years)	Friendship Concrete operations Skill learning Self-evaluation Team play	Learning to develop friendships Learning concrete operational skills in cognitive domain Learning to evaluate self

Summary

Physical Development and Movement is about experiencing and developing a range of fundamental movement skills that will improve co-ordination, locomotion, control, balance, and manipulation. In addition, physical development helps children gain confidence and self-esteem and enables them to feel the benefits of being healthy and active. Children enter primary school having had a range of movement experiences in the home, pre-school setting and the local community. They will have developed skills of control, co-ordination and manipulation and will have some awareness of space. The development of the fundamental movement skills needs to be nurtured, not only because they are important for the child's long-term health and well-being, but because they support the child's physical development

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ASSIGNMENT

Record the growth of a children by measuring the growth parameters like weight, height, mid arm circumference and chest circumference.

Check your progress

1. A quantitative change that occurs in the body is referred as-----.
2. Changes are systematic, progressive, permanent and occur over a period of time is known as-----.
3. The process of maintaining regular close observation of a child's growth is -----
---.
4. The first teeth to make an appearance are the-----

Please read the following statements and specify whether true or false

1. Girls are slightly advanced in teeth development over boys
2. *Neurons* are the information processing cells in the brain
3. The earliest form of bone is cartilage which is very hard
4. The time of the eruption is more important than sequence of eruption

UNIT 4(b): MOTOR DEVELOPMENT



- Patterns of motor development
- Interdependence of motor skills, emotional and social competencies, cognition and language.
- Handedness, ambidexterity.
- Motor development during 6-8 years

Introduction

Motor development refers to control over the body movements through the coordinated activity of the nerve centers and the muscle comes from the development of reflexes and mass activity present at birth. It refers to the development of posture, locomotion, hand and leg skills. These are the result of bone and muscular development and maturation. Large muscle skills such as leg skills, fine muscle/hand skills/finger skills are subsumed under motor development.

The infant gradually advances from reflex functioning to motor functioning. The development of motor skills—the ability to move and manipulate—occurs in a more or less orderly, logical sequence. It begins with simple actions such as lifting the chin and progresses to

more complex acts such as walking, running, and throwing. Infants usually crawl before they walk. Motor development is somewhat predictable, in that children tend to reach milestones at about the same age and in the same sequence.

4.1 Importance & Patterns of Motor Development

Motor development follows the laws of developmental direction. The Cephalocaudal (head to foot) sequence of development is shown by the fact that early in babyhood there is a greater movement in the head region than in the rest of the body. As the baby's neuromuscular mechanism is mature, there is more and better control movement in the trunk and later in the leg region. The motor development also proceeds in the proximodistal (from the main access to remote areas) direction, for example in reaching an object the baby uses shoulders and elbows before wrist and fingers. The predictable pattern of motor development is evident in the change from mass to specific activities. With different patterns of motor development, there are predictable stages in the development of prehension which forms the foundation for hand skills and there are predictable stages which occur at predictable ages. The motor development is predictable is shown by the fact that the age at which the babies start to walk is consistent with the rate of their total development, it is possible to predict with fair degree of accuracy when a baby will start to walk on the basis of evidence of the rate of development in other motor coordination. While each of these is distinct from the other it is dependent on the stage of proceeding it and influences the stage following it.

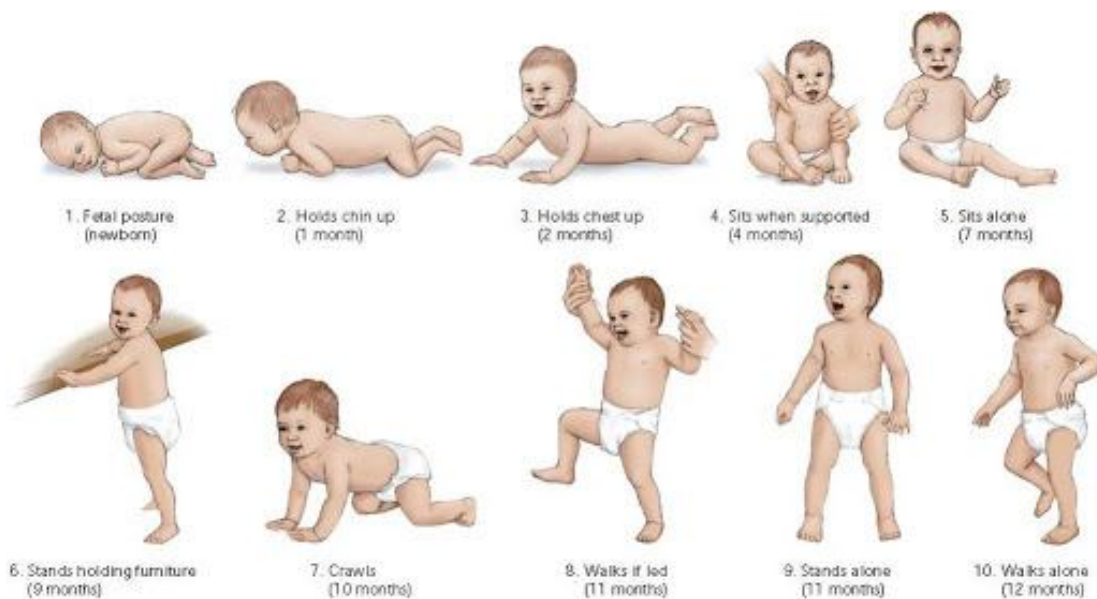
Norms for motor development

Norms are stages related to the age at which the various traits, skills or other characteristics appear. Generally children start walking, speaking and show bowel control around 15 months of age. In the same manner, norms are worked out with respect to growth of intelligence, social behaviour and language development. But these norms indicate the average age at which certain behavioural characteristics manifest themselves. It must be noted that there is an age range at which these appear. For example, the norms for walking alone may be 15 months, but the range varies from 15 months to 18 months. It does not mean that a child who started walking earlier than the norm is more active or intelligent and the child who walked later than the norm is inactive and slow. The norms help us to understand normal behaviour and development.

Motor development follows a predictable pattern it is possible to establish norms based on the mean ages, for different forms of motor activity. These norms can be used as guidelines to enable parents and others to know what to expect and at what ages to expect it for their children. They can also be used to assess the normalness of child development. Norms for different patterns of voluntary activity such as sitting standing reaching and grasping are used to assess the intellectual development of the babies before their win to be tested by the standard intelligence test which relies heavily on the use of speech.

Ontogenetic Motor skills that are unique to an individual are known as ontogenetic Motor skills (swimming, tennis, golf) these skills need to be taught.

Phylogenetic Motor skills are those motor skills that are common to all members of the species like walking is known as phylogenetic motors skills.



Motor development during infancy:

It is one of the major tasks of infancy. The fine motor system governs the movement of hands, fingers, feet, toes and hips. The gross motor system governs the movement of head, body, arms and legs. Even in the activity pattern, the head is the first to be controlled, while control over the legs and feet, movement of walking comes last.

Motor skills include: Gross motor development, fine motor development and perceptual motor development

Gross motor development: It involves movements of the entire body, using various large muscle groups. The development of children's brain lays the ground work for balance, control and using hands. New skills emerge rapidly during preschool period. These children can learn to run, throw ball, use a slide, jump, hop, creep and catch.

Fine motor development: Using the smaller muscles of body and the extremities with organization and coordination is called fine motor skills. Ex. Grasping, reaching, holding, banging, pushing, turning are fine motor activities. Differentiation, coordination and control are important skills developed during early childhood years. The developmental progression in fine motor skills from less to more differentiation, coordination and control is apparent during the preschool years.

Perceptual motor development: It is a process in which the child develops the skills and ability to take in and interpret information from the environment and respond to it with movement. The three basic types of movement involved in motor skills include

- **Loco-motor:** These abilities involve a change of locomotion of body and include the skills of walking. Jumping, climbing and so on. **Eg.** Playing ball - running/walking.
- **Non-loco motor:** These abilities are sometimes called as balancing and stabilizing. **Eg.** Turning, bending, and stretching. **Eg.** Playing ball – bending down for ball.
- **Manipulative:** These include the operation and control of limited and precise movements of the small muscles in hands and feet. **Eg.** Throwing, catching, holding and grasping. These three basic movements are necessarily combined when children are active in physical play. **Eg.** Playing ball – Locomotor – running/walking. Non-locomotor - bending down for ball, Manipulative – throwing ball.

From birth, the child attempts to move his limbs and muscles, acquires control over them.

2- 3 months the infant first gains control overhead and neck, next he can move his trunk, legs and arms and control over fingers come last.

Around 4-5 months, the infant can reach further and grasp an object. Grasping objects is an important developmental milestone as it allows the infant to experience both the sensation of touching objects and manipulating them. By 4 months the infant can sit with support.

By 6 months infant can sit alone and around 7-8 months he can stand up with support.

By 9 months an infant can walk with support.

Around 11 months he can stand alone.

Around 12 months he can walk alone and explore the environment.

Around one-and-a-half to two years walking skills become refined and the toddler is proficient at moving about. He can open cabinets, climb stairs, pull the table cloth, and feed himself and by **two-and-a-half years** the child can run, jump, kick and climb up steps and walk down without assistance.

Fine motor skills

The toddler can move things, push and pull objects, put things in containers, stretch and bend. The two primary events of infancy are locomotion. It includes the act or the ability to move from place to place and prehension.

Locomotion: Locomotion includes the act of moving from place to place Or the ability to move from place to place.

Prehension: It includes reaching and grasping. It is one of the important achievements of infancy. It also forms the basis for a wide range of important infant /toddler skills, self-help skills, block-building, tracing, scribbling and so on.

Locomotion and Prehension skills are the main aspects of physical development during infancy and babyhood. Development is continuous and at the end of every two months, child is capable of a new set of body skills. While most children achieve the milestones according to schedule there may be some who lag behind. It is but normal for some children to reach the milestones behind the schedule.

Milestones in gross and fine motor skills in infancy and preschool years.

Age	Gross Motor Skills	Fine Motor Skills
2-3 years	Walks more rhythmically; hurried walk changes to run. A jump, hops, throw, and catches with rigid upper body. Pushes riding toy with feet; little steering.	Puts on and removes simple items of clothing. Zips and unzips large zippers. Uses spoon effectively.
3-4 years	Walks up stairs, alternating feet, and downstairs, leading with one foot. Jumps and hops, flexing upper body. Throws and catches with slight involvement of upper body; still catches by trapping ball against chest. Pedals and steers tricycle.	Fastens and unfastens large buttons. Serves self food without assistance. Uses scissors. Copies vertical line and circle. Draws first picture of person, using tadpole image. Uses fork effectively.
4-5 years	Walks downstairs, alternating feet. Runs more smoothly. Gallops and skips with one foot. Throws ball with increased body rotation and transfer of weight on feet; catches ball with hands. Rides tricycle rapidly, steers smoothly.	Cuts with scissors following line. Copies triangle, cross, and some letters.
5-6 years	Increases running speed. Gallops more smoothly; engages in true skipping. Displays mature throwing and catching pattern. Rides bicycle with training wheels.	Uses knife to cut soft food. Ties shoes. Draws person with six parts. Copies some numbers and simple words.

4.2 Interdependence of Motor Skills, Emotional and Social Competencies, Cognition and Language.

Development is a lifelong process, and different aspects of development (physical, motor, cognitive, emotional, etc.) are correlated and interdependent in multiple ways. The complex interaction of our genes, and our social, cultural, and physical environment, is what defines us. According to the current theories, cognition, perception, motor behaviour, and emotions are in a close relationship.

Motor development in children brings with it new freedom and potential dangers. In the early years when infants begin to walk, correspond to Piaget theory of sensory motor development in which he describes infants as little experimenters trying to figure out how things work. This can

result in a test of wills between parent and children. Research indicates that self locomotion changes infants relationship with their physical and social worlds and instigates changes in how babies think about things and other people. The relation between physical, cognitive and social development are purely transactional

Children develop skills become independent. And form relationships through participation. Early motor development and self produced motor experiences contribute to infants understanding of the social world around them. As the infants gain control over their bodies, allowing them to move around the environment and learn through manipulating/using the objects.

For example: When baby or infant crawls or walks, they understand the concept of distance, feel of different shapes, textures. They use the social information such as Facial expressions, tone of voice of the caregiver to guide their exploration.

Therefore motor development can be viewed as part of interactive developmental process with social, emotional, language and cognitive abilities.

4.3 Handedness, Ambidexterity

Handedness means the predominant use of one hand. There are two criteria used to determine handedness, first, preference for one hand as compared with the other hand. Second, proficiency or the skill with which a person uses one hand compared with use of the other hand.

People are said to be right handed , if they use the right hand most of the time and left handed if they favour the left hand. Few people are so predominantly right or left handed that they always use the preferred hand. Handedness is a better, faster, or more precise performance or individual preference for use of a hand, known as the dominant hand; the incapable, less capable or less preferred hand is called the non-dominant hand. Right-handedness is the most common form, and it is estimated that around 90% of the world's population is right-handed. Handedness is often defined by which hand one writes with, as it is fairly common for people to prefer to do some tasks with each hand. However, true mixed-handedness is rare, as most people clearly prefer one hand for most purposes.

If people use both hands equally well and approximately an equal amount of time they are referred as Ambidextrous or sometimes called as "mixed handed". Left handers tend to be more

ambidextrous than right handers. The reason for this is that when, as children, when they showed a preference for their left hands. They were often taught to perform certain formal skills, such as writing, painting, with their right hand. In time, they built up repertoire of skill they could carry out equally well with their right or left hands. By contrast, right handers generally show less ambidexterity than left handers. A majority of hand skills require the use of one hand aided by the other.

4.4. Motor Development During 6-8 Years

Have you seen 6 year old coming out of their classes after school is over? What would they be doing? Some of them would be running, others would be skipping and still others leaping onto narrow edges and balancing themselves. In all these activities, the children are learning to coordinate their muscles for different types of movements. Changes in the body as a result of growth contribute to the development and refinement of movement or motor skills. Motor development involves qualitative changes in the movement or actions of the body and depends on brain maturation, sensory input, increased size, composition, and strength of muscular- skeletal system, experiences and opportunity for practices. With the increased strength, speed, flexibility, agility, balance and coordination of the body, movements become more precise and proficient.

Motor skills involves **Gross motor skills** involve the use of large bodily movements, and **fine motor skills** involve the use of small bodily movements. Both gross and fine motor skills continue to refine during middle childhood.

The body has two types of muscles, namely, the large muscles such as those of the arms, legs, back, etc., and the small or fine muscles such as those in the fingers, toes, etc. You probably know that muscular activity is possible because of their contraction and flexion (relaxation).

Different muscles placed in different parts and some in some parts of the body perform and control different movements. Some part of this control is automatic while some part is learnt. Movement due to muscular control which is learnt is called muscular co-ordination. Muscular co-ordination is of two types: fine and gross. The movement of the fine (small) muscles is called fine muscular coordination while the movement of large muscles is called gross muscular coordination. Activities such as running, balancing, skipping climbing, involve mostly the coordination of large muscles.

4.5 Role of Opportunity and Practice

Motor skills will not develop through maturation alone. Instead they must be learned. When learning is correlated with readiness to learn, the skill is far superior to that learned with equal time and effort by those maturation ally unready to learn.

Many children are deprived of the opportunity to learn motor skills by parents who are afraid they will hurt themselves or by living in an environment which does not provide learning opportunities. Children must be given much time to practice as is needed to master a skill. Quality of practices is for more important than the quantity. If children practice in hit or miss fashion, poor habits of performance and inefficient movements will develop. As imitating plays an important role in learning motor skills, if good skills are to be learned children must have good models to imitate. Children also need guidance if they ae to imitate a model correctly. Guidance e helps to correct errors before they are so well learned that it is difficult to correct them.

Motivation to learn is essential to keep interest from lagging. Common sources of motivation to learn motor skills are personal satisfaction children derive from the activity, the independence and prestige in the peer group motor skills give them.

Summary

Motor development, which comes from the coordinated activities of nerve centers, nerves and muscles, is partially responsible for overcoming the helplessness characteristic of new born. Five general principles of motor development have emerged: Motor development depends on neural and muscular development, learning skills cannot occur until the child is maturationally ready, motor development follows a predictable fashion, it is possible to establish norms for motor development and there are individual differences in rate of motor development.

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Check your progress

1. Fine motor skills, as opposed to gross motor skills, have to do with:

- a. Small muscles, such as muscles in the hands, wrist, and fingers
- b. Large muscles, such as muscles in the legs
- c. Medium muscles, such as muscles in the shoulders
- d. The skills of a motorized robot

2. How can motor skills help child development?

- a. Motor skills help children to learn only physical tasks
- b. Motor skills help teach verbal skills
- c. Motor skills help teach social skills, relieve energy and strong emotions, and aid in learning
- d. Motor skills help teach only social skills

3. Prominent use of one hand is referred as _____

- a. Handedness
- b. Maturity
- c. one hand

1. What are the major milestones in motor development and what factors influence the rate at which motor development proceeds.
2. How motor development influence the development of other psychological process.

UNIT 5: COGNITIVE DEVELOPMENT



5.0 Introduction:

Cognitive development provides children with thinking, memory, attention as well as a child's ability to manage and respond to experiences and information. Many parents are concerned with making sure their child develops the cognitive abilities early and high.

Meaning of cognition:

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.

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.

5.1 Mental Processes and Cognitive Development:

Perception:

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.

- As you take in sensations from the world around you, the information that you see, hear, taste, touch, and smell must first be transformed into signals that your brain can understand.
- The perceptual process allows you to take in sensory information and convert it into a signal that your brain can understand and act upon.
- For example, if you see an object flying through the air toward you, the information is taken in by your eyes and transferred as a neural signal to your brain.
- Your brain then sends out signals to your muscle groups so that you are able to respond and duck out of the way before the object smacks you in the head.

Memory:

- Memory is the process of maintaining information over time.” (Matlin, 2005)
- “Memory is the means by which we draw on our past experiences in order to use this information in the present’ (Sternberg, 1999).
- Memory is the term given to the structures and processes involved in the storage and subsequent retrieval of information.
- Memory is essential to all our lives. Without a memory of the past, we cannot operate in the present or think about the future.
- We would not be able to remember what we did yesterday, what we have done today or what we plan to do tomorrow. Without memory, we could not learn anything.
- Memory is involved in processing vast amounts of information. This information takes many different forms, e.g. images, sounds or meaning.

Conception formation:

- In addition to reducing information to make it more memorable and understandable, people also elaborate on these memories as they reconstruct them.
- Imagine that you are telling a friend about a funny event that happened last week.

- As you weave your tale, you might actually start adding in details that were not part of the original memory.
- This might also happen as you are trying to recall items on your shopping list.
- You may find that you add a number of items that seem like they belong on your list due to their similarity with other items you wanted to buy.
- In some cases, this elaboration happens when people are struggling to remember something.
- When the information cannot be recalled, the brain sometimes fills in the missing data with whatever seems to fit.

Attention:

- Attention is a component of higher cortical cognitive functioning and refers to a person's ability to (a) detect and focus on general environmental stimuli, and (b) select important environmental stimuli.
- The successful individual will use his or her attention skills to respond effectively to environmental stimuli and cues.
- The ability to focus and sustain attention is normally developed by age 10 years.
- Youth who experience deficits in one or more of the functional domains or experience delayed maturation in the integration of those domains will most likely experience problems with attention.
- By age 13, youth have effective attention skills.
- Attention skills begin to decline in older adults (after 60 years) as they attempt to manage multiple important stimuli.

Thinking or Thought:

Thinking is the mental process in which beings form psychological associations and models of the world. Thinking is manipulating information, as when we form concepts, engage in problem solving, reason and make decisions.

Examples:

- Identify a problem or issue
- Create inferences on why the problem exists and how it can be solved

- Collect information or data on the issue through research
- Organize and sort data and findings
- Develop and execute solutions
- Analyse what solutions worked or didn't work
- Identify ways to improve the solution

Reasoning:

- Reasoning is what we do when we take information that we are given, compare it to what we already know, and then come up with a conclusion.
- Reasoning skills often happen subconsciously and within seconds. However, sometimes we need to think things through to reach a conclusion when we are presented with a tough question or situation.

Examples:

Logical Reasoning

- [Number Series](#)
- [Letter and Symbol Series](#)
- [Essential Part](#)
- [Analogies](#)
- [Artificial Language](#)
- [Sentence Rearrangement](#)
- [Making Judgments](#)
- [Logical Deduction](#)
- [Logical Problems](#)
- [Logical Games](#)
- [Statement Arguments](#)
- [Statement Assumption](#)
- [Course of Action](#)
- [Statement Conclusion](#)
- [Matching Definitions](#)

- [Coding and Decoding](#)
- [Theme Detection](#)

Verbal Reasoning

- [Blood Relation](#)
- [Dice](#)
- [Cause and Effect](#)
- [Logical Sequence of Words](#)
- [Venn Diagrams](#)
- [Cube and Cuboid](#)
- [Analogy](#)
- [Seating Arrangement](#)
- [Character Puzzles](#)
- [Direction Sense Test](#)
- [Classification](#)
- [Data Sufficiency](#)
- [Arithmetic Reasoning](#)
- [Verification of Truth](#)

Non-Verbal Reasoning

- [Series](#)
- [Figure Matrix](#)
- [Non-Verbal Analogy](#)
- [Analytical Reasoning](#)
- [Mirror and Water Images](#)
- [Embedded Images](#)
- [Pattern Completion](#)
- [Paper Folding](#)
- [Paper Cutting](#)
- [Rule Detection](#)

- [Non-Verbal Classification](#)
- [Grouping of Images](#)
- [Dot Situation](#)
- [Shape Construction](#)
- [Image Analysis](#)
- [Cubes and Dice](#)

Problem-solving:

Problem-solving skills help you determine the source of a problem and find an effective solution.

Examples:

- 1) **Research:** Researching is an essential skill related to problem solving. As a problem solver, you need to be able to identify the cause of the issue and understand it fully.
- 2) **Analysis:** The first step to solving any problem to analyse the situation. Your analytical skills will help you understand problems and effectively develop solutions.
- 3) **Decision-making:** Ultimately, you will need to make a decision about how to solve problems that arise.
- 4) **Communication:** When identifying possible solutions, you will need to know how to communicate the problem to others. You will also need to know what communication channels are the most appropriate when seeking assistance. Once you find a solution, communicating it clearly will help reduce any confusion and make implementing a solution easier.
- 5) **Dependability:** Dependability is one of the most important skills for problem-solvers. Solving problems in a timely manner is essential.

Imagination:

Imagination is the ability to produce and simulate novel objects, peoples and ideas in the mind without any immediate input of the senses.

Examples:

When a child is playing house and creates a pretend story, this is an example of a child using his imagination.

Curiosity:

Curiosity is a quality related to inquisitive thinking such as exploration, investigation, and learning, evident by observation in humans and other animals. Curiosity is heavily associated with all aspects of human development, in which derives the process of learning and desire to acquire knowledge and skill.

Examples:

- a. curiosity is a little known and interesting fact about a subject.
- b. An example of curiosity is always asking questions, reading books and going out to try to learn about the world.

Creativity:

- Creativity is the act of turning new and imaginative ideas into reality.
- Creativity is characterised by the ability to perceive the world in new ways, to find hidden patterns, to make connections between seemingly unrelated phenomena, and to generate solutions.
- Creativity involves two processes: thinking, then producing.
- *Creative thinking* is the ability to look at things in an innovative way that hasn't previously been considered.
- Creative thinking helps invent or create something new: a concept, a solution to a problem, a method, a work of art, or an actual, physical device.

5.1.11: Milestones in Cognitive Attainment:

Cognitive milestones represent important steps forward in a child's development. Throughout human history, babies were often thought of as simple, passive beings. Prior to the 20th-century, children were often seen simply as miniature versions of adults. It wasn't until psychologists like

Jean Piaget proposed that children actually *think differently* than adults do and that people began to view childhood and adolescence as a unique period of growth and development.

Adults often dismissed the remarkable intellectual skills of infants and very young children, but modern thinkers and researchers have discovered that babies are in fact always learning, thinking, and exploring the world around them.

Even newborn infants are actively taking in information and learning new things. In addition to gathering new information about the people and the world around them, babies are also constantly discovering new things about themselves.

From Birth to 3 Months:

The first three months of a child's life are a time of wonder. Major developmental milestones at this age are centered on exploring the basic senses and learning more about the body and the environment. During this period, most infants begin to:

- ❖ See objects more clearly within a distance of 13 inches.
- ❖ Focus on moving objects, including the faces of caregivers.
- ❖ Tell between sweet, salty, bitter, and sour tastes.
- ❖ Detecting differences in pitch and volume.
- ❖ See all colors in the human visual spectrum.
- ❖ Respond to their environment with facial expressions.
- ❖ Demonstrate anticipatory behaviors like rooting and sucking at the site of a nipple or bottle.



From 3 to 6 Months:

In early infancy, perceptual abilities are still developing. From the age of three to six months, infants begin to develop a stronger sense of perception. At this age, most babies begin to:



- ❖ Recognize familiar faces.
- ❖ Respond to the facial expressions of other people.
- ❖ Recognize and react to familiar sounds.
- ❖ Begin to imitate facial expressions.

From 6 to 9 Months:

Looking inside the mind of an infant is no easy task. After all, researchers cannot just ask a baby what he or she is thinking at any given moment. To learn more about the mental processes of infants, researchers have come up with a number of creative tasks that reveal the inner workings of the baby brain.



From the age of six to nine months, researchers have found that most infants begin to:

- ❖ Understand the differences between animate and inanimate objects.
- ❖ Tell the differences between pictures depicting different numbers of objects.
- ❖ Utilize the relative size of an object to determine how far away it is.
- ❖ Gaze longer at "impossible" things such as an object suspended in midair.

From 9 to 12 Months:

As infants become more physically adept, they are able to explore the world around them in greater depth. Sitting up, crawling, and walking are just a few of the physical milestones that allow babies to gain a greater mental understanding of the world around them.

As they approach one year of age, most infants are able to:



- ❖ Understand the concept of object permanence, the idea that an object continues to exist even though it cannot be seen.

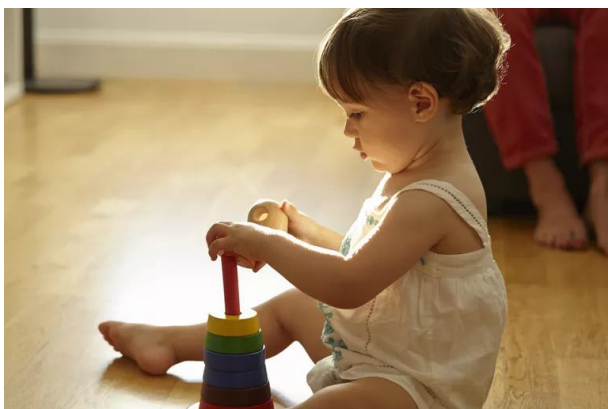
- ❖ Imitate gestures and some basic actions.
- ❖ Respond with gestures and sounds
- ❖ Like looking at picture books
- ❖ Manipulate objects by turning them over, trying to put one object into another, etc.

From 1 Year to 2 Years:

After reaching a year of age, children's physical, social, and cognitive development seems to grow by leaps and bounds. Children at this age spend a tremendous amount of time observing the actions of adults, so it is important for parents and caregivers to set good examples of behavior.

Most one-year-olds begin to:

- ❖ Understand and respond to words.
- ❖ Identify objects that are similar.
- ❖ Tell the difference between "Me" and "You".
- ❖ Imitate the actions and language of adults.
- ❖ Can point out familiar objects and people in a picture book.
- ❖ Learn through exploration.



From 2 to 3 Years:

At two years of age, children are becoming increasingly independent. Since they are now able to better explore the world, a great deal of learning during this stage is the result of their own experiences.

Most two-year-olds are able to:

- ❖ Sort objects by category (i.e., animals, flowers, trees, etc.)
- ❖ Stack rings on a peg from largest to smallest.
- ❖ Imitate more complex adult actions (playing house, pretending to do laundry, etc.)
- ❖ Identify their own reflection in the mirror by name.

- ❖ Respond to simple directions from parents and caregivers.
- ❖ Name objects in a picture book.
- ❖ Match objects with their uses.

From 3 to 4 Years:



Children become increasingly capable of analyzing the world around them in more complex ways. As they observe things, they begin to sort and categorize them into different categories, often referred to as schemas. Since children are becoming much more active in the learning process, they also begin to pose questions about the world around them. "Why?" becomes a very common question around this age.

At the age of three, most kids are able to:

- ❖ Demonstrate awareness of the past and present.
- ❖ Actively seek answers to questions.
- ❖ Learn by observing and listening to instructions.
- ❖ Organize objects by size and shape.
- ❖ Understand how to group and match objects according to color.
- ❖ Have a longer attention span of around 5 to 15 minutes.
- ❖ Asks "why" questions to gain information.

From 4 to 5 Years:



As they near school age, children become better at using words, imitating adult actions, counting and other basic activities that are important for school preparedness.

Most four-year-olds are able to:

- ❖ Rhyme.

- ❖ Name and identify many colors.
- ❖ Draw the shape of a person.
- ❖ Count to five.
- ❖ Tell where they live.
- ❖ Draw pictures that they often name and describe.

5.2.1 Bandura Social Learning theory:

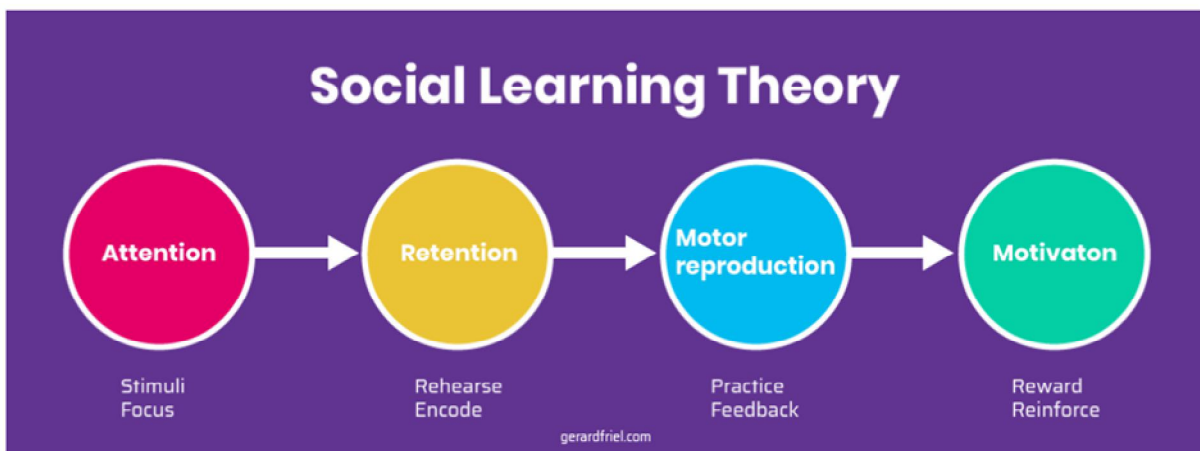
The social learning theory of Bandura emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others.

Bandura (1977) states: “Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do.

Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action.”

Social learning theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences.

5.1.1 Components of observational learning: The component processes underlying observational learning are:



Attention – in order to learn, observers must attend to the modeled behavior. Experimental studies have found that awareness of what is being learned and the mechanisms of reinforcement greatly boosts learning outcomes.

Attention is impacted by characteristics of the observer (e.g., perceptual abilities, cognitive abilities, arousal, past performance) and characteristics of the behavior or event (e.g., relevance, novelty, affective valence, and functional value).

In this way, social factors contribute to attention – the prestige of different models affects the relevance and functional value of observation and therefore modulates attention.

Retention – In order to reproduce an observed behavior, observers must be able to remember features of the behavior.

Again, this process is influenced by observer characteristics (cognitive capabilities, cognitive rehearsal) and event characteristics (complexity).

The cognitive processes underlying retention are described by Bandura as visual and verbal, where verbal descriptions of models are used in more complex scenarios.

Reproduction – By reproduction, Bandura refers not to the propagation of the model but the implementation of it.

This requires a degree of cognitive skill, and may in some cases require sensorimotor capabilities.

Reproduction can be difficult because in the case of behaviors that are reinforced through self-observation (he cites improvement in sports), it can be difficult to observe behavior well.

This can require the input of others to provide self-correcting feedback.

Newer studies on feedback support this idea by suggesting effective feedback, which would help with observation and correction improves the performance on participants on tasks.

Motivation – The decision to reproduce (or refrain from reproducing) an observed behavior is dependent on the motivations and expectations of the observer, including anticipated consequences and internal standards.

Bandura's description of motivation is also fundamentally based on environmental and thus social factors, since motivational factors are driven by the functional value of different behaviors in a given environment.

5.1.2 Observation Learning:

- Children observe the people around them behaving in various ways. This is illustrated during the famous Bobo doll experiment (Bandura, 1961).
- Individuals that are observed are called models. In society, children are surrounded by many influential models, such as parents within the family, characters on children's TV, friends within their peer group and teachers at school.
- These models provide examples of behavior to observe and imitate, e.g., masculine and feminine, pro and anti-social, etc.
- Children pay attention to some of these people (models) and encode their behavior. At a later time they may imitate (i.e., copy) the behavior they have observed.
- They may do this regardless of whether the behavior is 'gender appropriate' or not, but there are a number of processes that make it more likely that a child will reproduce the behavior that its society deems appropriate for its gender.
- First, the child is more likely to attend to and imitate those people it perceives as similar to itself. Consequently, it is more likely to imitate behavior modeled by people of the same gender.
- Second, the people around the child will respond to the behavior it imitates with either reinforcement or punishment.
- If a child imitates a model's behavior and the consequences are rewarding, the child is likely to continue performing the behavior.
- If a parent sees a little girl consoling her teddy bear and says "what a kind girl you are," this is rewarding for the child and makes it more likely that she will repeat the behavior. Her behavior has been reinforced (i.e., strengthened).
- Reinforcement can be external or internal and can be positive or negative.
- If a child wants approval from parents or peers, this approval is an external reinforcement, but feeling happy about being approved of is an internal reinforcement.
- A child will behave in a way which it believes will earn approval because it desires approval.

- Positive (or negative) reinforcement will have little impact if the reinforcement offered externally does not match with an individual's needs.
- Reinforcement can be positive or negative, but the important factor is that it will usually lead to a change in a person's behavior.
- Third, the child will also take into account what happens to other people when deciding whether or not to copy someone's actions.
- A person learns by observing the consequences of another person's (i.e., models) behavior, e.g., a younger sister observing an older sister being rewarded for a particular behavior is more likely to repeat that behavior herself. This is known as vicarious reinforcement.
- This relates to an attachment to specific models that possess qualities seen as rewarding.
- Children will have a number of models with whom they identify. These may be people in their immediate world, such as parents or older siblings, or could be fantasy characters or people in the media.
- The motivation to identify with a particular model is that they have a quality which the individual would like to possess.
- Identification occurs with another person (the model) and involves taking on (or adopting) observed behaviors, values, beliefs and attitudes of the person with whom you are identifying.
- The term identification as used by Social Learning Theory is similar to the Freudian term related to the Oedipus complex.
- For example, they both involve internalizing or adopting another person's behavior. However, during the Oedipus complex, the child can only identify with the same sex parent, whereas with Social Learning Theory the person (child or adult) can potentially identify with any other person.
- Identification is different to imitation as it may involve a number of behaviors being adopted, whereas imitation usually involves copying a single behavior.

5.1.3 Modeling:

Social Learning Theory draws heavily on the concept of modeling as described above. Bandura outlined three types of modeling stimuli:

- ❑ Live models, where a person is demonstrating the desired behavior.

- ❑ Verbal instruction, in which an individual describes the desired behavior in detail and instructs the participant in how to engage in the behavior.
- ❑ Symbolic, in which modeling occurs by means of the media, including movies, television, Internet, literature, and radio. Stimuli can be either real or fictional characters.
- ❑ Exactly what information is gleaned from observation is influenced by the type of model, as well as a series of cognitive and behavioral processes.

5.3.4 **Imitation:** Imitation is an action of using someone or something as a model. For example a child learns to speak by imitation.

5.3: Learning:

5.3.1 Classical conditioning in young Infant:

- An unconditioned stimulus (UCS), say, a nipple inserted into the mouth, elicits a reflexive unlearned response (unconditioned response, UR), sucking.
- The infant can become conditioned to the nipple (now a conditioned stimulus, CS) so that sucking occurs as soon as the baby sees a nipple (now a conditioned response, CR).

5.3..2 Operant Conditioning:

- Learning is based on the relationship between one's own behavior and reward or punishment.
- Positive reinforcement - a reward that follows a behavior and increases the likelihood that the behavior will be repeated.

In social learning theory, Albert Bandura (1977) agrees with the behaviorist learning theories of classical conditioning and operant conditioning. However, he adds two important ideas:

1. Mediating processes occur between stimuli & responses.
2. Behavior is learned from the environment through the process of observational learning.

5.1 Piaget's Cognitive Development Theory:



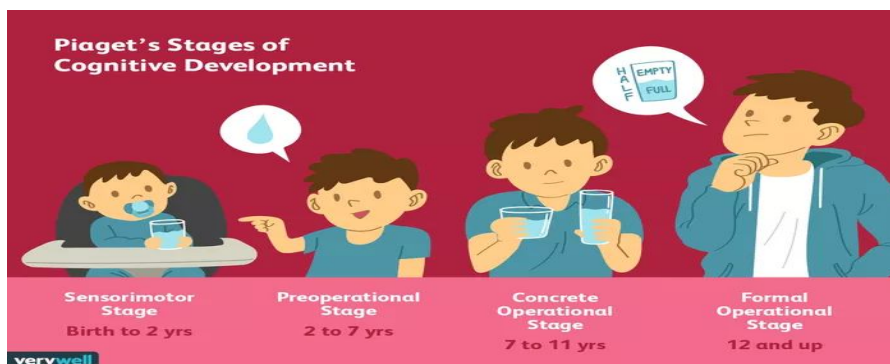
Jean Piaget's theory of cognitive development suggests that children move through four different stages of mental development.

His theory focuses not only on understanding how children acquire knowledge, but also on understanding the nature of intelligence.

Piaget believed that children take an active role in the learning process, acting much like little scientists as they perform experiments, make observations, and learn about the world.

As kids interact with the world around them, they continually add new knowledge, build upon existing knowledge, and adapt previously held ideas to accommodate new information.

Through his observations of his children, Piaget developed a stage theory of intellectual development that included four distinct stages:



1. Sensorimotor stage: birth to 2 years
2. Preoperational stage: Ages 2 to 7
3. Concrete operational stage: Ages 7 to 11
4. Formal operational stage: Ages 12 and up

The Sensory motor stage:

Ages: birth to 2 years:

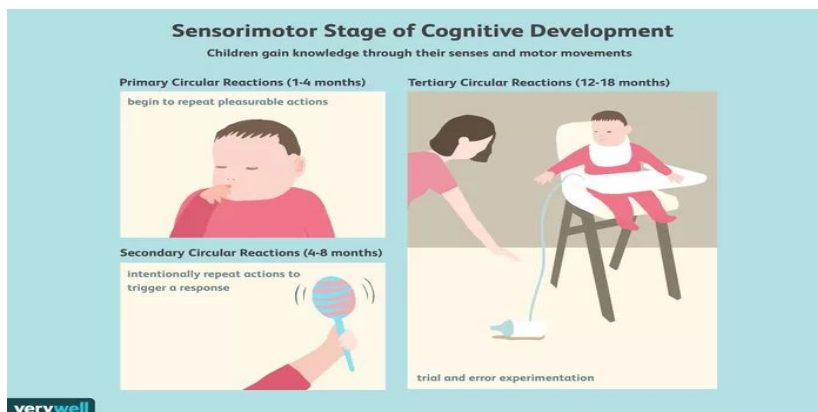
- ★ The main achievement during this stage is Object Permanence - knowing that an object still exists, even if it is hidden.
- ★ It requires the ability to form a mental representation (i.e., a schema) of the object.

The sensorimotor stage is the earliest in Piaget's theory of cognitive development. He described this period as a time of tremendous growth and change.

Piaget chose to call this stage the 'sensorimotor' stage because it is through the senses and motor abilities that infants gain a basic understanding of the world around them.

The abilities that an infant is born with—sight, hearing, smell, taste, and touch—combined with physical capabilities that continue to develop—including touching, grasping, and tasting—allow infants to interact and build awareness of themselves and what is around them.

As children interact with their environments, they go through an astonishing amount of cognitive growth in a relatively short period of time—the sensorimotor stage lasts from birth to approximately age 2.



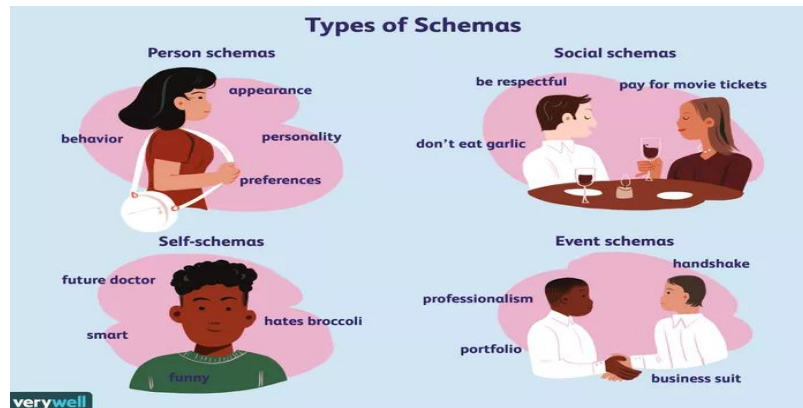
Sub stages

As any parent or caregiver can attest, a great deal of learning and development happens during the first two years of a child's life. The sensorimotor stage can be divided into six separate sub-stages that are characterized by the development of a new skill:¹

Reflexes (0-1 month)

During this substage, the child understands the environment purely through inborn reflexes such as sucking and looking.

Primary Circular Reactions (1-4 months)



This substage involves coordinating sensation and new schemas. For example, a child may suck his or her thumb by accident and then later intentionally repeat the action. These actions are repeated because the infant finds them pleasurable.

Secondary Circular Reactions (4-8 months)

During this substage, the child becomes more focused on the world and begins to intentionally repeat an action in order to trigger a response in the environment. For example, a child will purposefully pick up a toy in order to put it in his or her mouth.

Coordination of Reactions (8-12 months)

During this substage, the child starts to show clearly intentional actions. The child may also combine schemas in order to achieve a desired effect. Children begin exploring the environment around them and will often imitate the observed behavior of others. The understanding of objects also begins during this time and children begin to recognize certain objects as having specific qualities. For example, a child might realize that a rattle will make a sound when shaken.

Tertiary Circular Reactions (12-18 months)

Children begin a period of trial-and-error experimentation during the fifth substage. For example, a child may try out different sounds or actions as a way of getting attention from a caregiver.

Early Representational Thought (18-24 months)

Children begin to develop symbols to represent events or objects in the world in the final sensorimotor sub-stage. During this time, children begin to move towards understanding the world through mental operations rather than purely through actions.

The Pre operational stage:

Ages: 2 to 7 years:

- ★ During this stage, young children can think about things symbolically. This is the ability to make one thing - a word or an object - stand for something other than itself.
- ★ Thinking is still egocentric, and the infant has difficulty taking the viewpoint of others.

Concepts:

Concept of Adaptation:

- According to Piaget, cognitive development occurs from two processes: adaptation and equilibrium.
- **Adaptation** involves the child's changing to meet situational demands. Adaptation involves two sub- processes: assimilation and accommodation.
- **Assimilation** is the application of previous concepts to new concepts. An example is the child who refers to a whale as a “fish.”
- **Accommodation** is the altering of previous concepts in the face of new information.
- An example is the child who discovers that some creatures living in the ocean are not fish, and then correctly refers to a whale as a “mammal.”
- **Equilibrium** is the search for “balance” between self and the world, and involves the matching of the child's adaptive functioning to situational demands.
- Equilibrium keeps the infant moving along the developmental pathway, allowing him or her to make increasingly effective adaptations

Egocentrism:









- Piaget used a number of creative and clever techniques to study the mental abilities of children.
- One of the famous techniques to demonstrate egocentrism involved using a three-dimensional display of a mountain scene.
- Often referred to as the "Three Mountain Task," children are asked to choose a picture that showed the scene they had observed.
- Most children are able to do this with little difficulty.
- Next, children are asked to select a picture showing what *someone else* would have observed when looking at the mountain from a different viewpoint.
- Invariably, children almost always choose the scene showing *their own* view of the mountain scene.
- According to Piaget, children experience this difficulty because they are unable to take on another person's perspective.
- Other researchers have also conducted similar experiments.
- In one study, children were shown a room in a small dollhouse.
- Children were able to see in the dollhouse that a toy was hidden behind a piece of furniture.
- Children were then taken into a full-size room that was an exact replica of the dollhouse.
- Very young children did not understand to look behind the couch to find the toy, while slightly older children immediately searched for the toy.
- Developmental psychologists refer to the ability to understand that others have different perspectives, thoughts, feelings and mental states as theory of mind.

Animism:

- Animism refers to attributing life-like qualities to objects.
- The cup is alive, the chair that falls down and hits the child's ankle is mean, and the toys need to stay home because they are tired.
- Cartoons frequently show objects that appear alive and take on lifelike qualities.

Young children do seem to think that objects that move may be alive, but after age three, they seldom refer to objects as being alive.

Conservation:

Tests of Various Types of Conservation		
Type of Conservation	Initial Presentation	Transformation
Volume	Two equal glasses of liquid. 	Pour one into a taller, narrower glass. 
Number	Two equal lines of checkers. 	Increase spacing of checkers in one line. 
Matter	Two equal balls of clay. 	Squeeze one ball into a long, thin shape. 
Length	Two sticks of equal length. 	Move one stick. 

- Another well-known experiment involves demonstrating a child's understanding of conservation. In one conservation experiment, equal amounts of liquid are poured into two identical containers.
- The liquid in one container is then poured into a differently shaped cup, such as a tall and thin cup or a short and wide cup.
- Children are then asked which cup holds the most liquid.
- Despite seeing that the liquid amounts were equal, children almost always choose the cup that appears fuller.
- Piaget conducted a number of similar experiments on the conservation of number, length, mass, weight, volume, and quantity.
- He found that few children showed any understanding of conservation prior to the age of five.

Centration:

- Centration and conservation are characteristic of pre operative thought.
- **Centration** is the act of focusing all attention on one characteristic or dimension of a situation while disregarding all others.
- An example of centration is a child focusing on the *number* of pieces of cake that each person has, regardless of the size of the pieces.
- Centration is one of the reasons that young children have difficulty understanding the concept of conservation.
- **Conservation** is the awareness that altering a substance's appearance does not change its basic properties.
- Children at this stage are unaware of conservation and exhibit centration. Imagine a 2-year-old and 4-year-old eating lunch.
- The 4-year-old has a whole peanut butter and jelly sandwich.
- He notices, however, that his younger sister's sandwich is cut in half and protests, "She has more!" He is exhibiting centration by focusing on the number of pieces, which results in a conservation error.

Irreversibility:

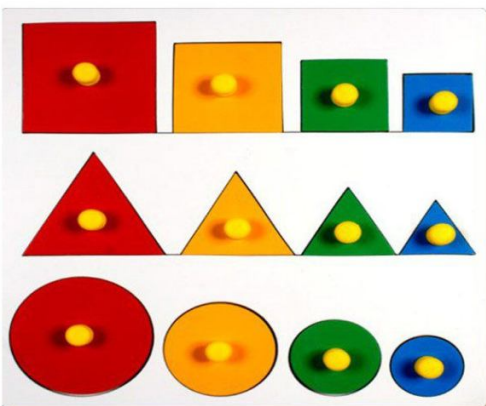
- **Irreversibility** refers to the young child's difficulty mentally reversing a sequence of events. In the same beaker situation, the child does not realize that, if the sequence of events was reversed and the water from the tall beaker was poured back into its original beaker, then the same amount of water would exist.
- Irreversibility in developmental psychology describes a cognitive inability to think in reverse order while manipulating objects and symbols.
- According to Hamilton and, developmental theorist Jean Piaget believed that changes in behavior occurring during development are a result of cognitive changes in children's ability to reason about the world around them discussed irreversibility and reversibility as cognitive changes useful for differentiating developmental stages and claimed that children do not grasp the concept of reversibility until they reach the concrete operational stage, between 7 and 11 years of age.

Classification:

- Classification is simply grouping properties as it relates to other types.
- This is an important concept for kids to comprehend, especially to solve problems.
- An example of classification would be a child's ability to group specific objects based on color, shape, size, amount, and/or similarities.
- It is very important children understand classification because it is a concept of knowing what is different and what is the same.
- Authors Jeppson and Myers-Walls state children initially classify objects on what they see, hear, and feel and it takes time to understand other elements beyond this.
- As children's cognitive development progresses, they will learn how some objects belong together as well as the purpose of each.
- Finally, there is seriation, which is the ability to group objects based on height, weight, and/or importance.
- An example of a seriation exercise would be: children putting objects in order from short to tall, thin to big, small to large, or of importance, and so forth.
- Because seriation deals with size, weight, or magnitude, this is a very important concept to master for children to learn in school, especially in math and science.



Seriation:



- In Piaget's theory of cognitive development, the third stage is called the Concrete Operational Stage.
- During this stage, which occurs from age 7-12, the child shows increased use of logic or reasoning.

- One of the important processes that develops is that of Seriation, which refers to the ability to sort objects or situations according to any characteristic, such as size, color, shape, or type.
- For example, the child would be able to look at his plate of mixed vegetables and eat everything except the brussels sprouts.

The Concrete Operational stage:

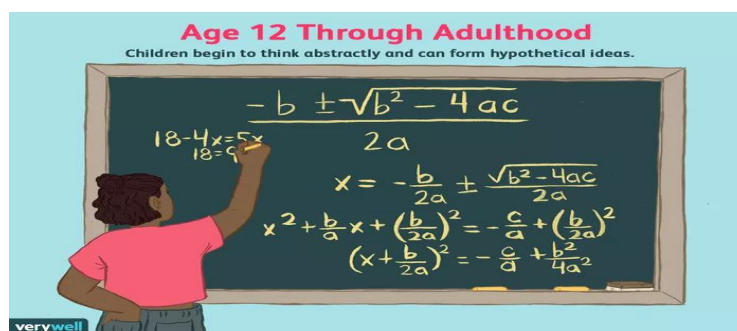
Ages: 7 to 11 years:

- ★ Piaget considered the concrete stage a major turning point in the child's cognitive development because it marks the beginning of logical or operational thought.
- ★ This means the child can work things out internally in their head (rather than physically try things out in the real world).
- ★ Children can conserve numbers (age 6), mass (age 7), and weight (age 9). Conservation is the understanding that something stays the same in quantity even though its appearance changes.

The Formal Operational Stage

Ages: 12 and Up

The formal operational stage begins at approximately age eleven and lasts into adulthood. During this time, people develop the ability to think about abstract concepts, and logically test hypotheses.



- ❖ At this stage, the adolescent or young adult begins to think abstractly and reason about hypothetical problems
 - Abstract thought emerges
 - Teens begin to think more about moral, philosophical, ethical, social, and political issues that require theoretical and abstract reasoning

- Begin to use deductive logic, or reasoning from a general principle to specific information
- ❖ The final stage of Piaget's theory involves an increase in logic, the ability to use deductive reasoning, and an understanding of abstract ideas.
- ❖ At this point, people become capable of seeing multiple potential solutions to problems and think more scientifically about the world around them.
- ❖ The ability to think about abstract ideas and situations is the key hallmark of the formal operational stage of cognitive development.
- ❖ The ability to systematically plan for the future and reason about hypothetical situations are also critical abilities that emerge during this stage.
- ❖ It is important to note that Piaget did not view children's intellectual development as a quantitative process; that is, kids do not just add more information and knowledge to their existing knowledge as they get older.
- ❖ Instead, Piaget suggested that there is a *qualitative* change in how children think as they gradually process through these four stages. A child at age 7 doesn't just have more information about the world than he did at age 2; there is a fundamental change in *how* he thinks about the world.

Summary of Piaget's cognitive development theory: In the course of the child's intellectual development, significant changes are brought about in child's initial cognitive structures (composed of the basic schemas). These changes are the result of maturation, the process of natural growth and the experiences like interaction with the physical and social environment the processes of assimilation, accommodation and equilibration.

Piaget stated that the child is born with a few practical instincts and reflexes like sucking, looking, reaching and grasping etc., and these inborn traits make him perform related tasks. The cognitive abilities related to the performing of such tasks were termed schemas (the basic functional units of one's cognitive structure) by Piaget. The schemas available to a child decides how a child responds to a stimuli in the environment.

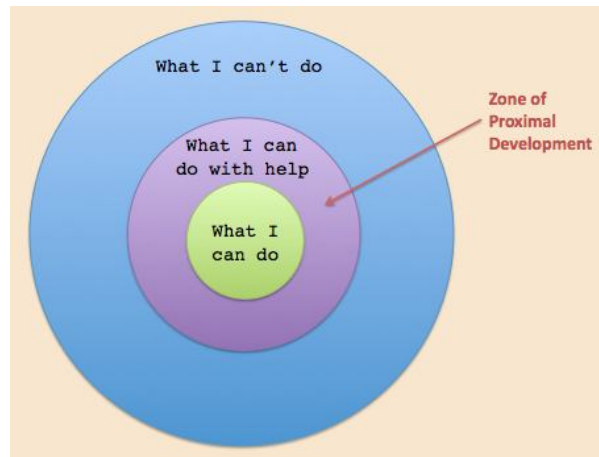
5.1 Vygotsky's Sociocultural Theory of Cognitive Development



Lev Vygotsky (1896-1934) was a Russian psychologist who argued that culture has a major impact on a child's cognitive development. Piaget and Gesell believed development stemmed directly from the child, and although Vygotsky acknowledged intrinsic development, he argued that it is the language, writings, and concepts arising from the culture that elicit the highest level of cognitive thinking (Crain, 2005). He believed that the social interactions with adults and more learned peers can facilitate a child's potential for learning. Without this interpersonal instruction, he believed children's minds would not advance very far as their knowledge would be based only on their own discoveries. Let's review some of Vygotsky's key concepts.

5.5.1 Zone of Proximal Development

- The zone of proximal development (ZPD) can also be described as the area between what a learner can do by himself and that which can be attained with the help of a 'more knowledgeable other' adult or peer.
- The 'more knowledgeable other', or MKO, shares knowledge with the student to bridge the gap between what is known and what is not known.
- Once the student has expanded his knowledge, the actual developmental level has been expanded and the ZPD has shifted.
- The ZPD is always changing as the student expands and gains knowledge, so scaffolded instruction must constantly be individualized to address the changing ZPD of each student.



- It was Vygotsky's belief that "good learning" occurs in the child's zone of proximal development.
- Important to teaching in the ZPD is the determination of what the student can manage on his own and to allow the student to do as much as possible without any assistance.

5.1.2 Scaffolding involving adult assistance:

Scaffolding is the temporary support that parents or teachers give a child to do a task.

1 – Sharing a Specific Goal

- It is the teacher's responsibility to establish the shared goal.
- However, the learner's interests must be recruited or enlisted through the teacher's ability to communicate with the learner and achieve intersubjectivity (sharing intentions, perceptions, feelings and conceptions) (Zhao & Orey, 1999).
- The teacher must do some pre-assessment of the student and the curriculum.
- Achievement of curriculum objectives is planned as the teacher considers the needs of each student.
- The teacher must be considerate of some of the unique, unusual, and often ineffective problem-solving techniques that children use.
- Allowing input from the student on the shared goal will enhance intrinsic motivation.

- It will also help control the frustration level of the learner as he or she will feel that their interests have been validated.
- It will assist the learner in establishing a desire to master the goal where success is contingent upon one's own ability in developing new skills.
- In this manner, the process of learning itself is esteemed, and the attainment of mastery is seen as being directly correlated with the effort put forth.

2 -Whole Task Approach

- In the Whole Task Approach, the focus is on the overall goal to be attained throughout the entire process.
- Consequently, the task is learned as a whole instead of a set of individual sub-skills.
- Each feature of the lesson is learned as it relates to the whole task.
- This approach lessens the amount of passive knowledge on the part of the learner and the need for transfer is not as great.
- It must be noted that this approach is only effective if the learner does not experience extreme difficulty with any of the component skills needed to complete the whole task.
- Imagine how difficult it would be to scaffold a child in telling time if they could not identify the numbers 1 through 12.

3 – Immediate Availability of Help

- Frequent success is important in scaffolding, especially in helping control frustration levels of the learner.
- Student successes may be experienced more often if the MKO provides assistance in a timely and effective manner so as to enable the learner to proceed with the task.
- These successes, in turn, help to increase motivation through a positive self-efficacy and make the learner's time and effort more productive.
- This procedure directly corresponds to the first rule of scaffolding as defined by Zhao & Orey (1999), which is to assist the learner with those tasks he/she is not yet able to carry out on his/her own.

4 – Intention-assisting

- It is central to the scaffolding process to supply assistance to the learner's present focus, thereby helping the learner with his/her current difficulties.
- In providing this immediate help with the current task at hand, a more productive learning environment is fostered because information has been related and conferred according to the learner's focus keeping the learner in pursuit of the task.
- However, it is often necessary to redirect the intentions of the learner if they do not represent an effective strategy for completing the task.
- The teacher or MKO must be cognizant that there are numerous ways of accomplishing a certain task.
- If the learner's current path is effective, it should be accepted as it is the essence of scaffolding to help the learner proceed with the least amount of assistance as possible.
- If the MKO finds him/herself consistently helping a learner with low level intentions, it may be a good idea to turn to coaching as a strategy to help the learner progress.
- This is beneficial in that it helps the learner examine the task from a different perspective so as to encourage higher level thinking skills.

5 – Optimal Level of Help

- What the learner is able to do should be matched with the level of assistance provided.
- The learner should be given just enough help to overcome the current obstacle, but the level of assistance should not hinder the learner from contributing and participating in the learning process of that particular task.
- In other words, the assistance should only attend to the areas of the task that he/she cannot accomplish on his/her own.
- No intervention should be made if the current task is within the learner's capabilities.
- However, if the learner lacks the necessary skills, a demonstration is needed.

6 – Conveying an Expert Model

An expert model can provide an explicit example of the task as the expert way of accomplishing the task. The techniques for accomplishing the task are clearly expressed. In an implicit demonstration, the information is outlined around the expert model.

5.1 Difference between Cognition and Intelligence:

5.1.1 Cognition involves the senses, or sensing with the brain through neuronal functions that are developed, honed, and sustained. ... **Intelligence** is the ability to process data into more efficient systems by acquiring learned substantive mental methods which develops into **cognitive** ability.

5.1.2 Multifaceted view about Intelligence:

Of course, Gardner is not the first person to suggest that there is more than one **intelligence**. ... All of these theories share the belief that **intelligence** is a **multifaceted**, complex capacity. Gardner's model is distinguished from the other theories by its breadth, its scientific basis, and its educational implications.

5.2 Gardner's Multiple Intelligences theory:



Intelligence is often defined as our intellectual potential; something we are born with, something that can be measured, and a capacity that is difficult to change. In recent years, however, other views of intelligence have emerged.

One such conception is the theory of multiple intelligences proposed by Harvard psychologist Howard Gardner.

This theory suggests that traditional psychometric views of intelligence are too limited. Gardner first outlined his theory in his 1983 book "Frames of Mind: The Theory of Multiple Intelligences," where he suggested that all people have different kinds of "intelligences." Gardner proposed that there are eight



intelligences, and has suggested the possible addition of a ninth known as "existentialist intelligence."

In order to capture the full range of abilities and talents that people possess, Gardner theorizes that people do not have just an intellectual capacity, but have many kinds of intelligence, including musical, interpersonal, spatial-visual, and linguistic intelligences etc.

Gardner proposed eight intellectual abilities. Those are

1. Musical
2. Visual/Spatial
3. Verbal
4. Logical/Mathematical
5. Bodily/ Kinesthetic
6. Interpersonal
7. Intrapersonal
8. Naturalistic

While a person might be particularly strong in a specific area, such as musical intelligence, he or she most likely possesses a range of abilities. For example, an individual might be strong in verbal, musical, and naturalistic intelligence.

5.1 Factors affecting cognitive development in Children:

(1) Biological factors

(a) Sense organs

Sense organs are important because they receive stimuli from the environment. Their proper development helps in receiving correct stimuli and the correct concepts are formed. Defective sense organs collect defective stimuli and as a result wrong concepts can be formed and the cognitive development will not be perfect.

(b) Intelligence

It has been seen that cognitive development of intelligent children is better. Children with low Intelligence Quotient are not able to receive stimuli from the environment properly, thus their cognitive development lags behind. Intelligence affects all mental capacities.

c) **Heredity**

Cognitive development is also influenced by the hereditary traits; one gets from his parents. Their development is similar to their parents cognitive development.

(d) **Maturation**

As the child gets matured he gets more interactive with his environment. For a good cognitive development interaction with the environment is very necessary which the child does with the help of his mental and motor maturation. They help directly in the development of cognition.

(2) **Environment factors**

(a) **Learning opportunities**

The opportunity a child gets to learn affects cognitive development. The more opportunities he gets the better is the cognition, because he will be able to add to his mental capacities by learning through these opportunities.

(6) **Economic status**

Economic state of the family also helps in the development of cognition. Children from better economic status get more opportunities and better training and it helps in cognitive development

5.2 Importance of Stimulation for infants brain development:

The multi-dimensional domains of your child's development include the interdependence of cognitive-language, sensory-motor, and social-emotional development.

1. The initial years during which *your baby's brain development is taking place* are particularly sensitive, displaying a remarkable capacity to absorb information and adapt to the surroundings.
2. An early development of your child's cognitive and non-cognitive domains at this stage is vital for an improved academic attainment, productivity and social functioning in adulthood.
3. During this period, it is essential that you keep your child in an environment which offers stimulation for the brain thanks to an array of interesting things to do see, hear and touch.



Importance of Stimulation:

- Stimulation during the first three years of a child's life helps to prevent changes to the brain structure and neurological pathways caused by stressful situations.
- You will establish a healthy relationship with your baby and will pick essential parenting skills along the way.
- Stimulation through play, helps your baby use his/her body and senses and develops their thinking and intelligence.
- Stimulation carried out by talking face-to-face with your baby helps in development of his/her auditory and visual senses.
- Stimulation during the early years will boost your baby's school readiness skills making him/her much more prepared for formal reading and math during the schooling years and also improves their social skills.

6.3 Adult Interaction and Environment:

- As a parent, it is important to foster your child's cognitive development as soon as he/she is born because doing so provides the foundation for your child's success in school and later in life. For example, research shows that children who can distinguish sounds at six months of age are better at acquiring the skills for learning to read at four and five years of age.

- To promote your child's cognitive development, it is important that you actively engage in quality interactions on a daily basis.

Examples include:

- Talking with baby and naming commonly used objects.
- Letting baby explore toys and move about.
- Singing and reading to your baby.
- Exposing toddler to books and puzzles.
- Expanding on child's interests in specific learning activities.
- For example, toddler might show an early interest in dinosaurs, so you can take him/her on a trip to the natural history museum to learn more about the time that these creatures roamed the earth.
- Answering child's "why" questions.
- Another way that one can foster child's cognitive development is to provide him/her with choices and prompt him/her to make thoughtful decisions.
- One should also allow child to explore different ways of solving problems.
- While one may want to provide some gentle guidance and encouragement, allow the child some time to figure out things, like a new puzzle.
- This may require some patience on one's part, but it will ultimately help him/her to learn.
- It is important to establish a healthy relationship with children.
- Children who grow up with an insecure relationship have a negative effect on their behaviour, education, physical and mental health in later stages of life.
- For many parents, encouraging children's intellectual development is a point of major concern. Fortunately, children are eager to learn right from the very beginning.
- While education will soon become an enormous part of a growing child's life, those earliest years are mostly influenced by close family relationships, particularly those with parents and other caregivers.
- This means that parents are in a unique position to help shape how their children learn, think, and develop.

- As kids grow older, parents should continue to encourage their children to actively explore the world.
- Try to have patience with young children who seem to have an endless array of questions about each and everything around them.
- Parents can also pose their own questions to help kids become more creative problem solvers.
- When facing a dilemma, questions such as "What do you think would happen if we...?" or "What might happen if we....?"
- By allowing kids to come up with original solutions to problems, parents can help encourage both intellectual development and self-confidence.

Fill in the blanks:-

1. Cognition process involves mainly _____ & _____ .
2. Perception is _____ and _____ of information.
3. Social learning theory was framed by _____.
4. Cognitive development theory was postulated by _____.
5. According to piaget, there are _____ stages in cognitive development.

Short Answer questions:

1. What is cognitive development:
2. Explain about Piaget's concrete operational stage of cognitive development
3. What is object permanence?
4. Briefly explain Bandura's social learning theory?
5. Define Adaptation.

Essay questions:

1. Explain in detail about Piaget's Cognitive development theory
2. Write in detail about Vygotsky's socio-cultural theory of cognitive development

Assignment:

1. Develop 5 exercises for enhancing cognitive development of an 8-yr-old child
2. Design some experiments to improve thinking of A child in the concrete operational stage.

UNIT 6: LANGUAGE DEVELOPMENT



Introduction

Language is a communication system that involves using words and systematic rules to organize those words to transmit information from one individual to another. Language serves as a necessary means of communication. It is the primary form of expression through which people communicate their knowledge and thoughts.

Language development is a critical part of child's overall development. It supports child's ability to communicate, and express and understand feelings. It also supports thinking and problem-solving, and developing and maintaining relationships. Learning to understand, use and enjoy language is the critical first step in literacy, and the basis for learning to read and write. It is an important tool in the field of education. It is used as a vehicle through which education is imparted to the child. Child's language develops from simple to complex. i.e. from individual sounds to syllables, to one word sentence to two word sentences to complex complete grammatically accurate sentences.

6.1 Emergence of language

Language is a means of communication, but infants communicate with their parents long before they learn to speak, and such paralinguistic abilities serve as the foundation for later language. Shared attention activities with mothers pointing, looking at, and vocalizing about some objects or events, provide a context for communication that is very different and according to

some theories underlying cognitive basis for language. Pointing and gestures generally serve as a paralinguistic form of communication. Gestures seem to point the way to early language development. During the first year and a half post natal life, until they have learned enough words to use as a form of communication, babies use four pre speech form of communication: crying, cooing, babbling and gestures. Of these babbling is the most important for speech development because it becomes a basis for real speech. As is true of all stopgap measures, pre-speech forms of communication should be abandoned when their usefulness ends. If children continue to use them after they are developmentally ready to learn to speak.

Crying:

In early days of postnatal life, most vocalization consists of crying. Crying is one of the first ways in which the infant is able to communicate with the world at large. Through cries, babies make known their need for someone to relieve their hunger, pain, fatigue and other unpleasant bodily states and to satisfy their desire for attention. To make this communication easier for others to understand, nature provides for differentiation in the tonal quality of the cries as early as the third or fourth week of life

Cooing

The second pre speech form of communication where babies may make simple sounds during the early months of life such as grunts of pain or disgust, squeals of delight, yawns, sneezes, sighs, belching, coughing, guttural sounds and growls.. These are known as cooing. As the baby's neuromuscular mechanisms develop, explosive sounds caused by chance movements of vocal mechanism. The sounds depend largely on the shape of oral cavity and the way it modifies the stream of air expelled from the lungs and passing over the vocal cards.

Babbling

The number of sounds the baby can produce increases with definiteness of utterance of various sounds. At first vowels are combined with consonants, for example, "da", "ma", "ugh" etc. Later with practices, vocal control makes it possible for the baby to repeat these sounds by stringing them together. With the growing ability to control the flow of air over the vocal cords, the baby can pronounce sounds at will. Babbling is therefore , a form of vocal gymnastics, voluntarily produced. Babbling starts as early as the second month of life, after that, there is a

rapid increase with peak between sixth to eighth month. Babbling gradually gives way to use of words. The first stage of a person's first language acquisition process is referred to as "Babbling". This stage is self-explanatory in which a child begins to make random sounds with their vocal cords.

Gestures and Imitation

Gestures is non verbal and non vocal form of communication using bodily actions to communicate particular message. It includes movement of hands, face or other parts of body. Gestures allow to a variety of feelings and thoughts, from approval to rejection. Gesture processing takes place in areas of brain such as Brocas's and Wernicke's areas which are used by speech processing.

The ability to imitate action of others is an important mechanism for social learning of infants and for acquiring new knowledge. Children learn to speak by imitating the words and sentences from their parents or caregivers. Imitation helps firm up their knowledge and helps to learn the language structure.

Holophrastic

The second stage of first language acquisition is the One-Word stage or Holophrastic stage. At this stage, a child can begin to utter recognizable words or at least phonemes that resemble words or simple phrases. Children develop these singular words through association and experience.

Two-Word stage

The third stage of first language acquisition is called the "Two-Word" stage. The child begins to develop more complex phrases with multiple words which form a more complete thought than in the previous stage. The child can better define items and personal belongings by combining two words at a time.

Telegraphic stage

The fourth stage of first language acquisition is referred to as the "Telegraphic" stage. During this stage, the child's analytical skills enhance and their ability to form complete sentences emerges. Their words have more of a purpose rather than simply identifying objects and people

like in the previous stages. At this point in a child's life, roughly age two, they begin to acquire new words more rapidly and their vocabulary increases at a rate of as many as 10 words per week.

Characteristics of Children's Language

- Children's language deals with present and is egocentric.
- Child does not know the parts of speech.
- Language is unique to the child's age.
- Children are active participants in their own language learning.
- Use of speech is not imitative but productive and creative.
- Language development is a process of maturation.

6.2 Chomsky's Nativist perspective

The Nativist theory is a biologically based theory, which argues that humans are pre-programmed with the innate ability to develop language. Noam Chomsky is the main theorist associated with the Nativist perspective. Before Chomsky's time, language development was largely accepted as being purely a cultural phenomenon that is based solely on imitation. Chomsky felt differently. He believed that greater attention should be given to children's innate ability to learn language. He came up with the idea of the **Language Acquisition Device (LAD)**. The LAD is a language organ that is hardwired into our brains at birth. Because of this, we are born with the ability to understand and develop language. Once a child is exposed to language, the LAD activates. It allows them to understand the rules of whatever language they are exposed to.

Further, he hypothesizes that every child is born with a hard-wired LAD, so they are born with an understanding of the rules of a language; they simply need to acquire the vocabulary. The role of the child is to be equipped with biological LAD, so the child plays a major role in acquisition. However, the language used by the society merely triggers LAD. Children need to have access to samples of a natural language to activate the device. Once the language acquisition device is activated, children discover the structure of the language to be learned. They discover it

by matching the innate knowledge of universal grammar to the structures of the particular language in the environment. Chomsky describes the child's mind as a black box and what happens in this black box will not be examined. In all, the language acquisition device must exist to help children to acquire language.

This theory came about as children have been observed to pick up grammar and syntax without any formal teaching (in spoken language). They seem to learn these fundamentals of their native language(s) purely from the input around them. Chomsky believes that the LAD helps children decipher the grammatical structures of their native language(s), subconsciously mapping new lexical items to their corresponding word class and syntactic position. The LAD could in theory mean that children while possessing this part of the brain could easily pick up the grammatical structures of any input language as they already have the building blocks in their mind.

Stages of language development

1. Response to language:

- Showing response to the verbal stimulus

2. Vocalization

- 3-4 months child starts cooing and babbling
- Babbling increases with age and peaks around 9-12 months
- Physical maturation plays an important role for babbling

3. Word Development

- Separation of noises heard into speech and non-speech.
- Separation of speech noises into words and sounds that form them.

4. Sentences

- Starts from 2 years
- Talking simple, complete sentences

5. Elaboration

- Elaboration includes description, narration, explanation and communication.
- Having conversations through dramatic play

6. Graphic Representation

- Starts from 5-6 years

6.3 Bilingualism and Multi-lingualism

Monolingualism – The ability to speak only one language proficiently.

Bilingualism – The ability to speak two languages proficiently (though not necessarily perfectly).

Multilingualism – The ability to speak many languages proficiently (though not necessarily perfectly).

Second language acquisition, the first stage is referred to as “Preproduction”. During this stage, the child has minimal comprehension of the language and cannot make sense of words, neither in understanding nor speaking. Much like first language acquisition, non-verbal communication is important during this stage because the individual cannot yet effectively communicate their desires through language. Typically during this stage, a student would be able to point and nod ‘yes’ and ‘no’ in response to very basic questions and prompts.

The third stage of second language acquisition is referred to as “Speech Emergence”. Similarly to the third stage of first language acquisition, the child can construct simple phrases and communicate basic ideas.

Similarly, the fourth stage of second language acquisition is called “Intermediate Fluency” in which the child is able to form complete thoughts and sentences. Their grammatical errors reduce and they make more of a conscious effort to speak correctly.

Home language vs School language

A **home language** is a language (or the variety of a language) that is most commonly spoken by the members of a family for everyday interactions at home.

School language is the language used in textbooks, in classrooms, and on tests. It is different in structure and vocabulary from the everyday spoken English of social interactions.

When children are expected to learn two languages simultaneously, they must learn two different words for each object they name and for every thought they wish to express. They must learn two sets of grammatical forms and they must learn how to pronounce same letters of same letter combinations differently. When learning the second language is begun after the first has

progressed to the point where it can be used automatically, the tasks involved in learning the second language are still far from easy. The reason for this is that conflicts in pronunciation, in Grammar and in word associations will be confusing. In addition the speech mechanism is not so easy to control as it was when children were younger. Consequently learning to pronounce words in different languages is for more difficult than learning to pronounce new words in the language children or accustomed to uses.

Bilingualism children are exposed from birth to two languages These children seem to develop two languages separate with little interference from other language. When children learn two languages simultaneously do make some temporary mistakes, for example, children apply a rule from one language to the speech in another. These children have smaller vocabularies of language during the early years of learning and slight delay in language development compared to the monolingual children but the age of 8 they are typically no difference. Becoming proficient in two languages requires more effort than learning one language.

Bilingualism and multilingualism provide an enormous number of advantages and opportunities at both individual and societal levels. Bilinguals or multilingual individuals have more improved cognitive abilities and have proven to be more creative and apt with respect to flexible thinking ability. Bilinguals and multilingual are better equipped for information processing.

6.4 Speech problems in children.

A **speech disorder** is a problem with fluency, voice, and/or how a person says speech sounds.

- **Fluency disorder** - an interruption in the flow or rhythm of speech characterized by hesitations, repetitions, or prolongations of sounds, syllables, words, or phrases.
- **Articulation disorder** - difficulties with the way sounds are formed and strung together, usually characterized by substituting one sound for another (wabbit for rabbit), omitting a sound (han for hand), and distorting a sound (ship for sip).

- **Voice disorder** - characterized by inappropriate pitch (too high, too low, never changing, or interrupted by breaks); quality (harsh, hoarse, breathy, or nasal); loudness, resonance, and duration.

Significant difficulties faced by children with **Speech Disorders**

- **Speech production:** Talking by making the sounds of our language by coordinating breathing and voice with movement of the jaw, lips, cheeks and tongue in different positions.
- **Speech processing:** Recognizing important features of the sound of someone talking.

Types Of Speech Impairments:

There are **three basic types** of speech impairments:

- a) **Articulation disorders** are errors in the production of speech sounds that may be related to anatomical or physiological limitations in the skeletal, muscular, or neuromuscular support for speech production. These disorders include:
 - **Omissions:** (bo for boat) - The child leaves a particular sound because he either cannot produce it at all, cannot produce it correctly or cannot use it properly.
 - **Additions:** This occurs when an extra sound is added to a word.
 - **Substitutions:** (wabbit for rabbit) - This occurs when the child consistently substitutes one sound with another.
 - **Distortions:** (shlip for sip) - Here, the actual sound of the syllable is distorted and an inexplicable sound is produced.

- b) **Fluency disorders** are difficulties with the rhythm and timing of speech characterized by hesitations, repetitions, or prolongations of sounds, syllables, words, or phrases. Common **fluency disorders** include:
 - **Stuttering:** rapid-fire repetitions of consonant or vowel sounds especially at the beginning of words, prolongations, hesitations, interjections, and complete verbal blocks. This is a disorder wherein the person repeats the first half of a word, or prolongs words and syllables

(generally vowels) or gives involuntary pauses in between the words. It can be both developmental (that begins in childhood) or acquired (caused due to other disorders like Asperger's syndrome).

- **Cluttering**: excessively fast and jerky speech. Cluttering speech disorder affects the fluency of speech. It occurs because the person speaks very fast or repeats things many a time to make it comprehensible. There is no distinct cause for cluttering. It may occur due to drug abuse or prolonged illness.
- **Dysarthria**: It is commonly known as slurred speech. The speech is slow or inaccurate. It is generally caused by stroke, multiple sclerosis or brain tumor. This leaves the muscles in the mouth or tongue weak or paralyzed and it becomes difficult to control them.
- **Lisps**: It is also known as stigmatism. This occurs when the person is unable to produce a specific speech sound. It is of three types:
 - *Interdental*: This occurs when the tongue comes in between the teeth at the time of speech.
 - *Lateral*: A wet sound is produced because air escapes from the sides of the tongue.
 - *Palatal*: This happens when the mid section of the tongue touches the soft palate.
- **Dysprosody**: It is a rare **speech disorder**. Here, the rhythm, modulation, timing and intensity of speech is disrupted. Sometimes also referred to as foreign accent syndrome, its causes have not been fully understood. It may be a result of Parkinson's disease, tumor or stroke that affects the brain.

c) **Voice disorders** are problems with the quality or use of one's voice resulting from disorders in the larynx. Voice disorders are characterized by abnormal production and/or absences of vocal quality, pitch, loudness, resonance, and/or duration.

i. Vocal quality

- a) **Phonation** - Production of sound : Breathiness, hoarseness or huskiness due to the failure of vocal chords. Correct vibrations in the air flow, because of small growth structures – nodules, nodes or contact ulcers, irregularity or paralysis of one of the

chords - so too much air will escape and predominate over phonation resulting in breathiness or huskiness.

b) Resonance - De-nasal and Nasal

ii. Vocal intensity – Loudness and softness

iii. Vocal pitch

6.5 Factors affecting language development

General Health and Physical Status:

General physiological condition and Motor development influence language development. Severe and prolonged illness and poor health particularly during the first two years of life retards the development of speech undoubtedly. Slightly deaf children and children who are hard of hearing may have slow speech development. Delay in speech development may be due to deafness. If a child does not start his first word by the requisite time his ear and vocal cord should be examined by a specialist.

Intelligence and Cognitive Development:

Language and intellectual development are so highly correlated that it is said ‘The child’s speech is the best single indicator of his I.Q.’ Children of superior intelligence talk early and are advanced in every phase of language development. Children of low intelligence are slow in their language development. The ability to know the meaning of words and to gain from language symbols suffers because of difference in I.Q. Mentally alert young children usually talk early. They also understand or comprehend early what is communicated to them through language.

Learning and Maturation:

Child’s language development depends a lot on learning and maturation. In fact, the interaction of these factors is crucial in determining the language development of the child. With the increase in age the vocal cord of the child matures and his learning also increases. By the interaction of these two factors language develops.

Environment:

It has been established through research that favorable and stimulating environmental conditions improve the development of early speech and unfavorable environment retards it. The role of

environment is therefore of extreme importance in the development of language. Even the effects of an stimulating environment on speech development are quite lasting and more or less permanent. The verbal ability is restricted and inhibited in poor and an illuminating environment where the child does not get any encouragement to speak.

Number of siblings:

Some doctors and scientists suggest that children who come from one-child homes tend to have a stronger grasp on the understanding and use of language. This is because there is no competition for the attention of parents or caregivers, and adults tend to communicate with single children in a more fluent manner, thereby setting a better example. Others argue, however, that the opposite is true. More siblings can mean more opportunities for language use, which can result in quicker and stronger language development.

Gender:

Gender has been known to play a role in a child's language development. Around the age of two, girls tend to start developing language at a faster rate than boys. They begin to communicate more fluently, and understanding of the spoken language develops quicker. This is sometimes attributed to children's relationships or closeness to their parents.

Motivation:

If a child has no desire to communicate or understand the world around her or him, there will be a lack of language development. Until he sees the value and need for use of the language, development may be slow.

6.6 Milestones in Language Development

Age	Receptive Language (Understanding)	Expressive Language (Talking)
Birth to 3 months	<ul style="list-style-type: none"> ▪ Responds to sounds. ▪ Smiles and/or verbalizes when spoken to ▪ Quiets to familiar voices 	<ul style="list-style-type: none"> ▪ Coos (prolonged vowels in a sing song manner) ▪ Different cries (hunger, attention) ▪ Makes gurgling sounds
3 to 6 months	<ul style="list-style-type: none"> ▪ Searches for speaker and sounds ▪ Frightened or upset by angry voices & smiles with friendly voices 	<ul style="list-style-type: none"> ▪ Vocal turn-taking ▪ Hand, nonspeech, and vocal imitation

	<ul style="list-style-type: none"> ▪ Localizes/searches for and responds to sounds ▪ Anticipates feeding at the sight of a bottle 	<ul style="list-style-type: none"> ▪ Produces raspberries and sound play ▪ Early lip and tongue sounds-p, m, b, ▪ and d
6 to 9 months	<ul style="list-style-type: none"> ▪ Responds to 'no' ▪ Recognizes and responds to name ▪ Responds to 'come' ▪ Anticipates what will happen next ▪ Responds with a gesture for 'up' and 'bye' 	<ul style="list-style-type: none"> ▪ Smiles and vocalizes to self in mirror or to a moving object ▪ Sings to familiar songs, with and without true words ▪ Says things like: ma, da, ga, ba, anddada, mama, baba (no specific meaning) ▪ Uses gestures, pushing, or pulling to communicate ▪ Vocabulary of 1 word
9 to 12 months	<ul style="list-style-type: none"> ▪ Follows simple commands like 'sit down, come here, give it' ▪ Recognizes and looks at common objects, pets, and people when named ▪ Participates in games like peek-a-boo and patty-cake 	<ul style="list-style-type: none"> ▪ Uses jargon with inflection and pauses ▪ Says mama, dada, bye-bye, no ▪ Imitates speech and animals sounds ▪ Says 1 word at 9 months, 2 words at 10 months, 3 words at 11 months, 4 words at 12 months, and 3 words other than mama and dada at 13 months
12 to 15 months	<ul style="list-style-type: none"> ▪ Understands and identifies two words/objects in the following categories: toys, family members, clothing ▪ Attends to a book or toy for 2 minutes and can identify common objects in the book ▪ Identifies 1-3 body parts ▪ Enjoys music, social games, and finger plays 	<ul style="list-style-type: none"> ▪ Says 5+ true words, 7+ by 15 months (some sources indicate 10-19 words, e.g., all done, more). ▪ Uses jargon and true words when talking ▪ Uses gestures and vocalizations to express wants and needs
15 to 18 months	<ul style="list-style-type: none"> ▪ Identifies 4-6 body parts or clothing items on a doll, self, or adult ▪ Follows 2 step commands (e.g., get the baby and put it in the bed) ▪ Understands 50 words 	<ul style="list-style-type: none"> ▪ Says 15+ words with specific meaning by 18 months ▪ Repeats words overheard ▪ 3-4 new words each month ▪ Starting to use words rather than gestures ▪ 50% of utterances are nouns; omits

		final consonants in words, e.g., ba for ball or mo for more
18 to 21 months	<ul style="list-style-type: none"> ▪ Understands and identifies two words in the following categories: family friends, things outdoors, descriptive words (hot), household items, pronouns, and places ▪ Understands verbs in sentences (eat, drink, sleep) ▪ Understands more complex sentences(e.g., After daddy gets home, we will call grandma) 	<ul style="list-style-type: none"> ▪ Imitates words heard at the end of sentences and 2-3 words phrases ▪ Speaking vocabulary of 20+ words. ▪ Starts to use 2-word phrases ▪ Uses ‘no’ and one pronoun (my, mine, me, you) ▪ Says ‘hi’
21 to 24 months	<ul style="list-style-type: none"> ▪ Understands 300 words and is learning new words daily ▪ Follows new, less routine commands ▪ Easily points to body parts 	<ul style="list-style-type: none"> ▪ Uses 30-50 words of specific meaning at 21 months and more than 50 words at 24 months ▪ Uses 2-word phrases the majority of the time and 3-word phrases some of the time ▪ Knows and says full name ▪ Talks about recent experiences ▪ Uses plural by adding ‘s’
24 to 27 months	<ul style="list-style-type: none"> ▪ Identifies objects by their use-drink out of, sleep in, sit on, eat with ▪ Knows difference between big/little, in/on, one/all, give/don’t give ▪ Understands the quantity of ‘one’ 	<ul style="list-style-type: none"> ▪ Uses 3-words statements (27 months) Asks for help with personal needs ▪ (washing hands, getting a drink) ▪ Recites portions of nursery rhymes and songs ▪ Uses a question inflection
27 to 30 months	<ul style="list-style-type: none"> ▪ Points to picture when given a function of the object (e.g., point to the one that meows) ▪ Identifies colors ▪ Understands part/whole relationships(e.g., point to the tail of the cat) 	<ul style="list-style-type: none"> ▪ Names 1 color ▪ Names pictures in respond to a question ▪ Answers what, where, and yes/no questions ▪ Uses verb + ing (eating, sleeping, crying) ▪ Uses the past tense (talked)

30 to 33 months	<ul style="list-style-type: none"> ▪ Fully understands the concepts of 'one' and 'all' ▪ Understands descriptive concepts like heavy, empty, same ▪ Groups object (animals, cars, food) 	<ul style="list-style-type: none"> ▪ Uses plurals (cats, cookies), consistently ▪ Uses prepositions (in, on, under) ▪ Tells how an object is used and about what he/she has drawn
33 to 36 months	<ul style="list-style-type: none"> ▪ Completes 3-step commands. ▪ Wants to know why and how things work ▪ Responds to why and when questions 	<ul style="list-style-type: none"> ▪ Talks in 4-5 word sentences. ▪ Uses plurals other than by adding 's' (feet) ▪ Uses negatives other than 'no' (never, won't, can't) ▪ Starting to count

Language Development in Early Childhood

The child can make sentences and learn the use of pronouns, adverbs and other connecting words – where, why, when, what, who, which and to use the negatives in several ways. Syntax is usually almost like adults. They include all parts of speech. Later on they use more complex and compound sentences with greater frequency as years increase.

Language is the transmission and reception of ideas and feelings through verbal symbols. The striking characteristic of language is that infants acquire all the main forms of language and speech by the end of the second year. The ability to communicate with others through speech begins at a very early age and opens up many new advances of learning.

Children normally do not begin to speak meaningfully until after the first year of life, but such speech is preceded by various forms of vocalization called pre speech that distinguish the different types of cry signifying hunger, pain and discomfort. There are individual variations in language development due to various factors. Children's language development is aided with adult's speech as they like to imitate. Hence, children should have a good model to imitate.

The development of language gives to the young child a new tool and power to deal with his environment. The environment consists of living and non living things. The process of language learning which begins early in infancy increases at a rapid rate during the pre-school

years. The increase in the use of words makes communication with others more meaningful. The child uses the language to talk to himself and others. The work of Piaget in regard to language has focused attention on the ego-centric and socialized functions of the language. The child uses various language strategies for performing various functions.

Summary

Speech is the only form of language, mostly useful and most widely used form. It is also the most difficult skill to master because of its cognitive aspect. If speech is to be useful form of communication, the speaker must use words that are meaningful to others and must be able to understand the meaning of words used by others. Speech contributes to children's personal and social adjustments by satisfying their needs and wants by giving them attention from others. Before children are physically and mentally ready to learn to speak, nature provides, four stopgap forms of communication, crying, gestures, cooing and babbling which form foundation for language development.

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Check your progress

Discuss about different types of pre-speech forms
What are the different types of speech problems
Fill in the blanks

1. Repetitive vowel sounds such as ahh, ooh at 2 months is called -----.
2. Children's ability to understand language -----.
3. Individual words that convey as much meaning as sentences-----.
4. Speech contain only the most essential and informative word, Child's early sentences-----.
5. The ability to speak many languages proficiently-----.

Match the following

Speech Disorder	Characteristic
a. Lisping	Rapid and Confused speech
b. Slurring	Letters sound substitutions
c. Stuttering	Indistinct speech due to inactivity of the lips tongue
d. Cluttering	Hesitant repeat speech

Unit 7: Emotional Development



Introduction

Emotional development is a child's ability to understand the feelings of others, control their own feelings and behaviors, and get along with peers. Emotions are a part of complex set of interconnected feelings, thoughts and behaviour. Emotions are the feelings, both physiological and psychological that people have in response to events that are personally relevant to their needs and goals. The word emotion is used to imply a system of feelings instead of a single feeling. It is used to describe certain behaviors such as fear, anger, joy, disgust and affection. Emotion is related in some way to motivation as an energizer of behavior and emotions can be classified into fear, anger, affection and others. Emotions are universally seen in all cultures and they seem to have an adoptive function. A child's emotional development is as important as their cognitive and physical development. It is important to know that children are not born with emotional skills. It is the role of the parents, caregivers, and teachers of children to teach and foster these abilities.

Emotions have several components. First, emotion is more than a behavioral expression. An emotional response such as smile does not always mean that the person is happy. Children may

feel one emotion but display another. This reflects an ability to regulate emotion that develops over childhood. Although facial expressions are perhaps the best way to read people's emotions, we can also recognize other people emotions by their voice and body language. Emotions are not independent of cognitions. In fact the same physiological arousal may represent different emotion depending on how we interpret the situation. We use expressions such as happy, sad, angry, and afraid to reflect subjective feelings that belong to wide spectrum of emotions.

The first theory and scientific study of emotions came from Charles Darwin, who proposed that facial expressions and emotions seen in both humans and animals were based common physiological system and thus reflected a continuity of function. According to Darwin emotions are universal and have species specific adaptive function.

Darwin described six basic emotions as identified by facial expression (surprise, anger, sadness, disgust, fear, and some adaptive benefit to the individual person. Consistent with the Darwin theory many researchers have argued that basic emotions such as joy, disgust, fear anger and sadness are universal and not the result of learning. We may have to learn what to fear. This is referred as discrete emotion theory, the belief that basic emotions can be distinguishable by an individual's facial expression and biological processes.

7.1 Functions of Emotions

There are three main functions of emotions

1. Adaptive
2. Social
3. Motivational

Adaptive Function

One of the most important functions of emotions is preparing the body for action. In this sense, each emotion, regardless of any positive or negative connotations, is useful in its own way. These emotions allow to mobilize and have enough of the necessary energy to complete a task or flee when needed. Charles Darwin himself pointed out the relevance of emotions as an adaptive mechanism. Darwin considered emotions as facilitators of appropriate behavior

Primary Emotion	Adaptive Function (use)
Happiness	Feeling of closeness to others
Disgust	Rejection
Anger	Self-defense
Fear	Protection
Surprise	Exploration
Sadness	Reintegratio

***Example:** when we see someone nearby crying, we have a natural emotional response that makes us approach the person and take interest in why they're upset.*

Social function

Phrases like “I’m embarrassed” “I feel overjoyed” “This makes me nervous” refer to emotional states. Emotions communicate our emotional state of mind and express what is going on inside and also facilitate social interaction. Emotions help to predict behavior, therefore emotions are very useful and necessary in interpersonal relationships. Sometimes it seems to be difficult to define emotions verbally. There are other ways to observe how someone is feeling besides asking them, since it may be difficult for the person to express exactly how they’re feeling. By observing body posture or facial expressions, clearly helps to understand, how someone is feeling than by asking them.

Expressing emotions and showing our feelings in a healthy and controlled way is beneficial as it will help to strengthen our social support network.

Social contagion

The concept of social [contagion](#) may be one of the reasons why we’re more attracted to positive people than to negative ones. Social contagion refers to the idea that emotions can be spread from person to person. Humans are genetically predisposed to social contagion. We let ourselves get carried away by the emotions of others. However, there are people who are more able to both transmit and capture others’ emotions.

Often, a certain posture or expression is more informative than “I’m sad”.

However, even not communicating emotions or preventing ourselves from expressing certain emotions can occasionally play a social function. This is particularly true in cases where hiding an emotion or not showing how we really feel helps to keep a friendship alive. In these cases, “the cure is worse than the disease”. Sometimes, it’s better to withhold how we really feel so we don’t hurt or upset the other person.

Motivational function

Emotions also have motivation function. The relationship between motivation and emotions is bidirectional. All motivated behavior produces an emotional reaction. On the other hand, emotions fuel motivation. Motivation often influences how we display our emotions, to what intensity, and how we let them guide our behavior in our direction or another. Emotions are the primary system for motivating human behavior. They essentially are the catalyst for creating motivated behavior. This is also true for the processes of perception, reasoning and motivating action.

For example, if we feel happy and enjoy having a cup of coffee with someone, we’ll feel more motivated to spend time with that person again.

On the contrary, a bad experience with someone will cause a negative emotional reaction that will make us think twice before agreeing to see that person again.

Infants exhibit two emotional responses, attraction and withdrawal. They show attraction to pleasant situations that bring comfort, stimulation, and pleasure, and they withdraw from unpleasant stimulation or physical discomfort. Infants exhibit social engagement in the form of social smiling as they respond with smiles. To engage their parents in interactions infants use social smile. Pleasure is expressed as laughter and displeasure becomes more specific as fear, sadness, or anger.

Anger is often the reaction to being prevented from obtaining a goal, such as a toy being removed. In contrast, sadness is typically the response when infants are deprived of a caregiver. Fear is often associated with the presence of a stranger, Emotions are often divided into two

general categories: Basic emotions (primary emotions), such as interest, happiness, anger, fear, surprise, sadness and disgust, which appear first, and self-conscious emotions (secondary emotions), such as envy, pride, shame, guilt, doubt, and embarrassment. Unlike primary emotions, secondary emotions appear as children start to develop a self-concept, and require social instruction on when to feel such emotions. The situations in which children learn self-conscious emotions varies from culture to culture.

Anger

It is a complex emotion. The most important stimulus for the arousal of anger in a child is some kind of blocking of his motives. At a very early age the child discovers and makes use of complex techniques for protecting and enhancing the self-image. The child becomes very angry if something threatens his self-images. Anger is essentially a defensive reaction and is designed to protect somewhat tender image of the self-hood

Fear

Anger and fear are closely related. Emotional reaction of the fear can be most devastating and may promote the development of the unhealthy personality. But it is an important defensive process. In showing fear reaction the child not only shows the normal capacity to react to his emotions but may save his life from a danger which is real. The tremendous raw energy produced in the form of fear is a source of strength, protection and advancement.

Anxiety

Anxiety is a blend of many emotions. It is more generalized, and expresses many situations which are likely to serve as reservoirs of anxiety. Anxiety arises chiefly from strong impulses that are blocked by social taboos.

Major approach to the problem of anxiety and its prevention is the acceptance of the child as a whole including its loopholes and worries. It is in fact very easy to add to the burden of the child, deliberately or inadvertently, by making the child feel guilty or anxious about petty things.

Joy and Happiness

It has been described as a condition of release of tension. When the child gets vacations or a holiday a lot of tension is released and he gets the sense of joy. Similarly in a game or in a party as the excitement goes on increasing the child feels more and more happy. It is a gleeful excitement.

The important sources of pleasure, joy and happiness for children include satisfying of physical appetites, pleasures associated with food and drink, fragrant odours, comforts of rest and relaxation etc. The emotional response of joy and happiness includes a good deal of shouting, laughing and running about.

Love and Affection

Love between a child and his mother is not only due to her being a source of food but also due to her being a source of bodily contact for example playing in her lap, sleeping with her. When a child is taken to a strange place he usually remains composed and happy as long as his mother is nearby. If the mother gets out of sight the child is often seized with fear and distress. In the development of affectionate relationship the sense of bodily contact appears to take a special significance.

Maturation and learning determine the development of all aspects of human behavior. Emotional response is more in case of children than in the case of adults. With maturation and learning the child learns through experience, the societal impact and tries to restrain frequent emotional expressions. With advancing age and social conformity some emotions become weaker and some stronger.

Temperament and children's behavior

Temperament is the term that developmental psychologist use to refer personality in infants and young children. Temperament can be defined a stable profile of mood and behavior with a biological foundation that emerge early in development. Temperament has a clear biological, constitutional or inherited basis, it is present and observable at birth or shortly thereafter and it is relatively stable over time. Thoms and Chess(1990) identified nine dimensions of temperament which are, activity level, approach/withdrawal, adaptability, rhythm city, quality of mood, attention span persistence and distractibility. From these infants were classified into three broad categories of temperament: easy, difficult and slow to warm up.

Easy babies: Described as the children with regular patterns of sleeping, eating, and toileting. They easily adjusted to new situations and had a generally positive mood. They were eager to approach objects, people and they reacted to events with low t moderate intensity.

Difficult babies: Described as the children who behaved just opposite of easy babies. Their bodily functions were unpredictable; they had generally negative moods, difficulty in adjusting to new situations, and reacted to events with high levels of intensity.

Slow to warm up babies: Described as infants with slow pattern of reaction, they had difficult time to adapt to new situations, showed a tendency to withdraw in novel situations and were generally low in activity. In many ways slow to warm up babies were like difficult babies, although they become easier as they grew older. Easy babies adjusted better and had fewer problems in school than slow to warm up and difficult children. Temperament interacted with child's immediate environment, and this interaction determined psychological adjustment.

Negative emotionality: A dimension of temperament linked to anger/irritability, fearfulness and sadness.

Surgency (Extraversion): A dimension of temperament related to positive affect and activity, reflected to high activity level, smiling and laughter, and high intensity of expression of pleasure.

Orienting /Regulation: In temperament theory, the ability to regulate one's emotions, effortful control in early childhood, which is linked to the capacity to inhibit a dominant response and reorient attention to another goal.

Effortful control in temperament theory, the ability to regulate one's emotion, effortful control is necessary for focused attention and is involved in regulating attention and aspect of information processing.

7.2 Milestones in emotional development; infancy changes in emotional expression ; temper tantrums; moving towards expression of emotions in socially approved ways.

The early years of child is important for development in all domains including emotional development. By paying attention to children's behaviour, helps to gauge emotional development and this helps to understand how they are feeling and how they understand their world.

NEWBORN

The first emotion that is evident in the newborn is general, undifferentiated type of response i.e. excitement. This behavior soon changes to some specific types of emotional responses. The next emotion to be detected after excitement is distress; this is observed by the end of the first month.

- Shows feelings by crying.
- Uses face and body to show you how he/she is feeling.
- Shows interest in watching your face.
- Quiets in response to your touch.



1 MONTH

- Shows feelings by crying.
- Shows interest in watching your face.
- Quiets in response to touch.



2 MONTHS

The feeling of delight can be noted. Between 3-6 months anger, disgust and fear are reflected. The two fears that seem at birth are sudden withdrawal of support of the body and a reaction to a loud voice/ harsh noise. All the other fears are learned.

- Shows feelings by crying or smiling.
- Begins to smile at parent.
- Follows parent with eyes.



3 MONTHS

- Quiets to familiar voice or touch.
- Smiles at people.
- Enjoys being hugged and cuddled.



4 MONTHS

- Smiles spontaneously, especially at people.
- Shows excitement by waving arms and legs.
- Calms and stops crying when comforted (most of the time).
- Enjoys playing with people and imitating smiles and frowns.

6 MONTHS

Smile appears but this is indiscriminately used regardless of situation. By end of this month it raises its frequency and it differs in the social context and care.

- Knows familiar faces and begins to know if someone is a stranger.
- Enjoys playing with others, especially family (such as “peek-a-boo”).
- Likes to look at self in mirror.
- Responds to other people’s emotions and often seems happy.
- Makes sounds to express happiness or displeasure.



9 MONTHS

Infant distress in response to being left by the mother appears. This is called *Separation anxiety*. (Separation from familiar persons produces more anxiety than from unfamiliar persons.)

- Shows feelings by smiling, crying and pointing.
- Prefers certain toys.
- Clings to familiar adults.
- Cries when parent leaves and is shy around strangers.
- Responds to own name.



12 MONTHS

- Prefers certain people and toys.
- Imitates sounds, gestures or actions to get parent's attention.
- Cries when parent leaves and is shy around strangers.
- Puts arm or leg out to help with dressing.
- Enjoys playing games like “peek-a-boo” and “pat-a-cake.”

Infants are capable of discerning emotional meaning underlying an adult's facial and vocal expressions and incorporate this meaning into their interpretation of the adult's behaviour. This is known as **Social referencing** (Observing emotional cues of others and using such cues to interpret the possible implications of an event for one self). For instance, if mother shows negative emotions such as weariness, infant may withdraw; on the other hand if she shows positive emotions infant is more likely to approach the situation with confidence.



18 MONTHS

- Shows interest in other children.
- Plays simple pretend, such as feeding a baby.
- Imitates your behavior.
- Tries new things with familiar adults nearby.
- Hands things to others as part of play.
- Shows feelings, for example, temper tantrums, fear of strangers, affection with familiar people or clinging to a familiar adult in new situations.
- Points to show things to others.

As the children grow older, they acquire a broader range of emotions. They also become increasingly aware of their own and others feelings. Changes that occur in the emotional responses are the products of complex interactions of maturation and learning. In early days of infancy children respond to emotional states of others. Ex. If one child cries, the other child also cries. It is called ***Emotional contagion*** (tendency for infants to cry spontaneously when they hear other infant is crying).



2 YEARS

- Plays briefly beside other children, and gets excited when with other children.
- Imitates others, especially adults and older children.
- Shows more and more independence.
- Shows defiance, such as doing what he/she was told not to do.

- Begins to play with other children, as in chasing one another.

Many babies show a pronounced fear of unfamiliar people. This is called **Stranger anxiety**. Usually this starts at 6 months and peaks at 8-10 months and generally disappears by 15 months. This is not universal characteristic of infancy. Infants exposed to limited variety and number of care-givers show more stranger anxiety than infants who are exposed to a diversity of people. (Stranger anxiety a wary or fretful reaction that infant often displays when approached by an unfamiliar person).



3 YEARS

Children can talk about their own emotional states and other's experiences and they can recognize emotions are connected to people's desires. **Self conscious emotions like** guilt, shame, embarrassment and pride.

- Shows concern and affection for others without prompting.
- Copies adults and friends (for example, runs when other children run).
- Takes turns in games.
- Separates easily from parents.
- Shows a wide range of feelings.
- Enjoys routines and may get upset with a major change.
- Dresses and undresses self.
- Enjoys helping with simple household tasks.
- Verbalizes toilet needs and may be toilet trained during the day.



4 YEARS

- Plays cooperatively with other children.
- Negotiates solutions to conflicts.
- Prefers playing with other children than playing alone.
- Enjoys doing new things.
- Becomes more creative in make-believe play.
- Confuses what's real and what's make-believe.
- Expresses likes and dislikes.
- Seeks new experiences.



5 YEARS

Wants to please friends.

- Wants to be like friends.
- Agrees to rules more easily.
- Likes to sing, dance and act.
- Knows the difference between fantasy and reality.
- Knows who is a boy or girl.
- Expresses likes and dislikes.
- Shows increasing independence.
- Seeks new experiences.
- Demonstrates both demanding and cooperative behaviors.

7.3 Erikson's theory of psychosocial development and stages ;social experiences in understanding emotions:

According to Erikson's theory, personality development goes through a series of 8 stages. Associated with each stage is a psycho-social crisis that the individual either successfully resolves or fails to resolve. The first 4 stages occur during infancy and childhood, the 5th stage during adolescence and the last 3 stages during adult years up to old age. Erikson theory describes the impact of social experience across the whole life span.

In each stage, the person confronts and hopefully masters new challenges. Each stage builds upon the successful completion of earlier stages. If the challenges of stages are not successfully completed it may be expected to reappear as a problem in the future.

The 8 stages in his theory are:

1. Trust vs Mistrust (oral sensory, Birth to 2 years)
2. Autonomy vs Shame and Doubt(muscular-anal, 2- 4years)
3. Initiative vs Guilt(locomotor-genital, preschool, 4 - 5 years)
4. Competence: Industry vs Inferiority(Latency,5 - 12 years)
5. Fidelity: Identity vs Role confusion(adolescence, 13 – 19 years)
6. Love: Intimacy vs Isolation(young adulthood, 20 – 24, or 20 – 39 years)
7. Care: Generativityvs Stagnation(middle adulthood, 25 – 64, or 40 – 64 years)
8. Wisdom: Ego integrity vs Despair(late adulthood, 65 to death)

1.Trustvs Mistrust (oral sensory, Birth to 2 years)

The first stage of Erikson's theory centres around the infant's basic needs being met by the parents and this interaction leading to trust or mistrust. Trust as defined by Erikson is "an essential truthfulness of others as well as a fundamental sense of one's own trustworthiness. The infant depends on parents especially the mother for sustenance and comfort. A child's first trust is always with the parent or the caregiver. If the parents expose the child to warmth, regularity, affection the infant's view of the world will be trust. If parents fail to provide a secure environment and to meet the child's basic needs; a sense of mistrust result. Development of mistrust can lead to feelings of frustration, suspicion, withdrawal and a lack of confidence.

2. Autonomy vs Shame and Doubt (muscular-anal, 2- 4 years)

During this age the child gains control over eliminative functions and motor abilities, they begin to explore their surroundings. The parent's patience and encouragement helps foster autonomy in the child. Children at this age like to explore the world around them and they are constantly learning about their environment.

At this age the children develop their first interests. For eg. A child who enjoys music may like to play with radio/i-pod, musical instruments. Highly restrictive parents, however, are more likely to instil in the child a sense of doubt and reluctance to attempt new challenges. As they gain increased muscular coordination and mobility, toddlers become capable of satisfying some of their own needs. They begin to feed themselves, wash and dress themselves and use the washroom.

If the care givers encourage self sufficient behaviour, toddlers develop a sense of autonomy – a sense of being able to handle many problems on their own. But if care givers demand too much, ridicule early attempts at self-sufficiency, children may instead develop shame and doubt about their ability to handle problems.

3. Initiative vs Guilt (locomotor-genital, preschool, 4 - 5 years)

Initiative adds to autonomy the quality of undertaking, planning and attacking a task for the sake of just being active and on the move. The child is learning to master the world around them, learning basic skills and principles of physics. Eg. Things fall down ,not up; Round things roll; learn to count, tie, speak with ease. At this stage the child wants to begin and complete their own actions for a purpose. Gilt is a confusing new emotion. They may feel guilty when this initiative does not produce desired results. Preschoolers face the challenge of initiative vs guilt. During this stage the child learns to take initiative and prepare for goal achievement, risk taking behaviours and roles. Eg. Crossing the road etc. By so doing the child may also develop negative behaviours. These are a result, developing a sense of frustration for not being able to achieve a goal as planned and may engage in aggressive behaviours such as throwing objects, hitting or yelling etc.

If parents, teachers encourage and support children's efforts and help them make realistic choices, children develop initiative-independence in planning and undertaking activities. Instead if adults discourage the pursuit of independence activities and dismiss them as silly and bothersome, children develop guilt about their needs and desires.

4. Competence : Industry vs Inferiority(Latency, 5-12 years)

Children at this age are becoming more aware of themselves as individuals. They work hard at “being responsible, being good and doing it right”. At this stage, children are eager to learn and accomplish more complex skills; reading, writing, etc. Children might express their independence by talking back and being disobedient and rebellious.

Erikson viewed the elementary school, years as critical for the development of self confidence. If children are encouraged to make and do things and are praised for their accomplishments, they begin to demonstrate industry by being diligent(hard work), persevering at tasks until completed, and putting work before pleasure. If instead children are ridiculed or punished for their efforts or if they find they are incapable of meeting their teachers’ and parents’ expectations, they develop the feeling of inferiority about their capabilities. At this age children start recognizing their special talents and discover their interests. They may begin to choose to do more activities to pursue that interest, such as joining a band if they are interested in music, a sport if they know they have athletic ability. If not allowed to discover their own talents in their own time, they will develop a sense of lack of motivation, low self-esteem and lethargy. They may become “couch potatoes” if they are not allowed to develop interests.

5.Fidelity: Identity vs. Role confusion (adolescence, 13-19 years)

Erikson proposed that most adolescents achieve a sense of identity regarding who they are and where their lives are headed. Erikson coined the term “Identity Crisis” as the identity in youth is different. This turning point in human development seems to be the reconciliation between “the person one has come to be” and “the person society expects one to be”. This emerging sense of self will be established by forging past experiences with anticipations of the future. Of all the 8 stages, this 5th stage corresponds to the “Crossroads”.

What is unique about this stage of Identity is that it is special sort of synthesis of earlier stages and a special sort of anticipation of later ones.

The problem of adolescence is one of role confusion – a reluctance to commit which may haunt a person into his mature years. There may be conflicts with adults over educational choices, career choices etc. According to Erikson, when an adolescent has balanced both perspectives of “What Have I got?” and “What am I going to do withit?” he or she has established their identity.

6. Love: Intimacy vs. Isolation(Young adulthood, 20-24 or 20-39 years)

At the start of this age identity vs. Role confusion is coming to an end. Young adults are still eager to blend their identities with friends. Erikson believes we are sometimes isolated due to intimacy. We are afraid of rejection such as being turned down or our partners may break up with us.

Once people have established their identities they are easy to make long term commitments to others. They become capable of forming intimate, reciprocal relationships(eg. Through close friendships or marriage) and willingly make the sacrifices and compromises that such relationships require. If people cannot form these intimate relationships a sense of isolation may result; arousing feelings of darkness and anguish.

7. Care: Generativity vs. Stagnation (Middle adulthood, 25-64 or 40-64 years)

Generativity is the concern of guiding the next generation. Socially-valued work and disciplines are expressions of generativity. The adult stage of generativity has broad application to family, relationships, work and society. In contrast, a person who is self centered and unable to help society move forward develops a feeling of stagnation – dissatisfaction with the relative lack of productivity.

8.Wisdom: Ego Integrity vs. Despair (Late adulthood, 65-death)

As age increases and one becomes senior citizens they tend to slow down on productivity and explore life as a retired person. It is during this time that they contemplate accomplishments and are able to develop integrity as leading a successful life. If they see life as unproductive, or feel that they did not accomplish their life goals, they become dissatisfied with life and develop despair, often leading to depression and hopelessness.

The final developmental task is retrospection: people look back on their lives and accomplishments. They develop feelings of contentment and integrity if they believe that they have led a happy, productive life. They may instead develop a sense of despair if they look back on a life of disappointments and unachieved goals. According to Erikson, Ego integrity is viewed as the key to harmonious personality development. Ego quality that emerges from a positive resolution is wisdom. Despair is the result of the negative resolution or lack of resolution of the final life crisis. This negative resolution manifests itself as a fear of death, a sense that is too short and depression.

7.4 Emotional intelligence; significance of Attachment; separation anxiety.

Emotional intelligence can be defined as appraisal and expression of emotions, regulation of emotions, and utilization of emotional information in thinking and acting. Another definition of emotional intelligence comprises the ability to manage the emotions and to utilize their strength. That is, individuals try to obtain positive results utilizing their emotions to regulate their behavior. Every human being has emotions but it is not enough to possess them. Emotional intelligence contributes to our appreciation and assessment of our and others' emotions, reflection of emotions' knowledge and energy to our daily life and work. Hence, individuals can be identified as "emotionally intelligent" provided that they can utilize their emotions to achieve their goals at work, in education, or daily life. In the conceptualization of the construct, Goleman (2000) proposed five dimensions of emotional intelligence. First three dimensions are related to self-management and the last two are about the management of interpersonal relationships. These dimensions have been identified as self-awareness, self-management, social awareness, empathy, and social skills. Self-awareness consists of knowing one's internal states, preferences, resources, and intuitions. This dimension contains the competencies of emotional self-awareness, accurate self-assessment, and self-confidence. Self-management involves the management of one's internal states, impulses, and resources to facilitate reaching goals. Social Awareness refers to being aware of others' feelings, needs, and concerns. Empathy is the basic skill in interpersonal relationships. Social Skills involves adeptness at inducing desirable responses in others. This dimension contains the competencies of leadership, communication, influence, change catalyst, conflict management, building bonds, teamwork and collaboration, and developing others. A person's identity takes its shape from relationships with environment starting from the beginning years of life. Bowlby, was the first to suggest a model of bond between mother and child and functions within this model. This bond helps the child who needs care to survive. Primarily, infant and mother are thought to have developed a coordinated relationship in which the infant's signals of distress or fear are noted by mother, who in turn, offers comfort and protection, as well as "a secure base", whereby from which the infant can explore the environment. Attachment is an emotional bond, comprises comfort, safety, and support. Bowlby defines attachment as a child being "strongly disposed to seek proximity to and contact with a specific figure and to do so in certain situations, notably when he is frightened, tired or ill."

Separation anxiety is typical in very young children (those between 8 and 14 months old). Children often go through a phase when they are "clingy" and afraid of unfamiliar people and places. This is typical in very young children (those between 8 and 14 months old).

Separation anxiety refers to excessive fear or worry about separation from home or an attachment figure. Separation anxiety is a normal stage in an infant's development, as it helps children understand relationships and master their environment. It usually ends around 2 years old, when toddlers begin to understand that a parent may be out of sight right now but will return later. The key feature of separation anxiety disorder, however, is when the anxiety exceeds what might be expected given a person's developmental level. Children with separation anxiety disorder may cling to their parents excessively, refuse to go to sleep without being near a major attachment figure, or require someone to be with them when they go to another room in their house. Children also commonly experience physical symptoms when they anticipate separation, such as headaches, nausea, and vomiting. When separation does happen, children may seem withdrawn, sad, or have difficulty concentrating on work or play.

7.5 Factors affecting emotional development

- **Temperament:** Emotions are influenced by interplay of temperament and environmental influences.
- **Cultural conditioning:** Emotional expressions are conditioned by what the culture permits and what it does not.
- **Need fulfillment:** Both physical and psychological needs dictate the emotions that are felt and expressed.
- **Parenting:** Parental expression of emotions, their acceptance and permissiveness are important for expressing emotions of the child.
- **Social influences:** Parents, teachers, friends and other significant adults are the models that the child imitates while expressing his emotions.
- **Learning and maturation:** As the child grows older, he learns to control and express emotions in socially acceptable ways.

Children in different cultures are often socialized in different ways. There are many influencing factors for children's emotional development. Some of them are culture, parenting style and temperament. They should be provided with good models for healthy emotional development.

Summary

Emotions and feelings play a great role during infancy and childhood .An individual's emotional development has a profound influence on his effectiveness and happiness as a person. Emotions can be both constructive and destructive. Excessive emotion disrupts actions and leads to destructive actions. One of the aims of child-rearing is to produce individuals who can meet the pain, sorrow and frustration that are inescapable in life without being overwhelmed by them and who can appreciate all the joys that life can offer. Proper emotional development prepares the individual to appreciate the pleasurable aspects of emotion and to cope with unpleasantness in a constructive manner. The well-developed personality should be expressive and emotionally responsive in a disciplined manner.

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Check your progress

Observe the emotions in children attending day care center and prepare script on Understanding and Promoting children's emotional development.

What do psychologists mean when using terms, emotions, temperament and personality.

Why emotions are considered important in child development and it is related to other aspects of child development.

Choose the correct answer from the options given below

1. The ability to understand the feelings of others, control their own feelings and behaviors, and get along with peers.
2. Emotional development
3. Language development
4. Social development
5. Maturation

2. Infant distress in response to being left by the mother is called

1. Attachment
2. Separation anxiety
3. Stranger anxiety
4. Fear

3. Many babies show a pronounced fear of unfamiliar people called

1. Fear anxiety
2. Emotion
3. Stranger anxiety
4. Separation anxiety

4. Feeling of wrong doing when a person sees his own action as having violated what is 'right'

1. Fear
2. Guilt
3. Shyness
4. Worry

5. Observing emotional cues of others and using such cues to interpret the possible implications of an event for one self is known as

1. Emotional development
2. Emotional cognition
3. Social referencing
4. Attachment

Unit -8: Social Development and Emergence of Self

Introduction

From the moment of conception, human beings undergo process of development. The term development means a progressive series of changes that occur as a result of maturation and experience. Development does not consist merely of adding inches to one's height or of improving one's ability. Instead, it is a complex process of integrating many structures and functions such as physical development, cognitive development and social development. And these domains of development are intertwined throughout life, each affects the other and each domain is important throughout life. Thus, development is unified process.

8.1 Patterns in social development:

Early social contact with significant adults and care givers; Social interactions with children ; learning of social skills and pro-social behavior.

Social development is a process, where by an individual's attitudes, skills, motives, standards and behaviour are shaped by the society, this behaviour are desirable and appropriate according to the society. Social development follows a pattern. Every child usually passes through certain phases to become socialized like their peer group.

Parents', other family members and significant peoples attitudes towards the developing child influence the social development of the child. Even marital adjustment between husband and wife considerably affects the social development of the child. Child's ordinal position among siblings also significantly influence the social developmental patterns.

8.1.1 Early social contact with significant adults and care givers

Early social experiences play a dominant role in determining the baby's future social relationships and patterns of behaviour towards others. And because the baby's life is centered around home, it is here that the formulations for later social behaviour and attitudes are laid. There is little evidence that people are inherently social or antisocial. Instead, whether they become introverted or extroverted depends mainly on their early social experiences.

Early social behaviour follows a fairly predictable pattern, though variations can and do occur as a result of health or emotional states or because of environmental conditions.

At birth, infants are non-gregarious in the sense that it makes no difference to them who attends to their physical needs. Infact, young babies can be soothed by a soft pillow as by human caresses. But at around the age of six weeks , a true social smile or a smile in response to a person rather than a tactile stimulus applied to the lips, which produces a reflex smile appears and this smile is regarded as the beginning of socialization.

At the age of two to three months , babies can distinguish people from inanimate objects and they discover that people supply their needs. They are content to be with people but discontented when left alone.

As the children get the age of four to five months they want to be picked up by anyone who approaches them. But they react differently to smiling faces and to scolding faces and to friendly and to angry voice. Once the children attain the age of six to seven months they differentiate between 'friends' and strangers. They smile at the friendly faces and show fear in the presences of strangers. This is the beginning of the 'shy age'. It is also the beginning of the 'attachment age' – the time when babies become strongly attached to their mother or mother substitute.

At the age of eight to nine months babies attempt to imitate the speech, gestures and simple acts of others.

Once the child turns one year of age he/she reacts to the warning 'no-no'. at the age of sixteen months to eighteen months children manifest negativism in the form of stubborn resistance to request or demands from adults by physical withdrawal or angry outbursts children start cooperating in a number of routine activities such as being dressed, fed, and bathed at the age of twenty two to twenty four months i.e two years.

There may be little variations among children with regard to patterns of social development during early years of babyhood. The way the parents attend the children together with child's temperament and the quality of the parent –child relationship , may help predict how hard or easy it will be to socialize a particular child (Kochanska, 1993, 1995,1997a,1997b) from the above observations we can understand that, during first year of babyhood, children are in a state of equilibrium which makes them friendly, early to handle and pleasant to be with. Around the

middle of the second year, equilibrium gives way to disequilibrium, and difficult to handle. Before babyhood is over, however, equilibrium is restored and children again exhibit pleasant and social behaviour.

8.1.2 Social interactions with children

The pattern of social responses of children to adults differs from that of social responses to other children. babies make first responses to adults and responses to other babies appear slightly later.

At the age of four to five months babies try to attract the attention of other babies. Babies bounce their hands and legs up down, flows bubbles and laughs to attract the attention of other children when other children are in proximity.

At the age of six to seven months babies smile at other babies and show an interest in their crying.

Once babies obtain the age of nine to thirteen months babies attempt to explore the clothes and hair of other babies. They imitate other babies behaviour and vocalization and cooperate in the use of toys though they tend to become upset when other babies take their toys.

As the babies attain the age of thirteen to eighteen months fighting over the toys decreases, and the baby shows more cooperation during play and a willingness to share their toys.

After attaining the age of eighteen to twenty four months babies show more interest in playing with other babies and uses play materials to establish social relationships with them.

Although parents exert a major influence on children's lives, relationship with other children –both in the home and out of home are important during babyhood and later.

Siblings

Siblings relationship play a distinct role in socialization different form those with parents or peers(Vandell, 2000). Sibling conflicts can become a vehicle for understanding social relationships (Dunn & Munn , 1985; Ram & Ross , 2001).

Babies usually become attached to their older brothers and sisters. The more securely attached each sibling is to the parents the better they get along with each other (Teti & Ablard ,1989). Nevertheless, as babies begin to move around and become more assertive, they inevitably come into conflict with siblings. Sibling conflict increases dramatically after the younger child reaches 18 months of age (Vandell & Bailey ,1992).

As cognitive and social understanding grows, sibling conflict tends to become more constructive and the younger sibling participate in attempts to reconcile. Constructive conflict helps children recognize each others needs, wishes, and point of view and it helps them learn how to fight, disagree and compromise within the context of a safe, stable relationship (vandell & Bailey ,1992).

Sociability with Non siblings

Infants and more to toddlers show interest in people outside the home, particularly people their own size. During the first few months , they look, smile, and coo at other babies (T.M . Field ,1978). During the last half of the first year they increasingly smile at , touch, and babble to another infant (Hay, Pedersen ,& Nash,1982).

At about One years, when babies are learning to walk and to manipulate objects, they pay more attention to toys and less to other people (T.M.Field & Roopnarine ,1982). This stage does not last long, though; from about 1 1/2 years of age to almost 3, they show more interest in what other children do and increasing understanding of how to deal with them. This insight seems to accompany awareness of themselves as separate individuals (Eckermen,Davis & Didow ; Eckerman & Stein ,1982).

Toddlers learn by imitating one another . games such as follow the leader help toddlers connect with other children and pave the way for more complex games during the pre school years (Eckerman etall ;1989) as with siblings ,conflict ,too , can have a purpose. Helping children learn how to negotiate and resolve disputes (Caplan, Vespo, Pedersen,& Hay ,1991).

Some children of course, are more sociable than others, reflecting understanding temperamental traits. Sociability is also influenced by experience. Babies who spend time with other babies tend to become sociable earlier than those who spend all their time at home alone.

This suggests that children need to spend time with neighbor children in activities such as sitting or playing. Parents need to provide such environment at home and at the common play area.

Between the ages of two and three years, children show a decided interest in watching other children and they attempt to make social contacts with them . this is known as parallel play, play in which young children play independently beside other children rather than with them. If any contacts are made with other children, they tend to be frictional rather than cooperative. Parallel play is the earliest form of social activity young children have with their peers.

Following this come associative play in which children engage in similar, if not identical, activities with other children. As social contacts increase, young children engage in cooperative play, play in which they are part of the group and interact with group members.

Even after children begin to play with other children. They often play the role of onlooker, watching other children at play but making no real attempt to play with them. From this onlooker experience, young children learn how others make social contacts and what their behaviour is in social situations.

By the time young children are four years old if they have had these preliminary socializing experiences, they usually understand the rudiments of team play, they are conscious of the opinions of others, and they try to gain attention by showing off. In the remaining year of early childhood, they then polish off the rough edges of their social behaviour and learn new patterns of behaviour that will make acceptance by the peer group more assured.

Waldrop and Halverson(1976), in a longitudinal study of a group of young children, reported that those children who, at the age of 2 ½ years, were friendly and socially active continued to be so when they reached the age of 7 ½ years. They concluded that sociability at 2 ½ years was predictive of sociability at 7 ½ years.

One of the important developmental task of early childhood (2-6years) in acquiring the preliminary training and experience needed to become a member of a 'gang' in late childhood. Thus, early childhood is often called the pregang age . the foundation for socialization are laid as

the number of contacts young children have with their peers increases with each passing year. Not only do they play more with other children but they also talk more with them.

The 'kind' of social contacts young children have is more important than the number of such contacts. If young children enjoy their contacts with others, even if they are only occasional, their attitudes towards future social contacts will be more favorable than if they have more frequent social contacts of a less favorable kind. Children who prefer interacting with people to interacting with objects develop more social know-how and, as a result, are more popular than those who have limited social interactions.

The advantages young children take of the opportunities offered them for social contacts will be greatly influenced by how pleasurable their past social contacts have been. As a general rule during the preschool years, children find social contacts with members of their own sex more pleasurable than those with members of the opposite sex.

Late childhood (6-10 or 12 years) is often referred to as the gang age because it is characterized by interest in peer activities. Children gradually increase strong desire to be an accepted member of gang, and feel discontent when children are not with their friends. Older children are no longer satisfied to play at home alone or with siblings or to do things with family members. They want to be with their peers and they are lonely and dissatisfied when they are not with them.

Even one or two friends are not enough for older children. They want to be with the gang. They want sufficient number of individuals to play the games and sports to enjoy and to give excitement to their play. This is just as true of girls as it is of boys. Popular gang activities include games and sports, going to movies and getting together to talk or eat. These gangs have a central meeting place, usually away from the watchful eyes of adults. Most gangs have insignia of belonging. The members of gang may like to wear similar clothes and similar accessories. The gang leader represents the gang's ideal and is superior in most respects to the other members.

8.1.3 Learning of social skills and pro-social behaviour

Social skills are the skills we use every day to interact and communicate with others. They include verbal and nonverbal communication such as speech, gesture, facial expression and body language.

Pro social behaviour are those intended to help other people. pro social behaviour in characterised by a concern for the right, feelings and welfare of other people. behaviour that can be described as pro social include feeling togetherness, empathy and concern for others and behaving in ways to help or benefit other people.

Social Skill Categories

There are many important social skills for children to learn. These skills are acquired overtime as a child grows. Thus they are developmental in nature. Because social skills are developmental in nature , parents and teachers must learn what to expect at different ages and stages for examples. a 10 year old child is concerned about fitting in with their peers. A 5 years old, however is not focused on 'what everyone else is doing as much he/she is focused on forming close - knit bonds with two or three select friends. 'Perceived relationship of self to others' is an important social skills that begin. developing early and continues to evolve over time. as with most social skills parents and teachers need to ensure children acquire the necessary core skills for successful social social interaction.

Because social skills encompass a broad array of skills necessary for successful interpersonal relations, it is helpful to think of these skills according to some type of skill grouping for purpose of assessing. What skills a child does and does not have and for providing instruction and for creating conducive environment to acquire the social skills. the categories of social skills are as follows.

1. foundation skills
 - Maintaining eye contact
 - recognize and respect personal space
 - Understanding gestures and facial expression

2. Interaction skills
 - Resolving conflicts
 - Taking turns
 - Beginning and ending conversations

3. Affection skills

- Identifying own feelings
- Recognizing the feelings of others
- Demonstration empathy
- Decoding body language and facial expressions
- Determining where someone is trustworthy

4. Cognitive skills

- Social perception
- Making choices
- Self -Monitoring
- Understanding community norms
- Determining appropriate behaviour for different social situation

The skills listed are but a few examples of the type of skills that encompass each category and the lists are not exhaustive (Canvey & Byrne,2006; Waltz,1999).

Among the above mentioned skills foundation skills are the building blocks that support social interactions for example. maintaining eye contact is important to successful interactions with others but in isolation does not mean much .

Interaction skills are those necessary for getting along with others, they demonstrate understanding of turn-taking, the ability to assess a situation, and following direction of a conversation. Individuals who have strong interpersonal skills are usually more successful making friends , getting along with others, and achieving life success.

Skills necessary for understanding indentifying and relating to the feelings of others are called affective skills. These skills address a child's feelings emotions motivations , values and attitudes. Any behaviour that has an emotional component requires affective skills. one of the most important affective skills necessary for relating well with others is empathy. Empathy is the ability to put oneself in another persons place and feel what that person feels, or would be expected to feel, in a particular situation. This empathy is thought to arise during approximately the second year and, like guilt, increases with age (Eisenberg, 2000; Eisenberg & Fabes, 1998). As toddlers become increasingly able to differentiate their own mental state from that of another person, they

can respond to differentiate their own mental state from that of another persons, they can respond to another child's distress as if it were their own. A child who recogniser the she or he has caused such distress, perhaps by grabbing a toy that another child was playing with may decide to give it back; and this empathic impulse may be akin to guilt (Hoffman, 1998) Empathy differs from sympathy, which merely involves sorrow or concern for another person's plight . Both empathy and sympathy tend to be accompanied by prosocial behaviour such as giving back the toy.

Cognitive skills encompass the skills a person's brain uses every day to think , learn , remember, reason and pay attention. children are bombarded with learn to sort through it and process which information is important and necessary to succeed in many different situations. For example empathy depends on Social cognition , the cognitive ability to understand that others have mental states and to gauge their feelings and intentions. Piaget believed that egocentrism (a focus on a child's view point) delays the development of this ability until the concrete operational stage . But other research suggests that social cognition begins so early that it may be 'an innate potential like the ability to learn language'(Lillard & Curenton,1999). One year olds pick up emotional cues from television performers (Mumme & Fernald,2003) and 18 months olds seen to impute mental states to others (Meltzoff,1995).

Children who are successful acquiring the necessary foundational, interaction, affective and cognitive skills will find social success. This Success typically leads to a positive feeling of self-esteem. Self-esteem is considered to be the most critical skill affecting friendship and other social interactions by the time children reach adolescence. Self -esteem is how valuable we think we are to others.

Activities that Help Improve social skills in Children though social skills start developing in healthy babies Spontaneously when parents spend sufficient time playing with children and facilitating neighborhood children play together ,following activities promote development of social skills among children. Parents and teachers can implement them optimally and appropriately.

1. Play: Play with Children to help develop joint attention ,turn -taking, shared interests, cooperation and appropriate play with toys.

2. Visuals: Make up a Poster of rules to remember when starting a conversation (e.g. using a friendly voice, making a eye contact, using appropriate greetings such as Hi).

3. Role Play: Practice Play ground/ Party Scenarios where the child does not know any body.

Model and create a list of different things you can say:

- To join others who are playing (e.g.'Can I play too?')
- To introduce yourself (e.g. 'Hi my name is')
- To Politely negotiate with peers (e.g. 'I don't want that one. Can i have the blue car please?')

4. Sing Songs: Sing songs such as 'if you are happy and you know it' to help teach a child different emotions.

5. Masks: Make masks together to help improve eye contact.

6. TurnTaking: Play then taking games(e.g. board games) to encourage a child to say whose turn it is in the game (e.g. 'My turn' , 'Your turn')

7. Games: Play board games and other games meant for children. Make sure that the child is not always the 'winner' so that they learn about 'losing' in a game and are able to cope better when this happens with their peers.

8. Bean Bag Conversation: Throw a bean bag around a circle and each child takes a turn to contribute to the conversation. Think of different ways to contribute to the conversation (e.g. Ask a question, comment on what has been said, add something to the topic).

9. Watch and Comment: Role play different situation and comment about appropriate and in appropriate attempts of communication (e.g. standing too close or too far from another person ,not using appropriate eye contact ,interrupting a conversation).

10. Passing on a Ball: Make a children sit or stand in a circle and give a ball and ask them to pass it to other child .

These activities are not exhaustive. Parents and teachers can play age appropriate and joyful activities and games to train them acquiring social skills.

Learning of Pro-social Behaviour

Pro-social behaviour of many different sorts appears in the second year of life, possible earlier for some forms. In a growing number of studies, infants between 12 and 24 months of age have been shown to help, comfort, share and cooperate with others. The mystery is how young children can generate these relatively complex, other oriented behaviours and what could account for their emergence in this period.

A number of scholars have shown that children respond to others distress in the first year of life and that infants experiences with parents are linked to the development of empathic concern and empathy - related pro - social responses in the second year. A handful of early studies similarly showed that toddlers share, help, and cooperate with others, especially in everyday contents buttressed with affective and behavioural support from parents.

More recent research has focused on normative patterns of helping, comforting, sharing and cooperating in toddlers and the condition under which prosocial responding occurs. We now know that children spontaneously share information with adults by 12 months age and spontaneously share food and toys by 14-18 months of age. They help adults instrumentally by assisting in goal-directed efforts by 14-18 months and help empathetically by assisting with emotion-related problems by 30 months. They cooperate with adults on novel tasks by 18 months and with peers by 24 months. At the end of second year children have become autonomously prosocial.

However, toddlers are not indiscriminately prosocial. Twenty one to 24 month old children are aware of and use information about a partner's need as well as friendliness, helpfulness and trustworthiness to decide whether to help or not(Dunfield & Kuhlmeier,2010;vaish etal;2009).

Promoting Pro social Behaviour in Early childhood

Some children are quite natural in the interpersonal process of acquiring prosocial behaviors, while others need more guidance from relationships within the social environment. Some of the ways of promoting pro social behavior are...

1. **Modeling**: Children learn through what they see from caring adults. Imitation is a powerful form of learning and more influential than preaching. The voluntary nature of prosocial behaviour requires a child to have consistent models and experiences to learn and internalize the importance and benefits of these actions.

2. **Notice and Acknowledge when the child engages in Prosocial Behaviour**: Short simple phrase such as "you were being helpful...". You were kind to " reinforce and send the message that actions matter. These reflections of behaviour by authoritative adults help children internalize these attributes and the source of behaviour. The same is true of antisocial behaviours.

3.Responsive and Empathic Care : Children are much more likely to give what they have received in their most important relationships. Research has pointed to the connection between a secure parent child attachment and prosocial behaviour as well as empathy in early childhood.

4.Respect for Nature : Modeling and teaching care and respect for the environment for the environment and its inhabitants offers a powerful message. Picking up litter, tending a garden, being respectful to animals and their habitats are just a few of the many ways can teach the value of caring, gratitude and connection?

5.Tasks and chores : Defining and assigning concrete tasks that make up usual parts of the day creates a sense of connection. Age appropriate tasks and chores are a great way for children to be and feel helpful.

6.Avoid Programmes and content Endorsing Violent or Anti-Social Behaviour : Regardless of format, be it comic books, toys or television serials or pictures, cartoon pictures or news channels news, it is better to avoid such things and prevent the children from being exposed to violent or antisocial behaviours particularly till the end of late childhood. Instead, consider choosing programmes with pro social themes of friendship, exploration, problem-solving and cooperation.

From the above discussion we can understand that development of social skills and pro social behaviour in early childhood are vital to the trajectory of interpersonal development and have been found to be stable over time. The development of social skills and pro social behaviours are complex as children have to balance their own needs and interests with the development of social bonds.

8.2 Development of Self-awareness, Self-Concept and Self-Esteem.

The growth of the brain after birth is closely connected with changes in emotional life. A newborn has only a diffuse sense of consciousness and is easily overestimated and upset by sounds, lights, and other sources of sensory arousal. As the structures of the central nervous system develop and sensory pathways myelinated, the baby's reactions become more focused, tempered or modulated. Emotional experiments not only are affected by brain development but can have long lasting effects on the structure of the brain (M lot, 1998, Sroufe, 1997).

There appear to be four major shifts in brain organization, which roughly corresponds to changes in emotional processing. During the first three months, differentiation of basic emotions begins as the cerebral cortex functional. The second shift occurs around 9 or 10 months, when the frontal lobes begin to interact with limbic system, a seat of emotional reaction. At the same time, limbic structures such as the hyppo campus become larger and more adult like. Connection between the frontal cortex and the hypothalamus and limbic system, which process sensory information may facilitate the relationship between the cognitive and emotional spheres. As these connections become denser and more elaborate, an infant can experience and interpret emotions at the same time.

The third shift takes place during the second year, when infants develop self awareness, self-conscious emotions and a greater capacity for regulating their emotions and activities. These changes, which coincide with greater physical mobility and exploratory behaviour, may be related to myelination of the frontal lobes. The fourth shift occurs around age 3, when hormonal changes in the autonomic nervous system coincide with the emergence of evaluative emotion. Neurological factors also may play a part in temperamental differences (Mlot, 1998).

8.2.1 Development of Self - awareness

Self - awareness is the cognitive understanding that they have a recognizable identity, separate and different from the rest of their world.

Consciousness of self seems to emerge between 15 and 24 months when (according to piaget) infants become able to make mental representation of themselves as well as other people and things. Self awareness is necessary before children can be aware of being the focus of attention, identity with what other "selves" are feeling or wish they had what someone else has. By about age 3, having acquired self-awareness plus a good deal of knowledge about their society's accepted standards, rules, and goals children show self-evaluation emotions, pride, shame and guilt. They now can evaluate their own thoughts, plans, desires and behaviour against what is considered socially appropriate (Lewis, 1995, 1997, 1998).

Guilt and shame are distinct emotions, even though both may be responses to wrong doing. Children who fail to live up to behavioural standards may feel guilty (that is, regret their

behaviour), but they do not necessarily feel a lack of self worth, as when they feel ashamed. Their focus is on a bad act, not a bad self. A guilty child will often try to make amends, say, by trying to put together a broken dish that the child knocked off the table; an ashamed child is more likely to try to hide the results of a misdeed (Eisenberg,2000).

Violating accepted standards can bring shame or guilt, or both, living up to, or surpassing, standards can bring pride. But even children a few years older often lack the cognitive sophistication to recognize these emotion and what brings them on a necessary step toward emotional control.

In one study (Harter , 1993) , 4 to 8 years old were told two stories. In the first story a child takes a few coins from a jar after being told not to do so; in the second story, a child performs a difficult gymnastic feat - flip on the bars. Each story was presented in two versions: one in which a parent sees the child doing the act and another in which no one sees the child. The children were asked how they and the parent would feel in each circumstance.

The annmers revealed a gradual progression in understanding of feelings about the self (Harter,1996). At ages 4 to 5, children did not say that either they or their parents would feel pride or shame. Five to 6 years old said their parents would be ashamed or proud of them but did not acknowledge feeling these emotions themselves. At 6 to 7, children said they would feel proud or ashamed, but only if they were observed. Not until ages 7 or 8 did children say that they would feel ashamed or proud of themselves even if no one saw them. By this age, the standards that produce pride and shame appear to be fully internalized and to affect children's opinion of themselves (Harter ,1993,1996). It is also in middle childhood that children seem to develop a clear idea of the difference between guilt and shame.

Erikson: Initiative versus Guilt

The need to deal with conflicting feelings about the self is at the heart of the third stage of personality development identified by Erik Erikson(1950): initiative versus guilt. The conflict arises from the growing sense of purpose, which lets a child plan and carry out activities, and the growing pangs of conscience the child may have about such plans.

Preschool children can do and want to do more and more. At the same time they are learning that and more. At the same time they are learning that some of the things they want to do meet social approval, while others do not. How do children reconcile their desire to do with their desire for approval?

This conflict marks a split between two parts of the personality: the part that remains a child, full of exuberance and a desire to try new things and test new powers, and the part that is becoming an adult, constantly examining the propriety of motives and actions. Children who learn how to regulate these opposing drives develop the "virtue" of purpose, the courage to envision and pursue goals without being unduly inhibited by guilt or fear of punishment (Erikson, 1982).

8.2.2. Development of Self concept

About halfway between their first and second birthdays, babies become toddlers. This transformation can be seen not only in such physical and cognitive skills as walking and talking, but in the ways children express their personalities and interact with others. Let's look at one of the psychological situations, the emerging sense of self and the rest of the situations are the growth of autonomy, or self-determination; the internalization of behavioural standards. Let us know some details about when and how do the self and self concept arise.

The Emerging sense of self

William James, in the late nineteenth century, described two selves: the I-self and the Me-self, the knower and the known (James, 1950). The I-self is a subjective entity that constructs and seeks to know the Me-self. The Me-self, is what can objectively be known about the self. It is called the Self-concept.

The self-concept is our image of ourselves. It is what the I-self believes about the Me-Self i.e our total picture of our abilities and traits. The self concept involves both cognition and emotion. It describes what we (our I-selves) know and feel about ourselves (our Me-selves) and guides our actions (Harter, 1996). Children incorporate into their self- image the picture that others reflect back to them.

Emergence of the I-self (Birth to 15 months) : The I-self is believed to be first aspect of the self to emerge. It does so in the context of the infant- caregiver relationship, which profoundly shapes it. From a jumble of seemingly isolated experiences such as from one breast-feeding session to another, infants begin to extract consistent patterns that form rudimentary concepts of

self and other. Depending on what kind of care the infant receives and how she or he responds, pleasant or unpleasant emotion become connected with sensory motor experiences such as sucking that play an important part in the growing organization of the self.

Between 4 and 10 months, when infants learn to reach, grasp, and make things happen, they may begin to experience and make things happen, they may begin to experience a sense of personal agency (I can make the mobile move), a feature of the I-Self. The sense of agency, the realization that one can control external events is a fore runner of what Bandura(1994) calls self-efficiency, a sense of being able to master challenges and achieve goals. At about this time infants develop self-coherence, the sense of being a physical whole with boundaries, within which agency resides.

These developments occur in interaction with caregivers in games, in which the infants becomes increasingly aware of the difference between self and other (I see you). It is this awareness that allows attachment to occur - a manifestation of both individuation and connectedness.

Between 10 and 15 months, "infants come to realize that their subjective experiences, their attention, intentions, and affective states can be shared with another" who is also an independent agent (Harter, 1998). When a crawling infant looks at the mother's face to see whether or not it's all right to touch a pretty vase, an emotional communication has occurred between two selves.

Emergence of the Me-self (15 to 30 months) :

The emergence of self-awareness, a conscious knowlegde of the self as a distinct, identifiable being may be a gradual process that builds on an earlier dawning of perceptual discrimination between self and others. In an experiment with ninety six 4 and 9 month olds, the infants showed more interest in images of other than of themselves. The 4 month olds looked and smiled more at images of an experimenter imitating their facial expressions and movements than at a mirror image of themselves. The 9 months olds appeared to attempt social initiatives such as reaching toward the other image (Rochat & Striano, 2002).

This early perceptual discrimination may be the foundation of the Me-self, the conceptual self- awareness that develops between 15 and 18 months. In a classic line of research,

investigators dabbed rouge on the noses of 6 to 24 month olds touched their red noses more often than before, where as babies younger than 15 months never did. This behaviour suggests that the older babies knew they didn't normally have red noses and that they recognized the image in the mirror as their own (Lewis, 1997; Lewis & Brooks, 1974).

By 20 to 24 months, toddlers begin to use first-person pronouns, another sign of self awareness (Lewis, 1997). The use of 'I', 'me' and 'You' enables toddlers to represent and refer to both the self and the other. Once they have a concept of themselves as distinct beings, children begin to apply descriptive terms (big or little ; straight hair or curly hair) and evaluative ones (good, pretty, or strong) to themselves. This normally occurs sometime between 19 and 30 months, as representational ability and vocabulary expand. The rapid development of language during this period makes it possible for children to think and talk about the self and to incorporate parents verbal descriptions (you are so smart, what a bigboy!) into their own emerging self image (Stipek, Gralinski & kopp, 1990). Self - evaluation and evaluation by others are steps towards the development of conscience.

Gender Identity : Gender identity is awareness of one's femaleness or maleness and all it implies in a particular society, is an important aspect of the developing self-concept.

Gender differences are psychological or behavioural differences between males and females. Measurable differences between baby boys and girls are few. The two sexes are equally sensitive to touch and tend to teeshe, sit up, and walk at about the same ages (Maecoby, 1980).

One of the earliest behavioural differences, appearing as early as age 2 is in the choice of toys and play activities and of playmates of the same sex (Turner & Gervai ,1995). while some gender differences become more pronounced after age 3 For example at 2 1/2 years girls show more interest in dolls and boys in cars, and both begin to prefer being with children of their own sex (Ruble & Martin , 1998).

According to Kohlberg, gender constancy, more recently called sex-category constancy is a child's realization that his or her sex will always be the same. This realization leads to the acquisition of gender roles. Sometime between ages 3 and 7, or even later comes the realization that a girl remains a girl and a boy remains a boy. Once children realize they are permanently male or female, they adopt what they see as gender-appropriate behaviours. parents and teachers should not create any confusion in children by dressing up a girl with boy dresses up a boy with girl

dresser after the gender constancy is reached. And they should not comment or scold a girl as if she is behaving like a boy or boy behaving like a girl.

Self esteem is the self- evaluating part of the self-concept, the judgment children make about their overall worth. From a neo - Piagetian perspective, self - esteem is based on children's growing cognitive ability to describe and define themselves.

Development changes in Self - Esteem :

Children do not generally articulate a concept of self worth until about age 8 , but younger children show by their behaviour that they have one. Children's positive or negative self-perception and socio- emotional functioning at age 8.

Still, before the 5 to 7 shift, young children's self-esteem is not necessarily based on a realistic appraisal. They are not yet able to rank them in importance. They tend to accept the judgments of adults, who often give positive, uncritical feedback, and thus may overrate their abilities (Harter, 1900, 1993,1996, 1998

Self esteem in early childhood tends to be all-or-none: "I am good or "I am bad (Harter , 1996, 1998). Not until middle childhood do personal evaluation of competence and adequacy (based on internalization of prentl and societal standards) normally become critical in shaping and maintaining a sense of self- work (Harter, 1990, 1996, 1998).

Contingent Self Esteem : The "Helpless" Pattern:

When self esteem is high, a child is motivated to achieve. However, if self esteem is contingent on success, children may new failure or criticism as an indictment of their worth and may feel helpless to do better. About one third or one half of preschoolers, Kindergarteners, and first - graders show elements of this "helpless" pattern: self-derrigration or self-balance , negative emotion , lack of persistence, and lowered expectations for themselves (Burhans & Dweck, 1995; Ruble & D weck ,1995). Instead of trying a different way to complete a puzzle , as a child with unconditional self- esteem might do, "helpless" children feel ashamed and give up , or go back to an easier puzzle they have already done. They do not expect succeed, and so they do not try. Whereas older children who fail may conclude that they are dumb, preschooler interpret poor performance as a sign of being "bad". Furthermore, they believe that "badness" is permanent. This sense of being a bad person may persist into middle childhood and on into adulthood.

Individual differences in self esteem may hinge on whether children think their traits and attributes are fixed or can be changed (Harter, 1998). children who believe their attributes are permanent tend to become demoralized when, say, they fail to test , believing there is nothing they can do to improve. often these children attribute poor performance or social rejection to their own personality, Rather than trying new ways to gain approval, they repeat unsuccessful strategies or just give up. children with high self-esteem, by contrast, tend to attribute failure or disappointment to factors outside themselves or to the need to try harder. If initially unsuccessful or rejected they persevere, trying new strategies until they find one that works. children with high self-esteem tend to have parents and teachers who give specific, focused feedback rather than criticizing the child as a person. For example, when a child wears a shirt wrongly parents do inform the child saying that "you have worn the shirt inside out" instead of scolding the child saying that "can't you see your shirt is on backwards? when are you going to learn to dress yourself properly?" Giving proper feedback helps the child to improve their self-esteem whereas, frequent scolding, blaming, redirecting the children demoralizes them and lowers their self esteem and it makes the child to feel that they are " good for nothing"

8.3 Forms of Social Behaviour :

Cooperation, Leadership, Friendship, Sharing, Sympathy, Negotiation, Aggression and Quarrelling

The most important forms of social behaviour necessary for successful social adjustment appear and begin to develop at early childhood though these forms are not developed well enough to enable the child to get along successfully with others at all times. However, this is a crucial stage in development because it is at this time that the basic social attributes and the patterns of social behaviours are established.

The different forms of social behaviour are cooperation, Leadership, Friendship, Sharing, Sympathy, negativism, aggression and quarrelling. We should know that many of these patterns appear to be unsocial or even anti-social rather than social. However , each of these apparently unsocial or antisocial patterns of behaviour is important as a learning experience that will enable young children to know what the social group approves and disapproves and what it will and will not tolerate. Let us know some details about these forms of social behaviours and how and when they develop among children.

8.3.1 Cooperation

Between the ages of two and three years, children show a decided interest in watching other children and they attempt to make social contacts with them. This is known as parallel play, a play in which young children play independently beside other children rather than with them. If any contacts are made with other children, they tend to be frictional rather than cooperative. Parallel play is the earliest form of social activity young children have with their peers.

Following this comes associative play, in which children engage in similar, if not identical, activities with other children. As social contacts increase, young children engage in cooperative play, a play in which they are part of the group and interact with group members.

By the time young children are four years old, they usually understand the rudiments of team play, they are conscious of opinion of others, and they try to gain attention by showing off. Another kind of play that generally becomes more social during the preschool years is imaginative play, which shifts from solitary pretending to dramatic play involving other children. Young children follow unspoken rules in organizing dramatic play staking out territory (" I am the daddy; you are the mommy"), negotiating ("Okay, I will be the daddy tomorrow"), or setting the scene ("a girl child playing the role of mommy tell the boy child who is playing the role of daddy "I prepared the lunch box and you go for office"). As imaginative play becomes increasingly collaborative, story lines become more complex and more innovative. Dramatic play offers rich opportunities to practice interpersonal and language skills and to explore social roles and conventions.

In the running years of early childhood, they then polish off the rough edges of their social behaviours and learn new patterns of behaviour that will make acceptance by the peer group more assured.

8.3.2 Friendship

Children spend much of their free time in groups, but only as individuals do they form friendships. Children look for friends who are like them : of the same age, sex, and ethnic group and with common interests. A friend is someone a child feels affection for, is comfortable with, likes to do things with, and can share feelings and secrets with. The strongest friendships involve equal commitment and mutual give-and-take. Even unpopular children can make friends; but they

have fewer friends than popular and tend to find friends among younger children, other unpopular children, or children in a different class or a different school.

Friendship seems to help children to feel good about themselves, though it's also likely that children who feel good about themselves have an easier time making friends. Peer rejection and friendlessness in middle childhood may have long term effects. In one longitudinal study, fifth-graders who had no friends were more likely than their classmates to show symptoms of depression in young adulthood. Young adults who had had friends in childhood had higher self-esteem (Bagwell, Newcomb, & Bukowski, 1998).

Children's concepts of friendship and the ways they act with their friends, change with age, reflecting cognitive and emotional growth. Preschool friends play together, but friendship among school-age children is deeper and more stable. Children cannot be or have true friends until they achieve the cognitive maturity to consider other people's views and needs as well as their own.

On the basis of interviews with more than 250 people between ages 3 and 45, Robert Selman (198; Selman & Selman, 1979) traced changing conception of friendship through five overlapping stages. He found that most school-age children are in stage 2 (reciprocal friendship based on self-interest) in the stages given below.

Stage 0: Momentary playmate ship age 3 to 7 :

On this undifferentiated level of friendship. Children are egocentric and have trouble considering another person's point of view they tend to think only about what they want from a relationship. Most very young children define their friends in terms of physical closeness and value them for material or physical attributes.

Stage 1 : One - way Assistance (Ages 4 to 9) : On this unilateral level, a "good friends" does what the child wants the friend to do.

Stage 2 : Two - way Fair - weather Cooperation (Ages 6 to 12) :

This reciprocal level overlaps stage 1. It involves give - and - take but still serves many separate self-interests, rather than the common interests of the two friends.

Stage 3 : Intimate, Mutually Shared Relationship (Ages 9 to 15) :

On this mutual level, children view a friendship as having a life of its own. It is ongoing, systematic, committed relationship that incorporates more than doing things for each other. Friends become possessive and demand exclusivity.

Stage 4 : Autonomous Interdependence (Beginning at age 12) :

In the interdependent stage, children respect friends needs for both dependency and autonomy. School age children distinguish "best friends", "good friends" and "casual friends" on the basis of how intimate they are and how much time they spend together (Hartup Stevens, 1999). Children this age typically have three to five "best" friends with whom they spend most of their free time, but they usually play with only one or two at a time. Twelve percent of this age have only one friend or none (Hofferth, 1998).

School - age girls care less about having many friends than about having a few close friends they can rely on. Boys have more friendships, but they tend to be less intimate and affectionate.

8.3.3 Sharing

Young children discover, from experiences with others, that one way to win social approval is to share what they have, especially toys with others

True sharing implies empathy, the ability to get into another's mind and see things from their view point.

As children begin to play with each other and cooperate in their play, they begin to see the value of sharing between the ages of two and three years of age .This begins first with parallel play, in which young children play independently beside other children rather than with them. If any contacts are made with other children, they tend to be frictional rather than cooperative. Parallel play is the earliest form of social activity young children have with other peers.

Following this comes associative play, in which children engage in similar, if not identical, activities with other children. As social contacts increase, young children engage in cooperative play, a play in which they are part of the group and interact with group members by sharing their toys.

Children who received attachment parenting during the first two years are more likely to become sharing children in the years to come. An attachment - parented child is more likely to have a secure self - image. He/she needs fewer things to validate self-worth. These children never mind to share their toys with other children though they are possessive may become victim of the grabbing natured child. So parents or teachers should teach the attachment- parented child to learn the power of saying 'no'.

Teaching sharing by Parents/Parents

If your child has trouble sharing his toys and a playmate is coming over, ask the playmate's parent to send toys along. Kid's can't resist toys that are new to them. Soon your child will realize that he must share his own toys in order to get his hands on his playmate's toys. Or, if you are bringing your child to the home of non-sharing child, bring toys along. Some children develop a sense of justice and fairness at a very young age.

if your child clings to his precious possessions, respect this attachment , while still teaching him to be generous. It's normal for a child to be selfish with some toys and generous with other toys. Ease your child into sharing. Before play begins help your child choose which toys he will share with playmates and which ones he wants to put away for himself. you may have to play referees. To encourage sharing children may be guided to share their toys or to fees with their play mates.

8.3.4 Sympathy

Sympathy involves expressing sorrow or concern for another person's plight. During second year of life, toddlers become increasingly able to differentiate their own mental state from that of another person, they can respond to another child's distress. A child who recognizes that another child who does not have toys to play may try to give his/her toys to another child to play out of sympathy.

This kind of showing sympathy requires understanding of the feelings and emotions of others appears only occasionally before the third year. As child contacts increases development of sympathy takes place As the cognitive development takes place among children sympathetic feelings towards others also grows.

Parents and teachers can facilitate sympathy in young children by emphasizing the consequences of a child's behaviour during social interaction. For example, when a child grabs a toy from his friend, the caregiver could ask the child. "How could you feel if your friend took away a toy from you?" This can encourage children to reflect on how their own actions may affect other's thoughts and feelings. This kind of situation can facilitate sympathy.

The ability to feel concern for others is one of key characteristics make children become human. Sympathy binds individuals together and increases cooperation among the members of the society. So, children should be encouraged to become sympathetic towards others. when children show high level of sympathy, which usually takes place at the age of seven years, they would be better accepted by peers and share more with others.

8.3.5 Negativism

Negativism is resistance to adult authority. Negativism commonly seen in toddlers. Negativism is closely related to autonomy. Because a toddler is going through a time of wanting independence, he/she becomes negative toward anyone who attempts to take away his/her independence. "No" is the most common word said to exercise negativism.

Negativism is usually displayed between ages two and three and reaches its peak between three and four years of age and then declines.

Negativism is a sign of struggle for control and independence. When children do not get what they want, they may respond by yelling, screaming, kicking, biting, hitting, or holding their breath. They are frustrated with their inability to verbalize their feelings. Physical resistance gradually gives way to verbal resistance and pretending not to hear or understand requests.

Often negativism is exercised by having temper tantrum, if parents enforce too many limits or restrictions. When the child have a temper tantrum, the parent and teachers should remember two goals :

- 1.Prevent the child from harming himself/herself.
- 2.Enforce limits you have set. If you give in, the child learns to condition you. By having a temper tantrum, children can get anything they want.

Parents/teachers/care givers can reduce the chance of a toddler having a temper tantrum by recognizing some of the factors that influence temper tantrums and then doing their best to eliminate these factors. The following are the factors that influence temper tantrums:

1. The toddler being overtired
2. A disrupter in the normal routine life.
3. Too much excitement or activities. Temper tantrums are often seen at the exhibition, shops, zoo, and during the visit of guests
4. Frustration of too many choices
5. Frustration of too many restriction
6. Lack of firm, realistic limits.

There are many ways to help a toddler gain self-control

1. Allow the toddler to make his/her own decision, when possible.
2. Tell the toddler what is going to happen before it happens
3. Give the toddler sufficient transition time from one activity to another'
4. Verbalize feelings of the child such as "I know you don't want to go to bed, but if you want to be strong and healthy, you must sleep".
5. Make requests in a pleasant tone of voice
6. Remove difficult toys or play equipment that seem to frustrate the child.
7. Reduce or avoid demands when toddler in tired, hungry or ill.
8. Provide enough toys or ideas to prevent boredom.
9. Offer help when toddler seems to need it.
10. Honor their small demand.
11. Leave the child alone for sometime during temper tantrums but keep vigilant and reserve the child indirectly to prevent any undue consequences

13. Comfort the child after a temper tantrum to assure him/her of your love and care but displeasure with him/her action.
14. Talk to the child about how much happiness he/she will feel if he/she avoids a temper tantrum.
15. Remember toddlers do not reason, they just react so do not expect too much of obedience from the child at very tender age.

Thus, the parents/teachers/care takers should understand that the children at the age of two to four years naturally exhibit negativism and have temper tantrums due to their inability to acquire maturity in terms of cognitive abilities and understanding the need of social control. So, they should be empathetic towards the children, approximately deal the children, the children as mentioned above and facilitate them in this transition stage, if the parents/care givers/teachers respond wisely children can overcome their negativism and temper tantrums and acquire positive forms of behaviours.

8.3.6 Aggression and quarrelling

Aggression is a set of behaviours that range from typical adaptive to atypical maladaptive.

Aggressive behaviour is intended to hurt another child.

Aggression leads to quarrelling and bullying with other children. Aggression becomes bullying when it is deliberately ,persistently directed against a particular target :a victim who typically is weak, vulnerable, and defenseless.

Aggression co-occurs with several common problems in early childhood including impulsivity, emotion dysregulation and language delays. Simultaneously parents begin to impose rules and limits around the age of 2 years, both in response to the child's new found autonomy and as a natural part of socialization process. Clashes between the child's self-assertion and a parent setting limits leads to more frequent episodes of frustration and upset. Thus some aggressive behaviour in response to frustration is fairly common in life.

Emerging skills in toddlers appear influence the trajectory of early aggression. For example, a child's increasing ability to regulate attention and negative emotions, inhibit impulsive responding ,and draw on social communication to resolve conflict or express needs provide a foundation for utilizing behaviours other than aggression in response to frustration, anger, fear etc. Rejected children and those exposed to harsh parenting also tend to have a hostile behaviour.

Hostile aggression(aggression aimed at hurting its target)largely replaces instrumental aggression(aggression aimed at achieving an objective),is the hallmark of the personal period. Between ages 2-1/2 and 5,children commonly over toys and control of space. Aggression and quarrelling surfaces mostly during social play; children who fight the most also tend to be the most sociable and competent. In fact, the ability to show some instrumental aggression may be a necessary step in social development .The kind of aggression involved in fighting over a toy without intension to hurt or dominate other child, is known as instrumental aggression.

Between ages 2 and 4, as children develops more self-control and become better able to express themselves verbally and to wait for what they want, they typically shift from showing aggression with blows to doing it with words(Coie&Dodge,1998).However, individual differences remain: children who are more frequently hit or grab toys from other children at age 2 are likely to be more physically aggressive at age 5(cummings,Iannotti,&Zahn waaler,1989).

After age 6 or 7, most children become less aggressive as they become more cooperative, less egocentric, more empathetic, and better able to communicate. They can now row put themselves in someone else's place, can understand why the other person may be acting in a certain way, and can develop more positive ways of asserting themselves in social relationships.

Many studies says boys are more aggressive than girls. It has been suggested that the male hormone testosterone, which boys have in greater amounts than girls, may underline aggressive behaviour. From infancy, boys are more likely to grape things from others. As children learn to talk, girls are more likely to rely on words to protect to protest and to workout conflicts(Coie & Dodge,1998) :

However, girls may be more aggressive than they seem. They just show aggressiveness differently. Boys engage in more overt aggression, physical force or verbal threats openly directed against a target. Girls commonly practice relational aggression also called covert, indirect, or

psychological aggression. This more subtle kind of aggression consists of manipulation and damaging or threatening to damage relationships, reputation, or psychological well-being. It may involve "putting down, spreading rumors, name-calling, teasing, withholding friendship, or excluding someone from a group. Among preschoolers, it tends to be direct and face-to-face (You can't come to my party if you don't give me that toy"). In middle childhood and adolescence, relational aggression becomes more sophisticated and indirect (Crick, Casas, & Nelson, 2002).

Source of aggression: what produces an aggressive child? Why are some children more aggressive than others?

Biology may play a part. So may temperament:

Children who are intensely emotional and low in self-control tend to express anger aggressively.

Aggressive behaviour tends to be bred from early childhood by a combination of a stressful and unstimulating home atmosphere; harsh discipline, lack of maternal warmth and social support; exposure to aggressive adults and neighborhood violence and transient peer groups, which prevent stable friendships and exposure to violence on television, violent movies and even undue social media and content on mobile phones. Through such negative socializing experiences, children growing up in poor, high-risk surroundings may absorb antisocial attitudes despite their parents' best efforts.

Parents/caregivers/teachers can help children overcome aggressive and quarrelling behaviour by adapting comforting mechanisms, explaining them the after-effects of aggression and fulfilling their genuine demands and expectations etc. Warm parenting prevents children from becoming aggressive.

8.4 Socio-emotional problems in children; causes of Behaviour Problems and Helping Children to Cope

Socio-emotional problems in children are manifold. They generally involve excessive crying, stress, separation anxiety, insecurity feelings, inadequacy, enuresis, sibling rivalry, negativism, aggressiveness, temper tantrums, bullying, adjusting to peer group expectations, adjusting to and adapting family norms and societal expectation etc.

Every cultural group expects its members to master certain skills and acquire certain approval patterns of behaviour at various stages. Havighurst has labeled them as development tasks. According to him, a development task is "a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to unhappiness and difficulty with later tasks."

BABYHOOD:

Babies who are not given the opportunity to experience the normal emotion of babyhood—especially, affection, curiosity, and joy—do not thrive physically. In addition, emotional deprivation in a babyhood often causes babies to be backward in their motor and speech development and they do not learn how to establish social contacts or show affection. They usually become listless, depressed, and apathetic and often develop nervous mannerisms such as thumb-sucking.

Parents who are over solicitous or over demonstrative encourage their babies to focus their attention on themselves and to become self-bound. Their attention on themselves and to become self-bound and selfish. Babies thus expect others to show affection for them but they do not reciprocate.

The major social problems of babyhood is lack of opportunity and motivation to learn to become social. This encourages the prolongation of egocentrism and leads to the development of introversion. When the children are subjected to too many strange people and strange caretakers they develop shyness. The long-term effects of shyness leads to loneliness, self-consciousness, and unfavourable social evaluations. Shy people are often judged as aloof, condescending or even hostile—judgments that do not contribute to give social or personal judgments.

EARLY CHILDHOOD:

During this stage, if children experience too many of the unpleasant emotions and too few of the pleasant ones, it will distort their outlook on life and encourage the development of an unpleasant disposition.

Children who, as babies, never experienced attachment behaviour because of lack of opportunity to have a warm and stable relationship with the mother or a mother-substitute, fail to realize the pleasure they could desire from such relationship. As a result, they do not try to

establish warm, friendly relationships with others, either adult as peers, during the early childhood years. Children during early childhood may have problems in making social adjustments. If children speech as behaviour makes them unpopular with their peers leaves them to be lonely and they may be deprived of opportunities to learn to behave in a peer - approved manner.

Children who have unfavorable social experiences may readily come to the conclusion that they do not like people. As a result they shall contact with people outside the home and, to some extent, even in the home. By so doing they not only deprive themselves of pleasant social experiences but also of opportunities to learn to behave in a social way.

Children who spend too much of time in social play do not learn to be self-sufficient and to enjoy solitary play, regardless of how much play equipment they have to amuse themselves.

LATE CHILDHOOD: Children at late childhood are considered immature by both age mates and adults if they continue to show unacceptable patterns of emotional expression, such as temper tantrums, and if such unpleasant emotion as anger and jealousy are so dominant that children are disagreeable and unpleasant to be with.

Social maladjustment takes place when children are rejected as neglected by their peer group. As a result they are deprived of opportunities to learn to be social. Voluntarily isolates who have little in common with their peer group come to think of themselves "different" and to feel that they have no chance for acceptance. Children against whom there is a group prejudice because of their race or religion tend to be maladjusted. Children who are geographically or socially mobile find difficulty in getting acceptance by already-formed groups.

HELPING CHILDREN TO COPE WITH SOCIAL-EMOTIONAL PROBLEMS

Normally, the first year of life can be and is one of the happiest of the life span. The dependency young babies makes them appealing to children as well as to adults. Most children like to play with them, while adults not only want to cuddle and love them but are happy to tolerate their crying and the other disruption their care brings into their lives.

By contrast, for almost all babies the second year of life is far less happy than the first. There are many reasons for this such as poor health, teething, desire for independence, increased need for attention, beginning of discipline child abuse, increased sibling resentment. In these

conditions children need parental care, comforting them with love and warmth, not imposing too much discipline and providing environment to neighborhood children to play along with their child.

Parents and other family members or care givers should ensure that the three A's of happiness - acceptance by others, affection and achievements which will encourage to like and accept themselves.

Parents should take enough care in providing nutritious food prepared in hygiene condition to ensure health of toddlers. Children should not be exposed to violence, loud noise and passive smoking or pollution. Parents and care givers also need to maintain health and healthy habits to assure health of children. Children should not be served very cold or hot food items and should not be exposed to cold weather or hot weather. These precautions keep the children healthy and strong. Healthy children are emotionally healthy and can cope with social pressures as well.

A stimulating and cheerful environment has to be created for the children so that children lead their life joyfully and with full of dynamism. A cold environment created by difficult parents make children easily prone to emotional disturbances and social maladjustment. For this, both the parents need to maintain happy married life. Any kind of conflict between mother and father creates insecure feeling in children. Parents need to spend sufficient time with children by engaging them through talk, play and comforting. This strengthens children emotionally and facilitates them to exhibit appropriate social skills.

Parents need to guide children to behave in a socially more acceptable way by using well planned discipline where in the individually of the children and their genuine expectation are reputed. Developmentally appropriate expression of affection, such as showing pride in young children's achievements and offering opportunities to succeed in what they undertake with realistic aspiration.

Children need to be encouraged to play creatively by encouraging that no adult ridicule or criticize unnecessarily that dampers young children's enthusiasm to try to be creative.

Parents should provide good models to their children how to get along with other people and guide the siblings and playmates to accept the child. Children at late childhood stage assume

added responsibilities in the school, at home. Parents/Teachers need to provide optimal guidance to children to succeed in these new responsibilities. At this stage children like to spend more time with their age mates. So, parents and other magnificent family members need to understand this and extend their acceptance as long as this is not disrupting the fulfillment of children's day to day chores. Children should be made to feel that they are treated with warmth and affection though occasionally punish them for their intentionally misbehavior.

Similarly, children who have learned to see themselves as guided to see themselves realistically, and whose failures either motivate them to find better ways of achieving this goals or cause them to mo modify their aspirations in accordance with their capacities, will be spared and the feelings of inadequately and inferiority that accompany them. This is just as true in the case of social failures as in the case of academic failures.

8.5 ROLE OF FAMILY,SCHOOL AND COMMUNITY IN SOCIALIZATION;CHILD REARING STYLES AND IMPACT ON

CHILDREN: AUTHORITATIVE; AUTHORITIAN; DEMOCRATIC; PERMISSIVE; UNINVOLVE

Human beings are social beings. Right from the start they develop within a social and historical content. Children are likely to have very different experiences from society to society of culture to culture. For an infant, the immediate content normally is the family, but the family in turn is subject to the wider and ever-changing influences of neighborhood, community and society

8.5.1 ROLE OF FAMILY IN SOCIALIZATION

Families take diverse forms in different time and places. Their attributes have changed greatly during the past 75 years or so. Earlier, many or most people lived in extended-family households, where children had multi generational kinship network of grandparents, aunts, uncles, cousins, and more distant relatives .In these families children used to have daily contact with kin. Social roles tend to be flexible. Adults often share breadwinning, and children are given responsibility for younger brothers and sisters.

These days, extended-family household is becoming less typical in developing countries like India, due to industrialization and migration to urban centres, particularly among groups that have migration to urban centres, particularly among groups that have achieved upward mobility.

This is resulting in increase of more and more nuclear families. The socialization of the children in getting affected negatively when both the parents are going out for work. Parents work determines more than the family's financial resources. Much of the adults time effort, and emotional involvement go into their occupations. As a result parents have little time socialize their children.

Socialization is the process by which children develops habits, skills, values and motives that make them responsible, productive member of society. Socialization rests on the internalization of social standards-taking those standard as one's own.

Some children are socialized more readily than others. The way parents go about their job, together with a child's temperament and the quality of the parent-child relationship, may help predict how hard as easy it will be to socialize a particular child. Factors in the success of socialization in the family may include security of attachment, observational learning of parents behaviour and the mutual responsiveness of parent and child.

It is observed that the families where wise grand parents live long with grand children, children get socialized more conveniently as they receive care, training and modelling from the grand parents. The families, where aunts, uncles and other significant family members facilitate the socialization process of the children. This kind of extended families contain the children of same age group. So, children get an opportunity to play, share, and acquire social skills and values while interacting with cousins of more or less same age group though occasionally the conflict with each other.

8.5.2 ROLE OF SCHOOL IN SOCIALIZATION

Going to pre-school and later middle schools and secondary school widens the child's physical, cognitive and social environment. Today more of 4 years-old and even many 3 years old children are enrolled in early childhood education.

In some countries such as China, preschools are expected to provide academic preparation for schooling. In contrast, most preschools in the Unites States of America and many other western counties traditionally have following a "child - centered" philosophy stressing social and emotional growth in line with young children's developmental needs-though some theories such as piaget or Itlalian educator Maria Montersori, have emphasized strong cognitive development.

Preschools in Japan are different from preschools in the United States. The typical Japanese pre school in line with accepted cultural values is society-centered, which emphasize skills and attitudes that promote group harmony, such as keeping the school neat and tidy, respecting elders, teachers etc.

Two other types of pre schools have emerged in Japan in recent years: Child-centered and role-centered.

Child - centered preschools arose in response to criticism that society-centered preschools discourage self-expression and creativity that are needed in modern industrial society Japan has become child -centered. programs are more individualized, like western ones. Children freely choose activities and internet individually with their teachers.

Role-centered programs-about 30 percent of private Japanese preschools reject western individualism and stress traditional Japanese principles. They concentrate on preparing children for roles in society. Whereas society-centered preschools downplay academic learning, children in role-centered preschools study not only "the basics"-reading, writing, and mathematics but also English ,art, gymnastics, swordsmanship, tea ceremonies, and Japanese dance.

What type of preschool is best for socialization of children? Defenders of the traditional developmental approach maintain that academically oriented programs neglect young children's need for exploration and free play and that too much teacher initiated instruction may stifle their interest and interfere with self- initiated learning (Elkind,1986;Zigler,1987)

Another field study (Marcon,1999) compared three types preschool classrooms in Washington DC child-initiated, academically directed, and middle-of-the road(a blend of the other two approaches). Children from child-initiated programs, in which they actively directed their own learning experiences, excelled in basic academic skills. They also had more advanced motor skills than the other two groups and social higher than the middle-of-the road group in behavioural and communicative skills. These findings suggests that a single, wherent philosophy of education may work better than an attempt to blend diverse approaches and that a child-centered approach seems more effective than an academically oriented one.

THE TRANSITION TO KINDERGARTEN

Originally a year of transition between the relative freedom of home or preschool and the structure of "real school" kindergarten is now more like first grade. Children spend less time on self-chosen activities and more time on worksheets and preparing to read. Many kindergartens now spend a full day in school rather than the traditional half-day. And, an academic and emotional pressures mount, many parents hold children back a year so that they now start kindergarten at age 6.

Children with extensive preschool experience tend to adjust to kindergarten more easily than those who spent little or no time in preschool. Children who start kindergarten with peers they know and likely to do better(Ladol,1996).There are number of interlocking factors that influence cognitive achievement and social development. Children who show antisocial behaviour become more disliked. They tend get into conflux with teachers, to participate less, and to be lower achievers. Children who are more cognitively mature tend to participate more, and those who participate more achieve better. A supportive family background also influence achievement. Children who are rejected by peers tend to participate less in elders and achieve less. They tend to fee lonely and to want to stay home from school(Buhs&Ladd,2001)

We can understand from the above research findings that preschool children exercise freedom while interacting with their peers and get socialized whereas the kindergarten offers the children an organized exposure to cognitive as well as social development. Teachers at preschool and kindergarten need to design appropriate and optimal learning environment and experiences to children to adapt pro social forms of behaviour. Thus, schools can play a vital role in the process of socialization of children.

8.5.3 ROLE OF COMMUNITY IN SOCIALISATION

Children's socialization in affected by several factors. These factors include kinds of home and neighborhoods people live in and quality of nutrition, medical care, supervision, schooling, socio-economic status of parents and other opportunities available to them.

Poor children for example, are more likely than other children to have emotional or behavioural problems, and their social and cognitive potential and school performance suffer even more. The harm done by poverty may be indirect, through its impact on parents' emotional state

and parenting practices and on the home environment they create.

Researches study how the composition of a neighborhood affects social development. So far, the most powerful aspects seen to be average neighborhood, the presence of educated, employed adults who can build the community's economic base and provide models of what a young person can hope to achieve. Living in a poor neighborhood with large numbers of people who are unemployed makes it less likely that effective social support will be available(Black & Krishnakumar1998).

Just as the family and school community also influences the children's socialization .A community is a group of people living in the same place as locality. Children's social contacts with peers, adults, community's group activities such as fairs, festivals, social gatherings stimulate children to imbibe social customs, traditions social values and social roles. Children learn them in a natural way as they interact with and involve in the community. The activities of the community offer the child an opportunity to them to adapt desirable social values such as sympathy, cooperation, tolerance, sacrifice and adjustment. In addition children learn right and duties and social experiments, expression of freedom and maintaining restraint if necessary exercising freedom.

Members of the community controls or regulates childrens's malaadaptive social behaviours. They also reward children to reinforce their socially approved behaviours. But parents should be vigilant to prevent children from being scared by ill-minded members of community who try to snub children unduly in the guise of disciplinary.

8.5.4. CHILD REARING STYLES AND IMPACT ON CHILDREN: AUTHORITATIVE; AUTHORITARIAN; DEMOCRATIC; PERMISSIVE; UNINVOLVED

As children gradually become their own persons their upbringing can be a complex challenge. Parents must deal with small people who have minds and wills of their own, but who still have a lot to learn about what kinds of behaviour work well in society. How do parents handle discipline? Are some ways of parenting more effective than others?

Discipline refers to methods of teaching children character, self-control, and social as well as moral values and behaviour. It can be a powerful tool for socialization with the good of developing

self discipline. What forms of discipline work best? Researches have worked at a wide range of techniques.

The effectiveness of parental discipline may hinge on how well the child understands and accepts the parents message, both cognitively and emotionally(Grusec&Goodnow,1994).The child has to recognize the message as appropriate; so parents need to be fair and accurate, and clear and consistent about their expectation. They need to fit their actions to the misdeed and to the child's temperament and cognitive and emotional level. The child may be more motivated to accept the message if the parents normally are warm and responsive.

Because a child interprets and responds to discipline is the context of an ongoing relationship with a parent, some researches have looked beyond specific parental practices to overall styles, or patterns, of parenting.

PARENTING STYLES

Are some ways of socializing children more effective than others? In pioneering research, Diana Baumrind (1971,1996 b; Bauramid &black,1967) studied 103 preschool children from 95 families. Through interviews, testing, and home studies she measured how the children were functioning, identified three parenting styles, and deserved typical behavior pattern of children raised according to each. Baumrind's findings were correlation and did not consider innate factors, such as temperament. However, Bauraminds's work and the large body of research it is inspired have established strong association between each parenting style and a particular set of child behaviours. These three parenting styles and their impact on children are as follows.

1. AUTHORITARIAN STYLE OF PARENTING:

Authoritarian parents value control and unquestioning obedience. They try to make children conform to a set of standard of conduct and punish them arbitrarily and forcefully for violating it. They are more detached and less warm them other parents. Their children tend to be more discontented, withdrawn, and distrustful.

2. PERMISSIVE STYLE OF PARENTING

Permissive parents value self-expression and self regulation. They make few demands and allow children to monitor their own activities as much as possible. When they do have to make rules, they explain the reason for them. They consult with children about policy decision and rarely punish. They are warm, non controlling, and undemanding. Their preschool children tend to be immature-the least self-controlled and the least exploratory.

3.AUTHORITATIVE STYLE OF PARENTING

Authoritative parents value a child's individuality but also stress social constraints. They have confidence in their ability to guide children, but they also respect children's independent decision, interests, opinions, and personalities. They are loving and accepting, but also demand good behaviour, are firm in maintaining standards, and are willing to impose limited, judicious punishment when necessary, within the context of a warm, supportive relationship. They explain the reasoning behind their stands and encourage verbal give and take. Their children apparently feel secure in knowing that they are both loved and firmly guided. Preschools with authoritative parents tend to be the most self-reliant, self-controlled, self-assertive, exploratory, and content. In addition to the above Baumrind's model of parenting, there are other two styles of parenting. They are democratic and uninvolved parenting. Let us know these styles of parenting.

4.DEMOCRATIC STYLE OF PARENTING:

Democratic parents emphasize the right of the child to know why rules are made and they give children an opportunity to express their opinions if they believe a rule is unfair. Blind obedience is not expected even when children are very young. Parents make children understand the meaning of rules and the reason the social group expects them to abide by them. Instead of corporal punishment, democratic parents make the punishment related and relevant to the misdeed. Democratic parents appreciate when children behave as per social expectations and reward them for confirming the rules.

Children of democratic parents are satisfied, confident, independent and self-reliant. They would be more creative, emotionally stable, mentally alert and socially acceptable. Children tend to take their own decisions as they grow which in turn will make them more responsible. They achieve

healthy, positive, confident, self concept and also achieve desirable personal and social adjustment.

5. UNINVOLVED STYLE OF PARENTING:

Eleanor Maccoby and John Marting (1983) added this uninvolved or neglectful parenting style. Uninvolved parents focus on their own needs rather than on those of the child because of stress and depression. Neglectful parenting has been linked with a variety of behavioural disorders in their childhood and adolescence. The children of uninvolved parents are more dissatisfied dependent on others for many things, lack of confidence, cold, chaotic, unorganized, haphazard in their behaviours and pessimistic.

From the observation of above mentioned parenting styles, it is clear that authoritative parenting enhances children's social competence. It may be because authoritative parents set sensible expectations and realistic standards. By making clear, consistent rules, they let children know what is expected of them.

In authoritarian homes, children are so strictly controlled that often they cannot make independent choices of their own behaviour.

In permission homes, children receive so little guidance that they may become uncertain and anxious about whether they are doing the right thing.

Democratic parenting is comparable to authoritative parenting. The children of democratic parents also comparable with regard to their social, emotional and cognitive development.

Uninvolved parents fail to provide good modelling to their education. As a result their children are forced to find models outside to identify themselves or go on leading or unrecognized or problematic life style in their later life.

Analysis of the above five parenting styles helps us to conclude that authoritative and democratic parenting styles have merits when compared to other styles of parenting. Children in authoritative and democratic homes, know when they are meeting expectation of parents and can decide whether it is worth risking parental displeasure to pursue a goal. These children are expected to perform well, fulfill commitments, and participate actively in family duties as well as family fun. They know the satisfaction of accepting responsibilities and achieving success. Parents

who make reasonable demands show that they believe their children can meet them and that the parents care enough to insist that they do.

When conflict arises, an authoritative parent can teach the child positive ways to communicate his or her own point of view and negotiate acceptable alternatives. For example, authoritative parents pursue children like this, "if you do not keep your books and note books orderly in shelf, how can you pick the needed book or notebook easily?". Internalization of this kind of broader demands, may well be a key to success of authoritative parenting.

ROLE OF CULTURE IN PARENTING STYLES:

Baumrind's categories of parenting reflects the dominant North American view of child development and may be misleading when applied to some cultures or socio economic groups.

Among Asian cultures, obedience and structures rather than being associated with harshness and domination seem to have more to do with caring, concern, and involvement and with maintaining family and harmony. Traditional Chinese culture, with its emphasis on respect for elders, stresses adults' responsibility to maintain the social order by teaching children socially proper behaviour. This obligation's carried out through firm control of the child and even by physical punishment if necessary (Zheo,2002)

Although Asian parenting is frequently described as authoritarian, the warmth and supportiveness that characterize Chinese family relationships more closely resemble Baumrind's authoritative more closely resemble Baumrind's authoritative parenting but without emphasis on the American values of individuality, choice and freedom(Chao,1994)

Researches have identified a parenting style in some African families that falls between Baumrind's authoritarian and authoritative styles. This style, called "no-nonsense parenting", combines warmth and affection with firm parental control." non sense parent regard stringent control and insistence on obedience to rules as necessary safeguards for children growing up in dangerous neighborhoods, and such children see this kind of parenting as evidence of concern about their well being(Broadly & Flor,1998).It can be misleading, then, to consider parenting styles without looking at the goals parents are trying to achieve and the constraints their life circumstances present.

CONCLUSION:

From the above explanations, we can understand that social development and emergence of self play a dominant role in determining children's future social relationships and pattern of behaviour towards each other and became the child's life in centered around the home during sensible period, it is here that the foundation for later social behaviour and attitudes are laid. There is little evidence that people are inherently social or anti social. Instead, whether they become outer or inner-bound-extroverted or introverted depends mainly on their early social experiences. Studies of the social developments of older children and even adolescents show the importance of the social foundation laid in babyhood and carefully groomed over a period of time. So, parents and teachers need to understand the trajectory of social development patterns of children and guide to help children in acquiring appropriate forms of social behaviours.

MAIN POINTS:

1. Social Development is a process, where by an individual's attitudes, skills, motives, standards and behaviour are shaped by the society
2. Parallel play is a play in which young children play independently beside other children rather than with them.
3. Associative play is a apply in which children engage is similar, if not identical, activities with other children.
4. Cooperative play is a play in which they are part of the group and interact with group members.
5. Social skills are the skills we use everyday to interact and communicate with others. They include verbal and non-verbal communication such as speech, gesture, facial expression and body language.
6. Pro social Behaviours are those intended to help other people. Prosocial behaviour in characterized by a concern for the rights, feelings and welfare of other people.
7. Self esteem is how we perceive our value to the world and how valuable we think we are to others.
8. Sympathy involves sorrow or concern for another person's plight.
9. Empathy is the ability to put oneself to another person's place and feel what that person feel, or would be expected to feel in a particular situation.
10. Social cognition is the cognitive ability to understand than others have mental states and

guage their feelings and intentions.

11. Egocentrism is a focus on only one's viewpoint
12. Self-awareness is the cognitive understanding they have a recognizable identity, separate and different from the rest of the world.
13. Socialization is the process by which children develop habits, skills, values and motives that make them responsible, productive members of the society
14. Community is a group of people living in the same place or locality.
15. Discipline refers to methods of teaching children character, self-control and social as well as moral values and behaviour.

FIELD ACTIVITIES:

1. Observe and report on the ways of social interaction among siblings and neighborhood children at babyhood stage.
2. Select two children in your neighborhood and prepare a note on development of self awareness.
3. Observe a group of children and prepare note on how does leadership qualities are exhausted by children.
4. Conduct a case study on a problematic child help him/her to overcome the problematic behavior
5. Select one of the parenting styles and prepare a report on a family where the selected parenting style is implemented.

SHORT ANSWER QUESTIONS

1. How does learning of social skills takes place in children?
2. What is the meaning of self concept and self esteem?
3. What are the forms of social behaviour?
4. What are the causes of behavioural problems in children?

5. What is the meaning of socialization?
6. How does authoritative parenting takes place?
7. Write the impact of authotiatarian parenting?
8. What are the effects of permissive parenting?

ESSAY TYPE QUESTIONS

1. Explain the patterns of social development
2. Define self awareness and explain the development of self awareness among preschool children.
3. What are the forms of social behaviour? Explain in detail.
4. Write the causes of behavioural problems and explain the ways of having children to cope with them.
5. What is the role of family, school and community? Explain.
6. Write a comparative analysis of various parenting styles.

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