



B.Sc. PSYCHOLOGY – I YEAR
DJP1C : DEVELOPMENTAL PSYCHOLOGY
SYLLABUS

UNIT I : INTRODUCTION

Developmental psychology: Definition, concepts and nature - Meaning of developmental changes – Significant facts about development – the life span – difficulties in studying life span – developmental tasks during the life span – happiness and unhappiness during the life span.

UNIT II : FROM PRENATAL PERIOD TO CHILDHOOD

Characteristics: Prenatal period -Infancy –Babyhood - Early childhood - Late childhood – personality changes – hazards and happiness.

UNIT III : ADOLESCENCE

Puberty: Characteristics – Criteria – Causes – Growth spurt – Bodily changes – Effects of puberty changes – Hazards & Happiness. Adolescence: Characteristics –Physical and Social changes – Interest – Morality – Sex interest and Behaviour – Family relationships – Personality change – Hazards & Happiness.

UNIT IV : EARLY AND MIDDLE ADULTHOOD

Early Adulthood: Characteristics and adjustments – Hazards and Happiness - Middle age: Characteristics and adjustments – Hazards and Happiness.

UNIT V : OLD AGE

Old age: Characteristics and adjustments – Hazards and Happiness.

TEXT BOOKS

1. Developmental Psychology (1997)– A Life Span Approach, Elizabeth B. Hurlock, Fifth Edition, Tata McGraw Hill Publishing co. Ltd., New Delhi.
2. Santrock, J. W. (2013). Life Span development, 14th ed. McGraw Hill.
3. Berk L.E. (2005) Child Development, (2nd Ed.), New Delhi: Pearson Education.

REFERENCE BOOKS:

1. Papalia, D. E. (2004). Human Development. 9th ed. Tata McGraw-Hill.
2. Life Span Human Development, Brodzinggkg, D.M., Gormly A.V. & Aniborn, S.R. (1986) New Delhi: CBS Publisher.
3. Child Development, Berk, L.E. (2003), New Delhi : Pearson Education.
4. Child Development : An Indian Perspective, Srivastava, A.K. (1998) New Delhi : NCERT



UNIT I : INTRODUCTION

Developmental psychology: Definition, concepts and nature - Meaning of developmental changes – Significant facts about development – the life span – difficulties in studying life span – developmental tasks during the life span – happiness and unhappiness during the life span.

1.0. DEVELOPMENTAL PSYCHOLOGY - DEFINITION, CONCEPTS AND NATURE

Developmental psychology is a branch of psychology that attempts to explain the development of humans over time, both in the micro sense, as they develop from babies to mature adults, and in the macro sense, as the culture itself evolves through the years and decades.

It should be noted that it's difficult to make broad claims about developmental psychology because it is effectively an umbrella term used to describe a number of disciplines all focused on the same goal. These disciplines, however, are often quite diverse, and can seem rather dissimilar from one another in all respects except their shared purpose.

The study of human development is not only informative but also interesting. Developmental psychology is one of the fields of psychology which studies human development from conception till death. It cover within its scope field like child psychology, adolescent psychology, geriatric psychology etc.

DEFINITION

According to Hurlock, “developmental psychology is the branch of psychology that studies intra individual changes and inter individual changes within these intra individual changes. Its task, is not only description but also explication of age-related changes in behaviour in terms of antecedent consequent relationship”.

1.1. NATURE OF DEVELOPMENT PSYCHOLOGY MEANING OF NATURE:-

Human development is the scientific study of systematic psychological change that occur in human being over the course of the life span. Human development is concerned with infants and children but now the field has expanded to include adolescence and adult development which studies life evolution including motor skills and other psycho-physiological processes. Cognitive development involving areas such as problem solving,



moral understanding and conceptual understanding, language acquisition, social personality etc. in the human development.

1) Development as lifelong:- According to the lifespan perspective no age period is supreme in its impact on the life course. Events occur during each period within each period, change occurs in three broad categories that involves physical, cognitive and social. Every period of life development has its own issue, bringing with its unique demands and opportunities that fields some similarities in development across many individual. Throughout life, the challenge people face and adjustment they make are highly diverse in timings and patterns.

2) Development as multidimensional and multidirectional:-The life span perspective regards the challenges and adjustment of development as multidimensional affected by an intricate blend of biological, psychological and social forces. Life span development is multidimensional in two ways. First if all the development is not limited to improved performance. At all period its joints expression of growth and decline. Second, besides being multidirectional overtime, change is multidimensional within the same domain of development.

3) Development as plastic:-Life span research emphasize that the development is plastic at all ages. Evidence on plasticity makes it clear that going is not an eventual "shipwreck" as has often been assumed. Development gradually becomes less plastic, as both capacity and opportunity for change are reduced. Plasticity varies greatly across individual.

4) Development as embedded in multiple contexts:-According to life span perspective, pathways of changes are highly diverse, because development is embedded in multiple contexts. They work together, combining in the unique ways to compliment each life course.

1.2. MEANING & SCOPE OF DEVELOPMENT PSYCHOLOGY

1) Physical development:-Physical development means progressive development of various parts of the body and their capacity to function. It includes the development of internal as well as external body organs of the individual. Growth in height and weight, body proportion, head skeleton, nose and trunk etc. Nervous system and changes in internal organs.

2) Motor development:-Motor development include the development of strength, speed and precision in the use of one's arms, legs and other body muscles. Motor activities such as head any eye movements, manipulation running, jumping and dancing etc. are important to child in his growth and development.



3) Intellectual development:-Intellectual development includes the development of intellectual power like thinking, reasoning, imagination, memory, concepts, sensation, perception, generalizations and such other abilities.

4) Language development:-Like development of thinking reasoning, imagination, creativity, sensation and perceptions language development is an important aspect of intellectual, mental cognitive development. It includes the learning of the language for communication and development of various skills and abilities for the effective use of the languages.

5) Emotional development:-In emotional development the evolution of different instincts and emotions leads to the character. The emotional behaviour is developed to the point of emotional maturity.

6) Social development:-Social development includes acquisition of the ability to behave in accordance with social norms, customs, expectations and making social adjustment. Social development implies the development to cooperate with others tolerate the views of others adjust with other members.

1.3. SIGNIFICANT FACTS ABOUT DEVELOPMENT

- Early foundations are critical.
- Maturation & learning are responsible for development.
- Development follows a definite & predictable pattern.
- Attitude towards developmental changes are influenced by the individual's appearance and behaviour; by cultural stereotypes; by cultural values; by role changes and by personal experiences.
- All individuals are different.
- Each phase of development has characteristic behaviour & hazards.
- Development is aided by stimulation & is affected by cultural changes.
- There are social expectations for every stage of development.
- There are traditional beliefs about individuals at all ages.
- Even though all individuals are different - they follow definite & predictable patterns of development -- that are similar for all.

1.4. PRINCIPLES OF GROWTH AND DEVELOPMENT

Human development is governed by certain principles. Knowledge of the principles of growth and development helps us to understand children better. A person who knows these



principles will be able to assess children's development objectively. It also helps us to prepare children ahead of time for the changes that are going to take place in their life. In other words proper child guidance is possible only with the knowledge of principles of growth and development. These principles are discussed below.

i. There are individual differences in development

As each child has his own characteristic rate of development, we cannot expect the same behaviour from all children of the same age. eg. Some children may grow up to 6 feet tall, while others might stop at 5 feet or in between.

ii. Different areas develop at different rates

As children grow each area of development proceeds at its own rate and reach maturity in its own time period. eg. the heart, liver and digestive organs grow slowly in childhood, but rapidly during the early years of adolescence.

iii. Development is continuous

Development is a continuous process from the time of conception to death. It may slow down or speed up at certain times, but it never stops completely at any time.e.g. Physical development is rapid during infancy and adolescent period but slows down during childhood period.

iv. Development is sequential

Development follows an orderly sequence, which in general is the same for most children. Each stage of development leads to the next. There are two basic sequences. First development proceeds from head to toe (Cephalo-caudal) e.g. a child first controls his head, then his trunk (turns) and later his legs (stands). This order of development never changes. Secondly, development proceeds from centre of the body towards outside (proximo-distal), eg. Child catches a ball first with both his arms, then with palms and later with his fingers.

v. Development proceeds from general to specific responses

The early responses of the infant are very general in nature as age increases they become more specific. eg. In early stages of language development, the child uses the word 'toy' before he learns to call each toy by name.



vi. Development is influenced by both heredity and environment

Heredity plays an important part in a child's development. This is evident as many characteristics such as colour of eyes, facial features etc. are passed through the genes from the parent to their children.

Environmental factors such as nutrition, motivation, good role model etc. play an important role in the development of child. A child who is not given opportunities to interact with others, generally turns out to be shy and introvert.

vii. Development is due to maturation

No development can take place unless the child's body is strong and able to support the concerned muscles. eg. A child can hold his head only after neck muscles are strong enough to hold it.

viii. Development is predictable

Because the rate of development for each child is fairly constant, we can predict the rate of development to some extent. eg. Children of tall parents are generally tall.

ix. Many forms of so- called 'problem behaviour' are normal behaviour of the age in which they occur.

Each developmental age has certain undesirable forms of behaviour which are normally found at that age and are outgrown as the child passes on to the next stage of development. eg. Bed wetting during the first year of life is normal but it can become a problem behaviour during early childhood.

x. Development involves changes

Major changes include change in size, changes in proportion, disappearance of old features and acquisition of new features.

Change in size:

Each year as child grows his/her height and weight changes.

Change in proportion:

As the child grows in size changes in proportion also occur. For eg. at birth head occupies one fourth of the body length. This proportion changes and in adulthood the head occupies one eighth of the body length.



Disappearance of old features:

Old features disappear or get modified as the child grows. Disappearance of baby hair and baby teeth are a few examples.

Acquisition of new features:

Among the physical features getting permanent teeth, appearance of primary and secondary sex characteristics are all new features acquired in the process of growth.

1.6. LIFE SPAN

Lifespan can be defined as the period that extends from conception to death. Thus, lifespan development is a process that begins at conception and continuous to death. Lifespan development can therefore be defined as a methodical, intra-individual transformation that is attributed to progressions corresponding to age. The development advances in a way that implicates the level of functioning. As a child grows he exhibits transformations that progresses with time. These may include physical growth, cognitive advancement, and psychological advancement that may entail emotional and social development.

Physical development may directly refer to the increase in body and organ sizes, signs of ageing and motor abilities. Cognitive development is mainly concerned with the manner in which a child thinks or perceives the world. This is brought about by the changes in perception, language knowledge, memory, and problem solving skills. Psychological development entails transformations in personal and interpersonal advancements that are concerned with emotional and social aspects. Emotional development subjects children to certain emotional feelings such as guilt and pride. Social development is mainly concerned with the manner in which children interact, share and relate as friends (Hernandez, 2008).

1.7. Characteristics of lifespan perspective

Development is a distinctive feature that largely varies from individual to individual. Life expectancy has been greatly boosted by progress made in nutrition, health and medical knowledge. Development is life-long and thus is not dominated by any age period, it is multi-dimensional. This is because it is concerned with the biological, cognitive, socio-emotional and spiritual aspects. Development can also be said to be multidirectional as some features of development increase while others are decreasing. Another characteristic of development is that it is plastic. It is able to assume different paths depending on the living conditions of an individual. It has the capacity to change. For example, the condition of a child experiencing



intellectual retardation may be reversed by the administration of proper diet and positive experience (Hernandez, 2008).

The other characteristic is that development is historically-embedded. This is to mean that historical conditions can influence development. Development is multidisciplinary. Professionals in the field of psychology, sociology, anthropology, neuroscience and medical research are all concerned with human development with a common goal of expanding their understanding of development in the course of the lifespan. It is contextual in the sense that a person incessantly responds to and acts on context. Such contexts may include the biological constitution of an individual, physical environment, and social, historical, and cultural contexts (Hernandez, 2008).

1.8. Human Development Domains and Periods

Development domains are categories that are adopted by scientists. Three main domains have been defined and they appear to be related or they appear to affect each other. These domains are biological, cognitive and psychological. Biological domain is characterized by human growth and physical changes in human. This is normally centered on the course of childhood and adolescence. It is normally concerned with maturation and growth. Cognitive domain tends to address the manner by which learning takes place and the reasons for deterioration of memory in the course of old age. Cognitive domain is constituted by the mental processes of imaging, perceiving, way of thinking and problem solving. Psychological domain is concerned with emotions, individuality and social relations and expectations. All these domains appear to be operating jointly and affect each other (Boyd & Bee, 2006).

Human development periods cover the lifetime from conception to death. In total there are eight major periods. These periods include infancy and toddler, early childhood, middle childhood, adolescence, early adulthood, middle adulthood, and late adulthood. As long as a person is alive, he/she will pass through each of these stages. In the course of growth of a newborn to a toddler, they portray a characteristic thinking ability, language and personality. In their middle years, great emphasis is laid on family, school, friends in addition to individuality and cognitive skills. When one moves from childhood to adulthood, sexual development is exhibited and the individual is subject to thinking about marriage and career. In adulthood, one cannot avoid thinking about retirement. Theories have been put forward to



explain in details how the actual transitions from one period to another occur. Some of these theories include the psychoanalytic, learning and cognitive theories (Boyd & Bee, 2006).

1.9. Contemporary Concerns in Lifespan Development

There are two main concerns that are related to lifespan development. These are nature and nurture, and continuity and discontinuity. For the better part of history, researchers thought that transformations in human were due to forces that could have been external or internal. Advancements in the knowledge and experimental factors of biological processes are referred to as nature versus nurture. Proponents of nature harbor the belief that children are born with certain traits that are innate and are inborn biases. These may have arisen as a result of genetics or as a consequence of prenatal environment. In any case children are not born as blank slates. Proponents of nurture argue that the outcomes of certain occurrences depend on how an individual perceive them (Boyd & Bee, 2006).

In the case of continuity and discontinuity, the subject of contention is whether the transformation that comes with age is basically a matter of amount, degree, type, or kind. The number of friends that a child has may vary as his age advances. These changes that come with age can be grouped as universal, group specific and individual changes. Children normally advance slowly through the various stages of cognitive development. There is a possibility of intelligence and individuality in the course of childhood merging at the onset of adulthood. This continuity is not rigid but flexible hence it is subject to change. A child who portrays a high level of intellectual capacity in the course of his childhood may lose this good trait if they are continuously subjected to an environment where they are vulnerable to abuse and are neglected (Boyd & Bee, 2006).

Every human being goes through universal changes. Such changes are a characteristic of certain ages. Group specific changes are a preserve of individuals who share comparable cultural and historical experiences. Individual changes are limited to the person concerned and are attributed to genetic factors and timing of experiences. Everybody is unique, and this is attributed to their genes which dictate their physical appearance, individuality, and intelligence (Smith, 1999).

1.10. Havighurst's Developmental Tasks Theory

Havighurst's main assertion is that development is continuous throughout the entire lifespan, occurring in stages, where the individual moves from one stage to the next by means of successful resolution of problems or performance of developmental tasks. These tasks are



those that are typically encountered by most people in the culture where the individual belongs. If the person successfully accomplishes and masters the developmental task, he feels pride and satisfaction, and consequently earns his community or society's approval. This success provides a sound foundation which allows the individual to accomplish tasks to be encountered at later stages. Conversely, if the individual is not successful at accomplishing a task, he is unhappy and is not accorded the desired approval by society, resulting in the subsequent experience of difficulty when faced with succeeding developmental tasks. This theory presents the individual as an active learner who continually interacts with a similarly active social environment.

Havighurst proposed a bio psychosocial model of development, wherein the developmental tasks at each stage are influenced by the individual's biology (physiological maturation and genetic makeup), his psychology (personal values and goals) and sociology (specific culture to which the individual belongs).

Some developmental tasks evolve out of the biological character of humans and are therefore faced similarly by all individuals from any culture. An example of this is learning how to walk for infants. Being a skill that depends on maturation and genetically determined factors, the mechanics involved in learning how to walk are virtually the same and occur at generally the same time for children from all cultures.

Infancy and Early Childhood - birth to 5 years

- Learning to walk
- Learning to control bodily wastes
- Learning to talk
- Learning to form relationships with family members

Middle Childhood - 6 - 12 years

- Learning physical skills for playing games
- Developing school-related skills such as reading , writing, and counting
- Developing conscience and values
- Attaining independence



Adolescence - 13 - 17 years

- Establishing emotional independence from parents
- Equipping self with skills needed for productive occupation
- Achieving gender-based social role
- Establishing mature relationships with peers of both sexes

Early Adulthood - 18 - 35 years

- Choosing a partner
- Establishing a family
- Managing a home
- Establishing a career

Middle Age - 36 - 60 years

- Maintaining economic standard of living
- Performing civic and social responsibilities
- Relating to spouse as a person
- Adjusting to physiological changes

Later Maturity - over 60 years

- Adjusting to deteriorating health and physical strength
- Adjusting to retirement
- Meeting social and civil obligations
- Adjusting to death or loss of spouse

1.11. HAPPINESS AND UNHAPPINESS DURING THE LIFE SPAN

Life satisfaction usually referred as happiness comes from the fulfilment of a need or wish and as such is the cause or means of enjoyment. According to the definitions of happiness given in any standard dictionary, it is a state of well being and contentment – a pleasurable satisfaction that comes when the individual's needs and wishes are fulfilled, it is not same as euphoria, which implies not only a state of satisfaction but also a buoyancy that is not present in life satisfaction or happiness.



Because happiness and unhappiness or life satisfaction and dissatisfactions are subjective states, information about them must, of necessity, come from answers to questionnaires or from introspections or retrospections. This is because only the persons involved can say whether they are happy or unhappy or whether they are satisfied or dissatisfied with their lives.

Introspective and retrospective reports, as well as psychologists are well aware, are not always accurate. Retrospective reports are specially subject to error because people tend to forget, or to minimize, especially in retrospect, the unhappiness they experience in some periods of their lives and to exaggerate the happiness or unhappiness at other periods.



UNIT - II

FROM PRENATAL PERIOD TO CHILDHOOD

2.0. MEANING :-

Prenatal period refer to period of development before birth. It is a period that ranges from conception to birth. Thus period approximately lasts for about 280 days. This is the period during which individual develops from a single cell to a fully developed organisms.

MAIN CHARACTERISTICS OF PRENATAL PERIOD

Although this period is relatively short it has six important characteristics according to HURLOCK.

- 1) The heredity endowment, which serves as the foundations for later development is fixed, once and for all, at this time. While favourable or unfavourable conditions both before and after birth may and probably will affect to some extent the physical and psychological traits that make up this hereditary endowment the changes will be quantitative not qualitative.
- 2) Favourable conditions in the mother's baby can foster the development of hereditary potentials while unfavourable conditions can stunt their development, even the point of distorting the pattern of future development.
- 3) The sex of the newly created individual is fixed at the time of conception and conditions within the mother's body will not affect it, as is true of the hereditary endowment.
- 4) Proportionally greater growth and development take place during the prenatal period than at any other time throughout the individual's entire life. During the nine months before birth, the individual grows from a microscopically small cell to an infant who measures approximately twenty inches in length and weights on the average, 7 pounds. It has been estimated that weight during this time increases eleven million times. Development is likewise phenomenally rapid. From a cell that is round in shape, all the bodily features, both external and internal, of the human being develops at this time.
- 5) The prenatal period is a time of many hazards, both physical and psychological. While it cannot be claimed that is the most hazardous period in the entire life span-many believe that infancy is more hazardous-it certainly is a time when environment or psychological hazards can have a marked effect on the pattern of later development or may even bring development or may even bring development to an end.



6) The prenatal period is the time when significant people from attitudes towards newly created individuals. These attitudes will have a marked influence on the way these individuals are treated especially during their early, formative years.

2.1. FACTORS INFLUENCE THE PRENATAL DEVELOPMENT

Prenatal development is greatly influenced by a wide variety of factors. Some of the factors that influence prenatal development are as follows:-

- 1) Age of the mother:-The best age for a women to bear a child 23 to 26 years. Children generally born before or after this age or most pronounced various types of genetic abnormalities. The labour period also increase with increased in mother's age.
- 2) Illness and infections:-In the mother during the prenatal period also influence the development of the organisms.

A young infant is concerned to mother through placenta. Many infectious illness of the mother do not cross the placenta to the blood supply of the foetus. However, some diseases do cross the placenta and effects the child which may lead to mental retardation. There are many such diseases. One well known disease, that is known to produce mental retardation as result of maternal infections is rubella virus or German measles. The danger is particularly great during the first three months of pregnancy.

3) Blood RH factor:-IF certain substance present in the blood of foetus which are not present in the mother's blood problem may result. For e.g foetus may inherit a substance from the father called RH factor. The foetus then has RH positive (RHP) blood, a mother who does not have this factor has RH negative (RH) blood. In such cases, the mother will develop antibodies against the RH factor for the foetus blood. This usually does not cause a problem for the mother first child. However, second pregnancy can be complicated by the antibodies that remain in the mother's blood. In some cases, mother's antibodies enter the blood stream of the foetus and destroy its red blood cells.

4) Birth complications:-Birth complications is another pre-natal factor. Prematurity and anoxia are two of the main complications that can occur the infant's delivery and lead to retardation and intellectual functioning. Studies have indicated that people who are born prematurely have lower than normal IQs and generally higher incidence of mental retardation.



5) Drugs:-Certain prescribed drugs taken by the mother during the pregnancy can have a serious development effect on the foetus. These drugs include aspirin, thalidomide, certain illegal drugs such as marijuana, hashish, LSD can also effect child's intelligence. Alcohol intake during pregnancy can also effect the child. About 40% of the children born to women who are chronic alcoholic have serious physical abnormalities including mental retardation. Thus, drugs affect foetus much more during the first three months of pregnancy than master.

6) Environmental hazards:-Anything that affects a pregnant women can affect her foetus - chemicals, radiation, extremes of heat and humidity and other hazards of modern life. Infants exposed to high levels of lead to parentally scored lower of intelligence tests then those exposed to low or moderate levels.

Radiation is especially dangerous. It affected Japanese infants after the atomic bomb explosions at Hiroshima and Nagasaki. The critical period seems to be that through 15week after fertilisation.

2.2. Germinal stage

Conception occurs when the female egg (ovum) is fertilized by a the male sperm. Under normal circumstances, one egg is released approximately once a month from a woman's ovary during a process called ovulation. The egg makes its way into a fallopian tube, a structure that guides the egg away from the ovary toward the uterus. For fertilization to occur, sperm ejaculated during sexual intercourse (or introduced during artificial insemination) in a substance called semen must have made their way from the vagina into the uterus and subsequently into the fallopian tube where the ovum has been released. This process can take up to ten hours after ejaculation. For fertilization to occur, a sperm must penetrate the tough outer membrane of the egg called the zona pellucida. When one sperm successfully binds with the zona pellucida, a series of chemical reactions occurs to allow only that sperm to penetrate. Fertilization occurs when the sperm successfully enters the ovum's membrane. The genetic material of the sperm and egg then combine to form a single cell called a zygote and the germinal stage of prenatal development commences.

The zygote soon begins to divide rapidly in a process called cleavage, first into two identical cells called blastomeres, which further divide to four cells, then into eight, and so on. The group of diving cells begins to move along the fallopian tube toward the uterus. About sixty hours after fertilization, approximately sixteen cells have formed to what is called a morula, still enclosed by the zona pellucida; three days after fertilization, the morula



enters the uterus. As cell division continues, a fluid-filled cavity called a blastocoele forms in the center of the group of cells, with the outer shell of cells called trophoblasts and an inner mass of cells called embryoblasts. The zona pellucida disappears and the morula becomes a blastocyst. At this stage the blastocyst consists of 200 to 300 cells and is ready for implantation.

Implantation, the process in which the blastocyst implants into the uterine wall, occurs approximately six days after conception. Hormones secreted from the mother's ovaries and a chemical secreted by the trophoblasts begin to prepare the uterine wall. The blastocyst first adheres to the wall then moves into the uterine tissue. Implantation marks the end of the germinal stage and the beginning of the embryonic stage.

2.3. 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 (gastrulation) leads to the formation of three distinct layers called germ layers: the ectoderm (outer layer), the mesoderm (middle layer), and the endoderm (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.

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:

- Week 3: Beginning development of the brain, heart, 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 the heart (which begins to beat), brain, and nervous tissue.



- Week 5: Beginning development of eyes, nose, kidneys, lungs; continuing development of the 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 or ovaries); first formation of urine in the kidneys 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 fetus.

2.4. Fetal stage

Prenatal development is most dramatic during the fetal stage. When an embryo becomes a fetus at eight weeks, 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 fetus is considered full-term at 38 weeks gestation, he or she may be 50 centimeters (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 fetal stage. Examples of some of the major features of fetal development by week are as follows:

- Weeks 9–12: The fetus reaches approximately 8 cm. (3.2 in.) in length; the head is approximately half the size of the fetus. External features such as the face, neck, eyelids, limbs, digits, and genitals are well formed. The beginnings of teeth appear, and red blood cells begin to be produced in the liver. The fetus is able to make a fist.
- Weeks 13–15: The fetus reaches approximately 15 cm. (6 in.) 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 fetus is able to swallow and make sucking motions.
- Weeks 16–20: The fetus reaches approximately 20 cm. (8 in.) 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 fetus becomes more active, and the mother can sometimes begin to feel fetal movements at this stage.

- Weeks 21–24: The fetus reaches approximately 28.5 cm. (11.2 in.) in length and weighs approximately 0.7 kg (1 lb. 10 oz.). Hair grows longer on the head, and the eyebrows and eye lashes finish forming. The lungs continue to develop with the formation of air sac (alveoli); the eyes finish developing. A startle reflex develops at this time.
- Weeks 25–28: The fetus reaches approximately 38 cm. (15 in.) in length and weighs approximately 1.2 kg (2 lb. 11 oz.). The next few weeks mark a period of rapid brain and nervous system development. The fetus gains greater control over movements such as opening and closing eyelids and certain body functions. The lungs have developed sufficiently that air breathing is possible.
- Weeks 29–32: The fetus reaches approximately 38–43 cm. (15–17 in.) in length and weighs approximately 2 kg (4 lb. 6 oz.). 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.
- Weeks 33–36: The fetus reaches approximately 41–48 cm. (16–19 in.) in length and weighs 2.6–3.0 kg (5 lb. 12 oz. to 6 lb. 12 oz.). Body fat continues to increase, lanugo begins to disappear, and fingernails are fully grown. The fetus has gained a high degree of control over body functions.
- Weeks 36–38: The fetus reaches 48–53 cm. (19–21 in.) 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. Fingernails have grown past the tips of the fingers. In a healthy fetus, all organ systems are functioning.

Common problems

Although 90 percent of babies born in the United States are considered healthy, abnormalities may arise during prenatal development that are considered congenital (inherited or due to a genetic abnormality) or environmental (such as material derived abnormalities). In other cases, problems may arise when a fetus is born prematurely.



2.5. Congenital abnormalities

In some cases abnormalities may arise during prenatal development that cause physical malformations or developmental delays or affect various parts of the body after the child is born. The cause may be a small mutation in or damage to the genetic material of cells, or a major chromosomal abnormality (each normal cell has two copies each of 23 strands [called chromosomes] of genetic material, and abnormalities can arise if there are three copies of a strand or only one). Sometimes the abnormality is inherited from one or both parents; in other cases, the defect occurs because of an error in prenatal development.

Some abnormalities are minor and do not affect the long-term prognosis once the child is born. At the other end of the spectrum, abnormalities may be so severe that fetal demise is inevitable. Approximately 10 to 15 percent of pregnancies end before the twentieth week, a process called miscarriage or spontaneous abortion; congenital abnormalities account for a significant proportion of miscarriages. Genetic abnormalities account for approximately 5 percent of miscarriages.

Maternal derived abnormalities

The age, health status, nutritional status, and environment of the mother are all closely tied to the health of a growing embryo or fetus. Some examples of environmental factors that may lead to developmental abnormalities include:

- Age: As of 2004, research showed that babies born to mothers between the ages of seventeen and thirty-five tend to be healthier. One reason is that the risk of certain congenital abnormalities such as **Down syndrome** increases with mother's age (particularly mothers over forty). Another reason is that the risk of having pregnancy or birth complications is greater with women over the age of thirty-five.
- Health status: In some cases a mother may pass a viral or bacterial infection to the fetus, such as in human **immunodeficiency** virus (HIV). In other cases, a mother's illness may cause congenital malformations; an example is **rubella**, which can cause heart defects, deafness, developmental delays, and other problems in a fetus if the mother contracts it during pregnancy.
- Nutritional status: A well-balanced diet rich in nutrients such as **follic acid**, calcium, iron, zinc, vitamin D, and the **B vitamins** is recommended for pregnant women. Certain vitamin and mineral deficiencies can interfere with normal prenatal



development. For example, a deficiency in folic acid during the early stages of pregnancy may lead to neural tube defects such as **spina bifida**. Mothers are recommended to eat approximately 300 additional calories a day (above and beyond a normal non-pregnancy diet) to support the fetus's growth and development.

- Other environmental factors: Exposure to certain substances called teratogens (agents that may interfere with prenatal development) during pregnancy may cause embryonic or fetal malformations. Examples of teratogens include alcohol, thalidomide, cocaine, certain seizure medications, diethylstilbestrol (DES), and the anti-acne drug Accutane.

2.6. Prematurity

Advances in medical care have made it possible for many infants born prematurely to survive and develop normally. The earlier the gestational age, the greater the chance of death or significant medical problems. Whether or not a premature infant will survive is intimately tied to his or her gestational age:

- 21 weeks or less: 0 percent survival rate
- 22 weeks: 0–10 percent survival rate
- 23 weeks: 10–35 percent survival rate
- 24 weeks: 40–70 percent survival rate
- 25 weeks: 50–80 percent survival rate
- 26 weeks: 80–90 percent survival rate
- 27 weeks: greater than 90 percent survival rate

2.7. BABYHOOD

i Characteristics of babyhood: (From 2 weeks to 2 years)

i) Babyhood is the true foundation age. At this time, many behavior patterns, attitudes and emotional expressions are established. It is a critical period in setting the pattern for personal and emotional adjustments.

ii) Babies grow rapidly both physically and psychologically. Changes are rapid in appearance (height and weight) and capacities. The limbs develop in better proportion to the large head. Intellectual growth and change are parallel to physical growth and change.



iii) Ability grows to recognize and respond to people and objects in the environment. The baby is able to understand many things and communicate its needs and wants.

iv) The babyhood is an age of decreasing dependency. The baby begins to do things to itself. With decrease of dependency, a rebellion against being treated as baby. A protest takes protest comes in the form of angry outbursts and crying when independence is denied.

v) It is an age of high individuality which can be realized in appearance and in patterns of behavior.

vi) Babyhood is the beginning of Creativity, sex role and socialization for adjustment in future life.

vii) Babyhood is a hazardous period. The physical hazards are illness, accidents, disabilities and death. Psychological hazards are disinterests and negative attitudes

2.8. Emotional behaviour in babyhood:

i) At birth, the emotions appear in simple and undifferentiated forms. In babyhood, the emotions are differentiated and they are aroused by a number of stimuli. There are two distinct types of emotions.

ii) There is much difference with the behavior of adolescents and adults and often from those of older children.

iii) Emotions are more easily conditioned during babyhood than at latter stage. This is due to the reason that the intellectual abilities of babies are limited. They respond easily and quickly to stimuli. Anyhow there is hesitation to respond in some cases.

Development in socialization:

Early social experiences play a dominant role in determining the baby's future social relationships and patterns of behavior towards others. Since the baby's life is centered around home, it is here that the foundations for later behavior and attitudes are laid. There is no evidence that people are social or antisocial by inheritance but on their social experience gained during babyhood. Also, making a change in the pattern of behavior that has become habitual is never easy. Nor is there any guaranty that the change will be complete. That is why good social foundations are so important during the babyhood years. At birth, infants are not gregarious in nature in the sense that there is no difference to them who attend to their physical needs. During the first year of the babyhood, babies are in a state



of equilibrium which makes them friendly, easy to handle and pleasant to be with. Around the middle of second year, the equilibrium is tilted making the baby fussy, non cooperative, and difficult to handle. However, equilibrium is restored so that the babies begin to exhibit again pleasant and social behavior.

2.9. EARLY CHILDHOOD

Early Childhood stage is the foundation period of life covering 2 - 6 years of our life. It is a period of rapid - physical, mental, emotional, social and language development of a child. Apart from these major developmental aspects such as, development of - understanding, moral values, some common interests, those are some common characteristics of Early Childhood stage. It is a period of slow growth and rapid development.

Early Childhood, which extends from two to six years, is labeled by the Parents as 'The Problem' ; 'The Troublesome, or 'The Toy' age, by the Educators as 'The Pre-school age' ; and, by the Psychologists as 'The Pre-lingual, 'The Exploratory', or 'The Questioning' age, because of its unique characteristics.

EARLY CHILDHOOD STAGE

- 1 Age group 2-6 years.
- 1 Period of rapid physical, mental, emotional, social and language development.
- 1 It is the foundation period of life.
- 1 It is a period of slow growth and rapid development.
- 1 It is termed as 'Pre-School age.

2.10. CHARACTERISTICS OF EARLY CHILDHOOD STAGE

- The Early period witnesses the all round development of the child. This is one of the most important and impressionistic periods of human life. Let us now discuss the characteristics of the early childhood period,.

▶ A period of physical development:

The child gains height at the average rate of about 3 inches per year. Children at the end of this stage generally have a height of 3 feet and 6 inches. The weight of the child also increases. Body proportions change markedly, and the "baby look" disappears. Difference



in body build becomes apparent for the first time in early childhood with some children having a fat body build, some muscular body build and some others having a thin body build. Regarding the development of teeth, generally during the last half year of early childhood, the baby teeth begin to be replaced by permanent teeth, coordination of the finer muscles. The child acquires various motor skills like - catching, throwing, running, jumping, climbing, riding a tricycle, self-feeding, dressing, balancing, colouring, drawing etc.

► **A period of language development:**

Early childhood is popularly known as “the chatterbox age”, because children are then able to speak with ease. By the time the children are two years old, most of the pre speech forms of communication they found so useful during babyhood are abandoned. Young children no longer babble, and their crying is greatly curtailed. They may use gestures, but mainly as supplements to speech.

During early childhood, there is a strong motivation on the part of most of the children to learn to speak. Because, 'learning to speak' is an essential tool in socialization and a tool in achieving independence.

► **Major improvements in speech during Early Childhood are –**

- i) Improvement in comprehension: Children at this stage, develop the power of understanding about what others say to them, which helps them to communicate with others.
- ii) Improvement in speech skills: Early childhood is normally a time when rapid developments are made in the major tasks of learning to speak - mastering pronunciation, building up a vocabulary. It means that young children begin to learn more words and their meanings, and to combine words into sentences. Children can speak simple to complex sentences.



► **A period of emotional development:** Emotions are especially intense during early childhood. This is a time of disequilibrium when children are unable to control their emotions. Some common emotions of early childhood period are - anger, fear, jealousy, curiosity, envy, joy, grief, affection etc. The most common causes of anger in young children are conflicts over playthings, un-fulfillment of wishes, attacks from another child etc. Children express anger through temper tantrums, characterized by crying, screaming, stamping, kicking, jumping up and down, or striking.

Another emotion which finds its expression is Fear. The child is afraid of many things which he does not know. Young children become Jealous when they think that their parents interest and attention are shifting toward someone else in the family, usually a new sibling. Young children may openly express their jealousy or they may show it by reverting to infantile behaviour to get attention. Children are curious about anything new that they see and also about their own bodies and the bodies of others and, as a result, they ask questions.

Young children often become Envious of the abilities or material possessions of another child and they express their Envy in different ways. Young children derive Joy from such things as a sense of physical well-being, different situations, sudden or unexpected noise, slight calamities, playing pranks on others, completing different tasks etc. They express their joy by smiling, clapping, jumping, hugging etc.

Another emotion which finds its expression is Affection. Young children learn to love the things are - people, pets, toys or other objects - which give them pleasure. They express their affection by kissing, hugging and patting. Young children are saddened by the loss of anything they love or that is important to them. They express their Grief by crying and by losing interest in their normal activities, including eating.

► **A period of Social Development:**

One of the important developmental tasks of early childhood is acquiring the preliminary training and experience needed to become a member of a “Gang” in late childhood. Thus, early childhood is often called as “The Pregang age”.

The foundations for socialization are laid by the family, neighborhood and by his pre-school. The child develops his social qualities in his family. A good family provides a good social atmosphere for the child to develop healthy social habits. Sometimes he goes



to the neighbourhood. He finds that the atmosphere there is different from that at home and he tries to adjust with that atmosphere. He develops Friendship with other children of his age in the neighbourhood. He plays with his friends and sometimes he also quarrels. He comes to know of teasing, imitating, quarrelling, sympathy, sharing, co-operation etc.

▶ **A period of Development of Understanding:**

With increased intellectual abilities, specially the abilities to reason and to see relationships, young children's understanding of people, objects and situations increases rapidly. This increase in understanding comes from new meanings being associated with meanings learned during baby-hood. Children come to know about the simple relationships, like - parents, sibling, relatives etc. By the time they are three years old, most young children know their sex, their full names, and names of different parts of their bodies. During the early childhood, the young children develop the concepts of bodily functions, space, size, numbers, colours, shapes, time, self, beauty etc.

▶ **A period of Development of Interests:**

Early childhood is also a period when some common interests develop. These include –

- i) Interest in play,
- ii) Interest in human body,
- iii) Interest in self,
- iv) Interest in clothes,
- v) Interest in Religion and
- vi) Interest in Sex.

The young children love to play at all the time. They become interested in the exterior of the body before the interior. But at the later part of early childhood, most young children develop an interest in the interiors of their bodies and want to know about the interior parts and their functions. After the helpless days of babyhood are over, many young children develop an interest in themselves. There are many ways by which the young children show their great interest in self, like - looking at themselves in mirrors, examining the different parts of their bodies and their clothes, asking questions about themselves, comparing their possessions with those of their playmates etc. Young children also have a strong interest in their clothes. The reason is that, at an early age, they discover that their clothing attracts



attention. Adults, they find, make favourable comments about their clothes and their playmates often admire them or envy them because of their clothes. Religious beliefs are, for the most part, meaningless to young children although they may show some interest in religious observances. So many of things often mystify children, such as - birth, death, growth and the elements. These are explained in religious terms by elders and they accept them. Even young children endow all their beliefs with an element of unreality; therefore, this stage has been called as “the fairytale stage” of religious belief. Young children are also curious about where babies come from and ask many questions about this. Many children show their interest in sex by talking about it to their playmates when adults are not present, by looking at pictures, by enjoying the adult scenes in the T.V. shows and movies etc. Normally in this stage male child is attached to the mother and the female child to the father.

PROBLEMS DURING EARLY CHILDHOOD

Now we are familiar with the characteristics of early childhood. We must also discuss the problems associated with this period. In learning to adjust to the world as children grow up, they often develop certain kinds of problem behaviour. The most common problems of early childhood are as follows -

▶ Eating problems:

Children’s eating problems have received considerable attention from theorists and practitioners. They have suggested that early eating experiences of children play a significant role in determining their later personality characteristics as eating has a direct relationship with the physical well-being of the child. There are a number of common eating problems among the young children as experienced by parents and other family members. The most common problems are –

- i) Not eating,
- ii) Vomiting,
- iii) Dawdling, and
- iv) Weaning.

Problems related to not eating tend to occur with considerable frequency during infancy and pre-school years. Vomiting is also frequent in young children. Children vary greatly in their proneness to vomit. Vomiting tends to occur during the highly stimulating events,



changes in environment and stressful experiences associated with food. Dawdling means doing something in a slow, lingering way - taking more time to finish the act than is needed. Most of the young children at this age take more time to finish a meal. Dawdling creates so many problems to the parents and it also affects the child's health. Another problem of early childhood is weaning.

The introduction of new food is usually correlated with the weaning process and presents its own problems. Children tend to reject the food that is different from their regular food in either taste or consistency. They push the food out of their mouths, or if forced to eat, they vomit. These eating problems affects in child's physical as well as mental development.

► **Elimination Problem:**

Next to eating, toilet training has perhaps been given the greatest attention. Method of toilet training have long term consequences for later personality characteristics. Toilet training is very important and the mother has a great role to play in this regard.

Children vary greatly in their progress towards successful toilet training. The child who has a regular elimination pattern is easier to train. But sometimes it has been observed that a well trained child begins to wet again or strongly resists sitting on the toilet; these kinds of behaviours create problems for the parents or the caretakers or the teachers.

In this case, re-training must be provided. Proper toilet training should be provided from a very early age, otherwise elimination process will create lots of problem to the parents, caretakers and to the pre-school teachers.

► **Sleeping Problem:**

Problems connected with sleep are certain to arise at some time. Unless they are dealt with correctly, they can lead to other more serious problems that may harm the general state of the child's health.

Many of the sleeping problems that parents encounter in children occur when the child recognizes the discrepancy between his hour of retiring and the bed time of the other family members. The child does not want to be left out of any activities by going to sleep



early. The young child cries when he does not want to be put to bed. Sometimes the refusal to go to sleep is accompanied by emotional responses reflecting fear on the part of the child. Pre-school children are particularly prone to the development of fears. Events such as loud, sudden sounds and unfamiliar light patterns coming through the windows are sometimes sufficient for the conditioning of fear to the darkened bedroom.

Awakening during the night may be initiated by many different events: illness, nightmares, changes in daytime routine, bed wetting etc. Once the rhythmic sleep pattern has been broken, there is a tendency for the child to continue night time awakening in the absence of the original event. This situation may create stress on the parents. A child's sleeping problems not only create problems to parents, but also these will hamper the physical as well as mental well-being of the child.

▶ **Accidents :**

Accidents in early childhood can be and often are one of the most serious problems that affect the physical well-being of children. Young children tend to have more accidents than the babies. Because young children are no longer as carefully supervised and protected as they were when they were babies. Nor are young children as aware of possible dangers and as careful as they will be when they grow older. Accidents can affect the head, feet, legs, hands, arms, body and face of a child. Accidents affect the child both physically and psychologically, which may affect the child's personality development in his later life.

▶ **Social Adjustment Problems:**

Children under 4 years of age cannot be expected to be have in a truly social manner. They will push, grab, fight and refuse to share their things with others. However, by the time they are 5 years old, children should have overcome some of these behaviours.

Children who still behave in an unsocial way after other children of the same age have developed more socially acceptable patterns will find that they have no one to play with. Normally other people also dislike children with unsocial behaviour. As a result, these children will develop adjustment problem in the social environment. So, unsocial behaviour should be checked as soon as it appears problems during early childhood.



Late Childhood extends from the age of 6 years to 12 years, beginning with the child's entry into formal schooling and ending in the advent of puberty. This is the period of excellence and pseudo - maturity. New interests develop for the child and besides some maturity in sex; the child also develops certain amount of physical and mental growth. As regards sex, it remains dormant, but it emerges with great force at the end of this stage. This stage, is therefore, called 'latency period'.

At both its beginning and end, late childhood is marked by conditions that profoundly affect a child's personal and social adjustments. The beginning of late childhood is marked by the child's entrance into first grade in school. For most of the young children, this is a major change in the pattern of their lives, even when they have had a year or more of experience in some pre-school institution. Entrance into first grade is a milestone in every child's life; therefore it is responsible for many of the changes that take place in terms of attitudes, values and behaviour.

Although it is possible to mark off the beginning of late childhood fairly accurately, one cannot be so precise about the time when this period comes to an end because sexual maturity - the criterion used to divide childhood from adolescence - comes at varying ages. This is because there are marked variations in the ages at which boys and girls become sexually mature. As a result, some children have a longer - than - average late childhood, while for others it is shorter than the average.

Parents, educators and psychologists apply various names to the late childhood and these names reflect the important characteristics of the period. Parents' name this period as - the troublesome age and quarrelsome age; educators call it as - elementary school age and critical period, and psychologists named the late childhood as - gang age, creative age and play age.

2.11.Late Childhood Stage

- ▶ This stage extends from 6 - 12 years.
- ▶ Period of excellence and Pseudo - maturity.
- ▶ The stage is called latency period.
- ▶ It is marked by profound affect on child's personal and social adjustment.



- ▶ It is a stage of physical development.
- ▶ It is the entry stage in first grade in elementary school.
- ▶ It is also named as elementary school age.
- ▶ This period can be termed as troublesome age and quarrelsome age.
- ▶ This period can also be termed as - gang or creative or play age.

CHARACTERISTICS OF LATE CHILDHOOD

Characteristics of development help us to understand the period in a better way. Let us discuss the characteristics of the late childhood. Late Childhood stage carries the major potentialities and prospects of an individual to make him fully grown up to manhood in the later stage. The distinguishing marks of such changes and development may be shown below

–

A period of Physical Development –

This is the period of slow and uniform growth. Physical growth follows a predictable pattern, although variations do occur. Body build affects both the height and weight of a child in late childhood. The bones harden; the height and weight increase at this stage and there is improvement in a child motor development, skill and endurance. A child at this stage is physically restless. He must engage himself in one or the other activity. The child develops skills like - self-help skills, social-help skills, school skills and play skills. Apart from doing his or her own works the child becomes able to help others in this stage. At school, the child develops the skills needed in writing, drawing, painting, clay modeling, sewing etc. The children also develop skills like - throwing, catching, riding a bicycle, swimming etc. By the end of the late childhood stage, a child normally has twenty - eight of the thirty - two permanent teeth. The last four - the wisdom teeth erupt during adolescence.

A period of Development of Intellectual Ability –

This is an age of intellectual advancement. Intellectual activities are clearly visible at this stage. The child is in a position to exercise his or her power of memory, attention, thinking and imagination and can solve problems intelligently. His knowledge and experience not merely remain receptive but gradually take the creative turn in the late childhood stage. The



child is intellectually an alive and active individual. I.Q. at this stage developed considerably and by the end of this stage it becomes stable.

A period of Capacity to Learn –

The child acquires mental readiness to learn at this stage. He can pay attention to and develop interest in reading, writing and arithmetical activities. He shows awareness and sense of subordination to the school rules, laws and discipline. A sense of discipline and some sense of responsibility to school work find are acquired by him. He tries to learn new knowledge and experience through imitation.

A period of Social Development –

The late childhood stage is also a stage of socialisation of the ego-centric nature of the child. The primary school provides an ideal situation for such socialisation. The child's social environment and its functions are widening. Both the classroom and the play ground situations train him how to feel, think and act together with others, share joy and sorrow with them. He also learns some of the social rules and norms through active participation in society. The child at this stage is engaged in social interaction and learns the spirit of sharing with others.

Development of Extrovert Nature –

Child's nature of behaviour, thought and activity at this stage can be described as extrovert or external minded. He is more attracted to external situations and takes pleasure in active participation in them. He has no occasion to feel bored, anxious or worried over any problems of his personal life. External world and its situations are extremely interesting and stimulating to him. He devotes all his energy and attention to them.

It is a Play Age –

The extrovert nature naturally makes the child playful. The social situation provided in school develops his natural tendency to play. Group play and group activity make the child more social, loyal and disciplined. He is usually attracted to the school on account of the play situation provided by it. He begins to acquire social virtues like friendship, co-operation and competition in group play with his own age mates. His individualistic and ego-centric nature at this stage is substantially reduced at this stage and instead he would love to live in groups when the children engage themselves in play activities. For these reasons this stage is termed as "Play Age".



It is a Gang Age –

Social senses urge the boys and girls to live an organised group life. They develop a strong sense of loyalty to the gang. They form certain rules and code of conduct of the gang and uphold them quite faithfully and obediently. They select their leader and owe the sense of subordination to him. In case the leader appears to be unacceptable, they discharge him and select a new leader. This sense of organised group life may be observed in children in the late childhood stage. As such, late childhood is often referred as “Gang - age”.

A period of Emotional Development –

Children at this stage discover that expression of emotions, especially the unpleasant emotions, is socially unacceptable to their age-mates. As a result they acquire a strong incentive to learn to control the outward expressions of their emotions. Characteristically, emotional expressions in late childhood are pleasant ones compared with the early childhood stage. A normal child at this stage believes in the sharing of love and affections. At this stage children also experience such emotions like - anger, fear, joy, anxiety etc.

A Period of Development of Concepts –

As children’s world expands with their entrance into school, so does children’s interest. With the broadening of interests comes an understanding of people and things which formerly had little or no meaning. Children associate new meanings with old concepts on the basis on what they learn after starting school. In addition, they derive new meanings from the mass media, specially movies, radio and television. The concepts that change most and the new ones most commonly developed in late childhood are associated with- Life, Death, Bodily functions, Space, Numbers, Money, Time, Self, Sex Roles, Social Roles, Beauty, Discipline etc.

Development of Homo-sexuality –

The sex life of the late childhood stage is described as homo-sexual. Boys and girls at this stage feel the sense of their physical attachment to their same sexes. Boys love playing with the boys and the girls with the girls. They remain quite indifferent to the opposite sex. Co-education is no problem to the teacher. At the later part of the late childhood stage boys and girls begin to develop a some what critical outlook towards the opposite sex.

Development of Constructive Instincts –

The instinctive tendencies of a child are in the process of modification and development through training during late childhood. His sense of curiosity is largely satisfied by the formal



education in school. Self assertive instinct makes the child more competitive. Instinct of construction may take the creative turn through hand-work, craft-work, and drawing. Gregarious instinct may be satisfied through collective games and sports. The instinctive restlessness of the child is substantially removed at this stage.

A period of development of Interests –

At the time of entrance to the primary school the child does not have any specific interest in mind. In the late childhood stage he however, develops acquired interest and sentiment towards specific subjects and fields of activity. A growing sense of liking and disliking makes his choice somewhat critical. His interest in play also appears to be more selective at this stage.

A period of Development of Creativity –

Late childhood is the stage then we can identify the creative talent in a child's individuality. The native talent, potentiality and prospect inherent in the child may find expression through the suitable outlets provided to him. He no longer remains a blind imitator but gives evidence of his creative ability in thought, feeling and action. He is now in a position to observe anything through the exercise of reasoning and understanding.

A Period of Development in Sex - Role Typing –

Sex - role typing, which begin when children are capable of doing things, now continues with new agencies playing important roles in the typing process. Sex-Roles are patterns of behaviour for members of the two sexes that are approved and accepted by the group with which the individual is identified. 'Sex Role Typing' means learning to conform to the approved roles for one's sex. Children learn to play sex-roles by three common methods, viz. imitation, identification and child - training. Sex role typing has profound and far reaching effects on children's behaviour.

The forces that play significant roles in the sex - typing process in late childhood are - teachers, school subjects, mass-media, books, peer groups etc. Sex - role typing influences in important ways both the behaviour and self-evaluation of the children. In appearance, clothing and even in mannerism, children try to create the impression of sex-appropriateness at this stage.



It is important for us to know the hazards associated with this period. Some of the common hazards of late childhood are in fact carry over from the earlier years, though they often take new forms. Others are new, arising from the changes in the child's life pattern after entering school. Hazards of Late Childhood can be divided in two major types –

- 1) Physical Hazards and
- 2) Psychological Hazards.

Physical Hazards:

Because of the advancement in medical science, there is now much less mortality during late childhood than in the past. However, accidents are a major cause of death among the children. While many of the physical hazards of the earlier years persist into late childhood, their effects on the child's physical well - being tend to be less severe and less far-reaching than they were earlier. The major physical hazards of late childhood are discussed below -

▶ Illness:

Since vaccines against most childhood diseases are now available, older children suffer mainly from occasional colds and stomach upsets. The psychological effects of illness in late childhood can be serious. Illness makes children irritable, demanding, and difficult to live with. If they are sick for a long period of time, their school work may suffer and they may fall behind their peers in the learning skills. And even in some cases, parents may become intolerant in their attitudes towards the illness of their children, complaining about the extra work and the expense the illnesses entail.

While most illness at the late childhood stage are real, some are imaginary or 'faked'. The children sometime pretend illness. They slowly children learn that when they are ill, they are not expected to carryout their regular activities, home disciplines are relaxed, and they get more attention than usual. As a result, sometimes they repeat this technique, 'Imaginary or faked illness', for avoiding regular activities or unpleasant task.



▶ **Obesity:**

Obesity in older children may be due to a glandular condition but it is more often due to overeating. Studies of fat children have revealed that they eat faster, take bigger bites and are more likely to ask for second or third helping than their age-mates. Obesity in older children is a physical hazard to their health. Obesity children are more prone to diabetes, they lack in socialization and lack in taking part in the active games. They also display lack of interest in acquiring different play skills etc. In addition, their playmates often tease them, calling them by different funny names which make them feel inferior.

▶ **Sex Inappropriate Body Build:** Sometimes girls with masculine body builds and boys with girlish physiques are likely to be ridiculed by their peers and pitied by adults. This leads to personal and social maladjustments. By contrast, a sex-appropriate body build aids to good adjustment.

▶ **Accidents:**

Even when accidents leave no permanent physical scar, they can and often do, leave psychological scars. Older children, like the younger, who experience more than their share of accidents, usually learn to be more cautious. Later on, this may lead to timidity on their part concerning all physical activities and may even spread to other areas of behaviour. When this happens it develops into a generalized shyness that affects social relationships, school work and personalities. And sometime accidents may leave permanent physical scar, which will develop physical as well psychological problems and maladjustments for the children.

▶ **Physical Disabilities:**

Many physical disabilities occur as an after effect of an accident and thus are more common among boys than girls. The seriousness of the after effect of an accident depends on the degree of the disability and on the way others treat the child, specially the members of the peer group.

Most disabled children become inhibited and ill at ease in social situations. As a result they make poor social adjustments and this affects their personal adjustments.



▶ **Awkwardness:**

Even As older children begin to compare themselves with their age mates, they often discover that their awkwardness and clumsiness prevent them from doing what their playmates do or from keeping pace with them in play. As a result, they start to think of themselves as inferior to their playmates.

Because the motor skills play such an important role in children's play and at school, the clumsy children find themselves in many situations where their awkwardness is apparent to themselves and to others. This reinforces their feeling of inadequacy which, in time, lays the foundations for an inferiority complex.

2.12. Psychological Hazards:

The psychological hazards of the late childhood stage are mainly the ones that affect children's social adjustments, around which the major developmental tasks of this period are centered. They have a powerful influence on children's personal adjustments and on their developing personalities. The most important psychological hazards of late childhood are discussed below -

▶ **Speech Hazards-**

There are four common speech hazards in late childhood –

- 1) A smaller than average vocabulary handicaps children in their school works as well as in their communications with others;
- 2) Speech errors, such as mis-pronunciation and grammatical mistakes, and speech defects, such as stuttering or lispings;
- 3) Children who have difficulty speaking the language used in their school environment may be handicapped in their efforts to communicate and may be made to feel that they are "different";
- 4) Egocentric speech and critical comments.



▶ **Emotional Hazards-**

Children are considered immature by both age mates and adults if they continue to show unacceptable patterns of emotional expression, such as temper tantrum; and if such unpleasant emotions as anger and jealousy are so dominant in them that the children become disagreeable and unpleasant to be with.

▶ **Social Hazards-**

There are five types of children whose adjustments are affected by social hazards. First, children who are rejected or neglected by their peer group. They are deprived of opportunities to learn to be social. Second, the voluntary isolates who have little in common with their peer group. They come to think of themselves as having no chance of acceptance by the peers. Third, socially or geographically mobile, the children who find the acceptance by already formed gangs difficult. Fourth, the children against whom there is group prejudice because of their race or religion. And, fifth, the children become resentful and disgruntled group members because they want to be leaders of the group rather than the followers.

▶ **Play Hazards-**

Children who lack social acceptance are deprived of opportunities to learn the games and sports which are essential for them to belong to their gang. Children are sometimes fond of fantasizing or day dreaming about some desirable events which are unlikely to happen. Sometimes they are discouraged from fantasizing because the parents find it to be a “waste of time”. They may also be discouraged from taking part in games and sports or creative activities. Such children may develop the habit of being rigid conformist.

▶ **Conceptual Hazards-**

Children who have idealized self-concepts are usually dissatisfied with themselves as they are and with the way others treat them. When their social concepts are based on stereotypes, they tend to become prejudiced and discriminatory in their treatment of others. Because such concepts are emotionally weighted, they are likely to persist and to continue to affect children’s social adjustments unfavourably.



▶ **Moral Hazards-**

Six hazards are commonly associated with the development of moral attitudes and behaviour in late childhood. They are –

- 1) The development of a moral code based on peer or mass - media concepts of right and wrong which may not coincide with adult codes;
- 2) A failure to develop a conscience as an inner control over behaviour;
- 3) Inconsistent discipline which leaves children unsure of what they are expected to do;
- 4) Physical punishment which serves as a model of aggressiveness in children;
- 5) Finding peer approval of misbehavior so satisfying that such behaviour becomes habitual; and
- 6) Intolerance of the wrong-doings of others.

▶ **Hazards Associated with childhood Interests –**

There are two common hazards associated with childhood interests; first, children may be uninterested in the things that their age - mates regard as important and, second, they may develop unfavourable attitudes toward some interests that would be valuable to them, as in the case of health or school.

▶ **Hazards in Sex- Role Typing –**

There are two common hazards in sex-role typing in late childhood-

- 1) Failure to learn the elements of the sex roles their age- mates regard as appropriate, and
- 2) unwillingness to play the approved sex roles.

▶ **Family - Relationship Hazards –**

Conflicts among family members have two serious effects on children –

- 1) It weakens the family ties, and
- 2) Such children carry this problem outside the home and thus become socially maladjusted.



► **Hazards in Personality Development –**

There are two serious hazards in personality development in late childhood: first, the development of an unfavourable self-concept, which leads to self - rejection and, second, the carry-over of ego-centrism from early childhood. Ego-centrism is serious because it gives children a false sense of their importance.



UNIT III : ADOLESCENCE

Puberty: Characteristics – Criteria – Causes – Growth spurt – Bodily changes – Effects of puberty changes – Hazards & Happiness. Adolescence: Characteristics –Physical and Social changes – Interest – Morality – Sex interest and Behaviour – Family relationships – Personality change – Hazards & Happiness.

ADOLESCENCE

PUBERTY – CHARACTERISTICS

3.0. Adolescence

Adolescence is a socially constructed concept. In pre-industrial society, children were considered adults when they reached physical maturity; however, today we have an extended time between childhood and adulthood known as adolescence. Adolescence is the period of development that begins at puberty and ends at emerging adulthood; the typical age range is from 12 to 18 years, and this stage of development has some predictable physical milestones.

Physical Changes of Puberty

Puberty is the period of several years in which rapid physical growth and psychological changes occur, culminating in sexual maturity. The onset of puberty typically occurs at age 10 or 11 for females and at age 11 or 12 for males; females usually complete puberty by ages 15 to 17, while males usually finish around ages 16 to 17. Females tend to attain reproductive maturity about four years after the first physical changes of puberty appear. Males, however, accelerate more slowly but continue to grow for about six years after the first visible pubertal changes. While the sequence of physical changes in puberty is predictable, the onset and pace of puberty vary widely. Every person's individual timetable for puberty is different and is primarily influenced by heredity; however environmental factors—such as diet and exercise—also exert some influence.

Hormonal Changes

Puberty involves distinctive physiological changes in an individual's height, weight, body composition, and circulatory and respiratory systems. During this time, both the adrenal glands and the sex glands mature—processes known as adrenarche and gonadarche, respectively.

These changes are largely influenced by hormonal activity. Hormones play an *organizational role* (priming the body to behave in a certain way once puberty begins) and an *activational role* (triggering certain behavioral and physical changes). During puberty, the adolescent's



hormonal balance shifts strongly towards an adult state; the process is triggered by the pituitary gland, which secretes a surge of hormonal agents into the blood stream and initiates a chain reaction.

Sexual Maturation

It is this stage in life in which a child develops secondary sex characteristics. *Primary sex characteristics* are organs specifically needed for reproduction, like the uterus and ovaries in females and the testes in males. *Secondary sex characteristics*, on the other hand, are physical signs of sexual maturation that do not directly involve sex organs. In females, this includes development of breasts and widening of hips, while in males it includes development of facial hair and deepening of the voice. Both sexes experience development of pubic and underarm hair, as well as increased development of sweat glands.

The male and female gonads are activated by the surge of hormones, which puts them into a state of rapid growth and development. The testes primarily release testosterone, and the ovaries release estrogen; the production of these hormones increases gradually until sexual maturation is met. Girls experience menarche, the beginning of menstrual periods, usually around 12–13 years old, and boys experience spermarche, the first ejaculation, around 13–14 years old. Facial hair in males typically appears around age 14.

Physical Growth

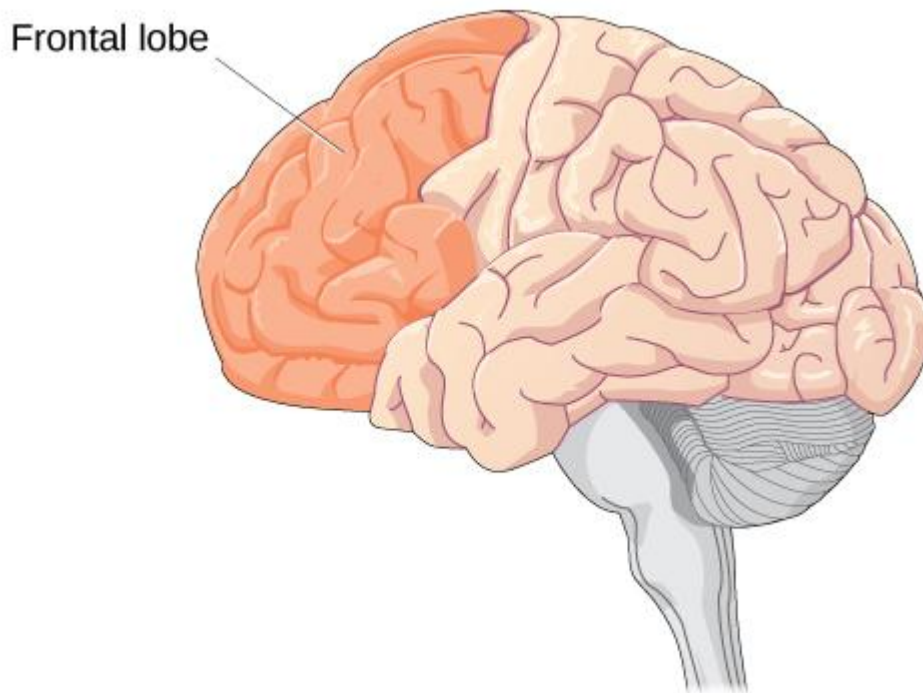
The adolescent growth spurt is a rapid increase in an individual's height and weight during puberty resulting from the simultaneous release of growth hormones, thyroid hormones, and androgens. Males experience their growth spurt about two years later than females. The accelerated growth in different body parts happens at different times, but for all adolescents it has a fairly regular sequence. The first places to grow are the extremities (head, hands, and feet), followed by the arms and legs, and later the torso and shoulders. This non-uniform growth is one reason why an adolescent body may seem out of proportion. During puberty, bones become harder and more brittle.

Before puberty, there are nearly no differences between males and females in the distribution of fat and muscle. During puberty, males grow muscle much faster than females, and females experience a higher increase in body fat. The ratio between muscle and fat in post-pubertal males is around 1:3, while for males it is about 5:4. An adolescent's heart and lungs increase in both size and capacity during puberty; these changes contribute to increased strength and tolerance for exercise.



Brain Development

The adolescent brain also remains under development during this time. Adolescents often engage in increased risk-taking behaviors and experience heightened emotions during puberty; this may be due to the fact that the frontal lobes of their brains—which are responsible for judgment, impulse control, and planning—are still maturing until early adulthood (Casey, Tottenham, Liston, & Durston, 2005).



Brain Development During Adolescence

Effects of Physical Development

Because rates of physical development vary so widely among teenagers, puberty can be a source of pride or embarrassment. Early maturing boys tend to be physically stronger, taller, and more athletic than their later maturing peers; this can contribute to differences in popularity among peers, which can in turn influence the teenager's confidence. Some studies show that boys who mature earlier tend to be more popular and independent but are also at a greater risk for substance abuse and early sexual activity (Flannery, Rowe, & Gulley, 1993; Kaltiala-Heino, Rimpela, Rissanen, & Rantanen, 2001). Early maturing girls may face increased teasing and sexual harassment related to their developing bodies, which can



contribute to self-consciousness and place them at a higher risk for anxiety, depression, substance abuse, and eating disorders (Ge, Conger, & Elder, 2001; Graber, Lewinsohn, Seeley, & Brooks-Gunn, 1997; Striegel-Moore & Cachelin, 1999). Girls and boys who develop more slowly than their peers may feel self-conscious about their lack of physical development; some research has found that negative feelings are particularly a problem for late maturing boys, who are at a higher risk for depression and conflict with parents (Graber et al., 1997) and more likely to be bullied (Pollack & Shuster, 2000).

3.1. PUBERTY STAGES IN GIRLS

- Stage One (approximately between the ages of eight and eleven): The ovaries enlarge and hormone production starts, but external development is not yet visible.
- Stage Two (approximately between the ages of eight and fourteen): The first external sign of puberty is usually breast development. At first breast buds develop. The nipples will be tender and elevated. The area around the nipple (the aureole) will increase in size. The first stage of pubic hair may also be present at this time. It may be coarse and curly or fine and straight. Height and weight increase at this time. The body gets rounder and curvier.
- Stage Three (approximately between the ages of nine and 15): Breast growth continues and pubic hair gets coarser and darker. During this stage, whitish discharge from the vagina may be present. For some girls, this is the time that the first menstrual period begins.
- Stage Four (approximately from ages 10 to 16): Some girls notice that their aureoles get even darker and separate into a little mound rising above the rest of the breast. Pubic hair may begin to have a more adult triangular pattern of growth. If it did not happen in Stage Three, menarche (first menstruation) should start now. Ovulation may start now, too. But it will not necessarily occur on a regular basis. (It is possible to have regular periods even if ovulation does not occur every month.)
- Stage Five (approximately between ages 12 and 19): This is the final stage of development. Full height is reached, and young women are ovulating regularly. Pubic hair is filled in, and the breasts are developed fully for the body.



3.2. PUBERTY STAGES IN BOYS

- Stage One (approximately between ages nine and 12): No visible signs of development occur, but, internally, male hormones become a lot more active. Sometimes a growth spurt begins at this time.
- Stage Two (approximately between ages nine to 15): Height increases and the shape of the body changes. Muscle tissue and fat develop at this time. The aureole, the dark skin around the nipple, darkens and increases in size. The testicles and scrotum grow, but the penis probably does not. A little bit of pubic hair begins to grow at the base of the penis.
- Stage Three (approximately between ages 11 and 16): The penis starts to grow during this stage. It tends to grow in length rather than width. Pubic hair is getting darker and coarser and spreading to where the legs meet the torso. Also, boys continue to grow in height, and even their faces begin to appear more mature. The shoulders broaden, making the hips look smaller. Muscle tissue increases and the voice starts to change and deepen. Finally, facial hair begins to develop on the upper lip.
- Stage Four (approximately 11 to 17): At this time, the penis starts to grow in width, too. The testicles and scrotum also continue to grow. Hair may begin to grow on the anus. The texture of the penis becomes more adult-looking. Underarm and facial hair increases as well. Skin gets oilier, and the voice continues to deepen.
- Stage Five (approximately 14 to 18): Boys reach their full adult height. Pubic hair and the genitals look like an adult man's do. At this point, too, shaving is a necessity. Some young men continue to grow past this point, even into their twenties.

Common problems

When puberty occurs outside the age limits considered normal parents may be prompted to search for the cause. As health and **nutrition** have improved over the past few generations, there has been a gradual decrease in the average age for the onset of puberty. These causes of early or late puberty may include the following:

- Excess hormone stimulation is the cause for early puberty. It can come from the brain in the form of gonadotrophins or from the gonads and adrenals. Functioning tumors may cause overproduction of sex hormones. Brain overproduction of factors promoting sex hormone production can also be the result of brain infections or injury.



- Likewise, delayed puberty is due to insufficient hormone. If the pituitary output is inadequate, so will be the output from the gonads and adrenals. By contrast, a normal pituitary overproduces if it senses there are not enough hormones in the circulation.
- There are several congenital disorders called polyglandular deficiency syndromes that include failure of hormone output. Children with these syndromes do not experience normal puberty, but it may be induced by giving them hormones at the proper time.
- Finally, there are in females abnormalities in hormone production that produce male characteristics, so called virilizing syndromes. Should one of these appear during adolescence, it will disturb the normal progress of puberty. Notice that virilizing requires abnormal hormones in the female, while feminizing results from absent hormones in the male. Each embryo starts out life as female. Male hormones transform it if they are present.

Delayed or early puberty requires measurement of the several hormones involved to determine which are lacking or which are in excess. There are blood tests for each one. If a tumor is suspected, imaging of the suspect organ needs to be done with x rays, **computed tomography** scans (CT scans), or **magnetic resonance imaging** (MRI).

Puberty is a period of great stress, both physically and emotionally. The psychological changes and challenges of puberty are made infinitely greater if its timing is off.

In early puberty, the offending gland or tumor may require surgical attention, although there are several drugs as of 2004 that counteract hormone effects. If delayed, puberty can be stimulated with the correct hormones. Treatment should not be delayed because necessary bone growth is also affected.

Early puberty often begins before age eight in girls, triggering the development of breasts and hair under the arms and in the genital region. The onset of ovulation and menstruation also may occur. In boys, the condition triggers the development of a large penis and testicles, with spontaneous erections and the production of sperm. Hair grows on the face, under arms, and in the pubic area, and **acne** may become a problem.

Several studies indicate an increase in incidences of early puberty and other forms of early sexual development in the United States. Sexual development in children seven years of age and younger should be evaluated by a physician. In some cases, early sexual development can



be caused by a tumor or other pathological conditions. Properly administered hormones can restore the normal growth pattern.

3.3. Parental concerns

Most experts suggest that parents begin short and casual discussions about the body changes that occur in puberty with their children by the age of seven or eight. Offering the child reading materials about puberty can impart information to the young person without the awkwardness that may characterize the parent-child conversations. Parents can then offer their children opportunities to ask questions or to discuss any aspects of puberty and sexuality that may arise from their reading.

It is also a good idea for parents to talk to their children about proper hygiene at the onset and during puberty. While good hygiene is important for everyone at any age, it can require greater care at the onset of puberty. Hormones produced by the maturing body bring about physical changes that require greater attention when it comes to hygiene. For a young girl or boy, this means taking more time to clean the body, especially the sexual organs, to treat acne, use mouthwash for bad breath, and deodorant for stronger body odor.

When a boy or girl begins to go through puberty, the body produces more perspiration because sweat glands, some of which are located near the underarms, become more active. More perspiration means a different type of body odor, one that is stronger and similar to an adult's. Daily bathing and showering are enough to control body odor, along with deodorants and antiperspirants.

Boys should be instructed to wash their genitals every day. This includes washing the penis, the scrotum that holds the testicles, the anus, and pubic hair with water and mild soap. Uncircumcised boys need to be instructed that the foreskin should be pulled down daily to expose the tip of the penis, which should then be washed with mild soap and water.

In girls, it is perfectly natural to have a slight sweet smell from the vagina that is inoffensive. A strong, foul odor indicates a possible infection. With treatment, the infection goes away and so does the strong odor. Vaginal discharge is a necessary part of the body's regular functioning. Normal discharge, usually clear to white, is part of the body's self-cleaning process. As discharge leaves the body, it takes bacteria with it, which helps prevent vaginal infections. Parents should stress that girls clean the vaginal area with a mild soap and water



Puberty

	Boys	Girls
Stage one	Prepubertal: no sexual development	Prepubertal: no sexual development
Stage two	Testes enlarge Body odour	Breast budding First pubic hair Body odour Height spurt
Stage three	Penis enlarges Pubic hair starts growing Ejaculation (wet dreams)	Breasts enlarge Pubic hair darkens, becomes curlier Vaginal discharge
Stage four	Continued enlargement of testes and penis Penis and scrotal sac deepen in color Pubic hair curlier and coarser Height spurt Male breast development	Onset of menstruation Nipple is distinct from areola
Stage five	Fully mature male	Fully mature female



Boys

Pubic hair extends to inner thighs

Increases in height slow, then stop

Girls

Pubic hair extends to inner thighs

Increases in height slow, then stop

The period of adolescence is considered as crucial and significant period of an individual's life. Psychologically, adolescence is the age when the individual becomes integrated into the society of the adults. It is the stage when the child no longer feels that he is below the level of his elders but rather an equal with them, at least in rights. This integration into the adult society has many aspects, more or less linked with puberty. It also includes profound intellectual changes. These intellectual transformations, typical of an adolescent's thinking, enable him to achieve his integration into the social relationships of the adults. This is the most general characteristic of this period of development.

It is the period which begins with puberty and ends with the general cessation of the physical growth. It emerges from later childhood stage and merges into adulthood. It is difficult to assign definite years to it because they differ from country to country and culture to culture. Chronologically, age ranges are from 12/13 years to 18/19 years in India. In case of girls it begins about 1 year earlier than the boys.

3.4. ADOLESCENCE

The term adolescence is derived from the Latin word *adolescere*, which means to sprout into maturity. It is the intermediate period between childhood and adulthood. This period is otherwise called as the age of teenagers. It includes three sub periods, such as: early adolescence (12 yrs -14 yrs), middle adolescence (14 yrs -17 yrs) and late adolescence (17 yrs -19 yrs). Adolescence is the developmental transition between childhood and adulthood entailing major physical, cognitive and psychological changes. During this period physical changes that occur are universal, but social and psychological changes largely depend on the cultural contexts. As this is the transitional phase of life adolescents rebel against their parents and society most often. Therefore, this period is labelled as storm and stress period.

(I) Physical Development

Sexuality and identity formation are two major challenges of the period of adolescence. During this period the most rapid physical growth occurs. There are changes in the growth



rate, sexual characteristics, and behaviour. Adolescent boys and girls develop in their height, weight, strength and development of bones, muscles, etc. Puberty and sexual maturity for both boys and girls marks the beginning of the adolescent period. Growth spurts and development of secondary sex characteristics signal about the onset of adolescence. Menstruation is the first sign of puberty for girl whereas appearance of few whiskers is the sign of puberty for boys. The approximate age for sexual maturation is 12.5 years for boys and 10.5 years for girls. Puberty begins in response to changes in the hormonal system. Sex hormones like testosterone in males and estrogen in females are secreted from the sex glands. The secretion of sex hormones help in pubertal development and also closely associated with emotions. During this period emotion like aggression is found in boys and depression is marked in girls. They try to imitate their idols. Girls are conscious about their shapes and do what their friends do while boys try to go for body building.

(II) Psycho-Social Development

During this period the physical changes in adolescents bring about a wide variety of psychological changes. Adolescents become innovative and take interest in learning various skills with great interest. They feel that no one understands them, and they often consider themselves to be „superman“. Their sense of uniqueness is expressed in the form of personal fable around them away from the world of reality. They are argumentative and they have a tendency to find fault with the authority figures. They do not able to differentiate between ideal and real. Adolescents are very self-conscious and it is expressed in the concept of imagery audiences. These imaginary audiences criticise, encourage and motivate an adolescent. Peer group influence is very important during adolescence. They want to do what their friends are doing, Adolescents abuse alcohol and drugs under peer pressure. Developmental psychologists viewed that adolescence as a period of risk, turmoil, uncertainty and conflict, if proper care is not taken during this period children became anti-social, abusive or depressed. They also develop eating disorders if they are not getting proper love and affection from the parents. In this period if adequate atmosphere is provided to them and they get high parental support, then they can develop their abstract thinking, reasoning skills and other social behaviours. The important task of adolescents is to establish an identity independent of their parents. They do not like anyone to interfere in their opinions, trust, believes and decision making process. They have their own expectations and they are also very emotional during this period. Adolescents suffer from different problems like teenage pregnancy and juvenile delinquency. So, positive



relationship with parents, peers, siblings and adults play an important role during adolescence period.

(III) Cognitive Development

During adolescence not only there are changes in body structures occur but also they think differently from younger children. Jean Piaget opined that adolescents enter the highest level of cognitive development, i.e. formal operational stage of cognitive development. During this period adolescents thoughts change from concrete objects to abstract events. They can think flexibly enough about the world. They accumulate knowledge through interaction and apply the learned concepts to new tasks. Teenagers develop their reasoning skills and engage in hypothetical deductive reasoning. As adolescents develop their logical thinking, they are becoming aggressive and argumentative. They are able to understand abstract concepts such as congruence and mass and they think in terms of theoretical concepts. They are conscious about others opinion regarding them and curious enough to know about spirituality, traditions and beliefs. Thus, during adolescence people deal with problems on an abstract level, to form hypothesis and to reason from proposition that are contrary to fact. Piaget's theory of cognitive development has been criticised on the following grounds:

- a) Piaget has given too much emphasis on physical maturation based on cognitive development.
- b) He has not included environmental factors and experiences that people accumulate during the process of growing up.
- c) He has overlooked the concept of the individual differences in his theory.

As such, adolescence period is divided into two parts –

- i) Early Adolescence, and
- ii) Late Adolescence.

Early Adolescence extends roughly from 12/13 to 16/17 years and late adolescence covers the period from 17 years to 18/19 years, the age of legal maturity. Late Adolescence is thus a very short period. Early adolescence is usually referred to as the “teens”. Older adolescents are also strictly speaking, “Teenagers”. But the term teenager is popularly associated with the characteristic pattern of behaviour of the young adolescents and is rarely applied to older adolescents. Instead they are usually referred to as “young men” and “young women” - or



even “youths” - indicating that the society recognises in them a maturity of behaviour not found during the early years of adolescence.

As stated above adolescence is the period of rapid changes in the individual’s physical, mental, moral, emotional, social and sexual aspects. Human personality develops new dimensions. It is the period to learn new things. It is also a period of anxieties and worries. It is the period of ambitions as well as of conflicts and complexities. In this connection let us mention how A.T. Jersield this period.

A.T. Jersield defines, “Adolescence is that span of years during which boys and girls move from childhood to adulthood, mentally, emotionally, socially and physically

3.5. CHARACTERISTICS OF ADOLESCENCE

Let us discuss the characteristics of adolescence. It is important for school teachers and parents to understand these characteristics, without which they can not be expected to be able to deal effectively with the adolescents. The distinguishing characteristics of this period are:

- ▶ **Rapid Physical Development** : Adolescence is first of all a period of physical changes and development. Physiological development primarily converts the boy into a man and the girl into a woman and provides the basic for emotional, social, intellectual and economic maturity. The most important changes occur in the glandular system which has great influence not only on the physical development but also in the behavior and personality development of the adolescents. Bio-chemical changes in the body make the endocrine glands more active and there is increase in height, weight, changes in voice muscular growth, appearance of pubic hair, growth of hair on the face arms, legs etc. The most striking physical change in this growth period is attainment of puberty which leads to development of reproductive capacity. Respiratory, circulatory and digestive system are also developed that give more physical energy and vigor. All these changes often lead to confusion, feeling of inadequacy, insecurity and in some cases abnormal behavior. You must understand the fact that all the aspects of adolescent development are basically conditioned by physical changes.



- ▶ **Mental Development:** **Mental development** in adolescence accelerates in many intellectual fronts. As compared with children, adolescents develop greater insight, better understanding and can perceive relationship more easily. They develop the ability to generalize and can think of the solution of more difficult problems. This indicates that the thought process becomes more logical, scientific and systematic during adolescence. It is an accepted fact that the ability of intelligence reaches its maximum at the age of 16 and 17 years. Memory power also develops tremendously and adolescents can retain facts for a longer period. They can anticipate the future needs and can plan for it. Another important change in intellectual orientation is the adolescent's ability to identify with the circumstances and people outside his own immediate environment. The imitative tendency of childhood disappears during adolescence. The adolescents develop certain amount of independence in thinking and can critically examine the things to make the decision of his own.

- ▶ **Emotional immaturity:** We have already said that adolescence is a period of “storm and stress.” Psychologists have regarded it as a period of heightened emotionality. Continuous physical changes mainly give rise to emotional uncertainty and instability. Emotions of anger, fear, shame, disgust give rise to variation in moods, nervousness, sensitiveness, stubbornness, disobedience etc. Sex drive is also a prolific source of emotional disturbance in adolescence. Beside these, adolescent's striving for independence gives rise to emotional conflicts. Their ideas and views often appear contradictory with that of their parents and other members of the society. At many times, therefore, the adolescent suffer from emotional detachment from their parents and other members of the society. So they are very prone to emotional maladjustment.

- ▶ **Social Consciousness:** The period of adolescence is preeminently a period of social development and adjustment. The most important social development during this period is the increased influence of the peer group. The type of peer group shapes the behavior of the adolescent to a great extent. His interests, attitudes and values are influenced by his peers. The adolescent boys and girls become self conscious about their place in society and they gradually enlarge their spheres of social activities and conducts. The adolescent tries to act in an independent manner but the parents often refuse to treat them like grown ups which may lead to difficulties. An adolescent also develops sense of patriotism in his mind and wants to join any type of social services.



- ▶ **Moral Consciousness:** The development of morality contributes a great to the general development of personality. Family is the main place where the adolescent receives the moral training and which exerts influence on his attitudes and behavior. As the child grows older his capacity for independent thinking develops. He can distinguish between right and wrong, true and false, virtue and vice and the desirable and the undesirable. Adolescents in general, cannot tolerate immoral or illegal activities. Interest in their own religion also develops. Their moral senses may make them God fearing but sometimes they also develop religions doubts, conflicts uncertainties regarding religious beliefs and practices etc. This may puzzle the thinking of the adolescents.

- ▶ **Hero-worshipping:** Hero-worshipping is a tendency of the adolescent stage. It means that the adolescents start to identify themselves with an ideal hero, whom they obey and follow. They admire and respect him. They organize their thoughts and activities in conformity with the ideal of the hero. The hero becomes the source of inspiration for the adolescents to aim for their future. For this reason, the adolescent should be encouraged to study biographies of great man so that they can shape their own life following the ideals of theses great men.

- ▶ **Hetero-sexuality:** Hetero-sexuality is another important characteristic of the adolescents. It means the attraction for the opposite sex. Both the sexes develop greater interest for the opposite sex. Adolescents become very much eager to know about the opposite sex. But unfortunately the knowledge which they may receive be harmful for their mental and physical health. Many boys and girls suffer from worries because of the wrong information about sex and lack of proper guidance. All teachers, social workers and psychologists agree that sex education should be provided to the adolescents.

- ▶ **Creative imagination:** During adolescence the imaginative faculty of an individual undergoes considerable development. Imagination added with intellectual elements become artistic and creative and finds expression in literature, art, poetry, fiction and even musical and artistic creations, indicating the power of their creative imagination. Imagination thus enriches and transforms experience and contributes to artistic appreciation and production during adolescence. Adolescents' should be provided with opportunities for the development of their creative talents through music, dance, art and culture. Divergent thinking should be encouraged.



- ▶ **Development of personal Independence:** One of the most important things that an adolescent wants is independence from the adult authority. It becomes important for the young person's to establish convictions about their identity. They develop faith in their own capability of doing things and demand self respect from the elder members of the society. They want psychological freedom and do not like adult interference in their own personal business and they want to take decision themselves. A sense of dignity, honour and freedom prevails in their thought, attitude and behaviour.

3.6. ADOLESCENCE – BASIC NEEDS

The basic needs of adolescents are divided into two groups – (a) Physiological needs and (b) Psychological needs.

Physiological needs:

- ▶ **Need for activity –**

Activity of one kind or another is an integral part of the adolescent behavior. The physical changes of puberty, the greater muscular power and the surplus of energy, all contribute towards strengthening the need for activity. This surging need must be controlled and guided into the proper channels such as, dancing, swimming, playing football or other types of games and sports.

- ▶ **Need for sexual satisfaction –**

Sex development is a fundamental fact of adolescence. The sex instinct which had been lying dormant during childhood is reawakened. In the adolescence stage the young adolescent repeats 3 stages of sexual development –

a) **Auto – eroticism:** the adolescent takes interest in his own body and he/she handles his own sex organs.

b) **Homo-sexuality:** during the early period of adolescence boys love to mix with boys and girls with girls.

c) **Hetero – sexuality:** this type of sexuality is found at the later stage of adolescence. The boys and girls are attracted towards the opposite sex.



Psychological needs:

▶ **Need for freedom –**

The young adolescents also need freedom in their life. They do not like to maintain a strict routine life. They do not like disciplined life which is imposed on them by their parents. They love freedom regarding taking decisions related to their life.

▶ **Need for social life –**

This is an important need of the adolescent. They want the company of their equals. They love to live with their peers, which has a direct influence in their life. They want to talk, discuss and come to some conclusions. This goes a long way towards satisfying their social need. The young adolescent wants to be something among his friends and in the total social set up. They want the approval of their actions and recognitions in any form by their parents, class fellows, teachers and the community at large.

▶ **The security need –**

The adolescent depends on his parents for the satisfaction of these needs. He wants their affection and attention. He wants some ideals which may help him in the conduct of his life. He wants inspiration from a hero, whom he worships, and who can guide him. This need can be fulfilled if the adolescent is given opportunity of studying the biography of great men like Gandhi, Nehru, Tagore, Vivekananda, Lakshmi Bai, Sarojini Naidu etc. He will, derive strength and inspiration from them, imbibe ideals, formulate his life goal and strengthens his will and character.

▶ **The adventure need –**

Thirst for adventure is strong at this age. The adolescent wants to do something so that he is remembered by all. The answer is exploring something which others do not know. Sometimes he is misunderstood and sometimes misdirected. In the absence of proper direction it takes the form of aimless wandering, vagabonding, unsocial acts like strikes and demonstrations. Even the sexual acts mean a thrill and adventure for them. But properly directed adventure can be very much helpful for the adolescent's social, mental, emotional and physical development.



► **Need for self dependence or need for a vocation –**

The young boys and girls want to be independent at this stage. Boys and girls of high school age begin to think seriously about their future. Boys are usually more seriously concerned about an occupation than girls. Boys, typically, want glamorous and exciting jobs, regardless of the ability required or the chances for such jobs being available for them. They also want jobs with high prestige and of higher social status. But the girls, on the other hand normally show a preference for occupations with greater security and less demand on their time. In their vocational choice, they usually stress on service to others, such as teaching or nursing. By late adolescence, the adolescents are concerned about what they would like to do and what they are capable of doing. They are also concerned about how they can get the kind of job they want. Older adolescents have a growing realization of how much it costs to live and they also know what young people, just out of school, can expect to earn. As a result of this greater realism, they approach the choice of their careers with a more practical and more realistic attitude than they would when they were young.

3.7. SIGNIFICANCE OF ADOLESCENT STAGE

► **Rapid physical development :**

It is a period of vital physical as well as physiological changes and developments. At this stage, all the external and internal body parts and organs achieve their full form and maturity.

► **Rapid mental development :**

During the early adolescence period, rapid mental development occurs. These give rise to the need for later mental adjustments and the necessity for establishing new attitudes, values and interests. The adolescent is mentally alert at this stage. He not only develops not only his intellectual power but also his capacity to critical thinking.

► **Rapid social development :**

It is a period of social development and adjustment. In this stage, the child enters a new field of social responsibilities. The adolescents become socially conscious, self-assertive, and loyal towards their group, they develop co-operation and friendship and become responsible.



▶ **Stage of emotional development :**

Traditionally adolescence has been thought of as a period of heightened emotionality resulting from glandular and other changes. The heightening is characterised by high degree of instability. The adolescents also develop dependency and sometime independency. They also develop some special feelings like - pride, humility, curiosity, guilt, hero-worshipping etc. All these emotions must be properly guided and they should be provided knowledge to control their emotions at this stage.

▶ **Rapid sexual development :**

A number of internal and external changes take place in the sexual characteristics of the boys and the girls at the adolescence stage. At the later part of this stage they achieve sexual maturity.

▶ **Rapid moral development :**

It is also a period of moral development and changes in morality. Their moral outlook becomes progressively more abstract. Moral convictions become more concerned with 'what is right' and justice emerge as a dominant moral force. Their moral judgment becomes less egocentric at this stage. They develop an attitude towards the service to mankind.

3.8. PROBLEMS OF ADOLESCENT STAGE

▶ **Sex Problems:**

We have read that all the aspects of adolescent development are basically conditioned by physical changes. The onset of puberty gives the physical excitement never experienced before. The adolescent reacting to these experiences is excited, often without realizing what is happening to him. Some react with pleasure or excitement and some others experience shame, disgust, confusions, anxiety and guilt. They may lead to sexual maladjustment.

▶ **Emotional Problems:**

Heightened emotionality is a major problem of adolescence. Adolescents experience excessive emotion and they do not have sufficient control. Excitability and anger may find expression in its destructive form may lead to law and order problem. Emotion



of love, suspicion, jealousy, frustration and revengefulness are very common among adolescents. Thus emotional immaturity is a major problem of adolescence.

▶ **Social Problem:**

Every society has its own customs and traditions, which it wants to maintain. Every individual has to follow these social values but often the adolescents think all these are out dated and they are not willing to obey. This leads to conflicts. Physical development has many social implications. Sexual development necessarily includes heterosexual orientation and they want to take part in social activities with the opposite sex. The denial of this desire often makes them discontented and restless. Thus, a number of social problems disturb the adolescent.

▶ **Educational Problem:**

The environment of the school is also not conducive to meet the interests of the students. Defective method of teaching, curriculum, examination, repressive measures adopted by school, unattractive condition of the school campus are largely responsible for creating frustration among the students.

▶ **Problem of leisure:**

Lack of proper recreational facilities or having nothing to do in their free time leads the adolescents to involvement in some unsocial and criminal activities. Their thoughts and attitudes may turn to be destructive and create serious problem for the society.

3.9. ROLE OF PARENTS AND TEACHERS TOWARDS ADOLESCENTS

For a proper and all round development of the adolescent boys and girls, parents and teachers have a great role to play. Some suggestions have been discussed below -

For Proper Physical Development -

- ▶ Provision should be made for compulsory physical exercise at morning and evening.
- ▶ Monthly health check-up by the school doctor must be done.
- ▶ Scope for some manual work for every adolescent must be provided at home and at school.



- ▶ Provision of various types of indoor as well as outdoor games and sports for all students in school.
- ▶ Provision for dance classes for girls at school.
- ▶ Provision for martial art at school for both boys and girls.

For Proper Mental Development -

- ▶ Home and school atmosphere must be loving and secured.
- ▶ The school must have a good library, a school debating society and in every class, a discussion group.
- ▶ Various types of clubs, like - music club, art and craft club, may be organised to enable adolescents to develop their creative abilities.
- ▶ The guidance services available at school should provide both educational and vocational guidance to their students.
- ▶ The teacher should keep an eye on every adolescent and try to fulfill his individual needs. The tutorial system must be adopted when necessary.
- ▶ Excursions to places of historical and geographical importance may be organised.
- ▶ Activity for the adolescent should be planned in such a way that the imaginations of the young adolescents are directed in the right channels and towards creative efforts.
- ▶ The adolescents are generally interested in experimentation and self-examinations of objects. Hence, it is suggested that importance should be given on using new dynamic methods of teaching.
- ▶ Different assignments should be given to the students on the basis of their intelligence and the abilities.
- ▶ Yoga and meditation must be included in the school curriculum.



For Proper Social Development -

- ▶ Many informal functions may be organised in the school. These would enable the adolescents to come closer to each other and understand the interests and aspirations of each-other. These functions must cater to the needs of all types of adolescents.
- ▶ Excursions and field trips may be organized. These lead to informal conversations and close contact between the members of the group.
- ▶ Group games, debates, seminars, conference may be organized. These will help the adolescents to participate in social activities.
- ▶ The teacher should try to find out the socio - economic conditions, social interests of every adolescent and organize various activities accordingly.
- ▶ In the social field, every adolescent has to enter particular vocation in his later life. As such the school authorities should impart him knowledge about various vocations prevalent in society. He should also provided knowledge about some new vocations.
- ▶ The adolescents should be initiated into the standards of adult behaviour. Thus he will be trained for better future living.
- ▶ They should be entrusted with jobs of responsibility at home and at school as they grow-up. Self-government may be introduced in school to develop a feeling of responsibility among the adolescents.

For Proper Emotional Development -

- ▶ Parents and teachers must be able to redirect the emotions of the adolescents in a proper manner. The adolescent must be able to control his emotions and also to repress those emotions which are not socially acceptable.
- ▶ Most of the adolescents accept problems of life in a negative way. They are afraid of facing difficult situations in life. Parents and teachers should encourage the adolescents and point out some of their plus points. They may also suggest means and methods of achieving success. This will restore the self-confidence of the adolescents.



- ▶ It should be brought into the notice of the adolescent that life is a mixture of failure and success and he must build a power of resistance to face failure in life.
- ▶ The adolescent has to face a large number of problems at this, stage, As such, proper guidance and counseling should be provided by parents, teachers and school Guidance Counselor.
- ▶ Parents and teachers should treat the adolescent well. They should give him freedom of action within limit. The adolescent should be kept busy with various activities.
- ▶ The teacher should try to develop maturity of thinking within the child. The adolescent boys and girls must be allowed to discuss their emotional problems with their parents and teachers. And they must be provided enough scope to take part in different activities in school.
- ▶ The teacher should try to find out those students who are emotionally disturbed. They should try to solve their problems personally.
- ▶ The parents as well as the teachers should not discriminate among the adolescent boys and girls. The teacher must be known for his impartiality. Then only will he be able to enjoy the confidence of his students.

For Proper Sexual Development -

- ▶ More social contracts between boys and girls. Freedom with proper guidance must be provided to the young adolescents to make friends with the opposite sex.
- ▶ Proper sex education on a scientific basis should be provided by the teachers.
- ▶ Parents and teachers should impart the right information about sex to the adolescent boys and girls.
- ▶ Information about HIV and other sex related diseases should be provided on a scientific manner by the parents and teachers to the young adolescents. If necessary, teachers and parents must take help of counselors.



UNIT IV : EARLY AND MIDDLE ADULTHOOD

Early Adulthood: Characteristics and adjustments – Hazards and Happiness - Middle age: Characteristics and adjustments – Hazards and Happiness.

EARLY AND MIDDLE ADULTHOOD

4.0. Adulthood

An adult is someone who is responsible, mature, self-supporting and well integrated into society. Also people do not develop these attributes and characteristics at the same time and with same skills. This adult stage has three sub-stages of development. First stage is early adulthood, second stage is middle adulthood, and third stage is late adulthood.

In early childhood period adults are at the peak of physical health, strength and energy. Sensory and motor systems are at their highest functioning. Adults gain weight and their height increases. They develop intimate relationships, they marry and begin their families. At this period of life adults take many important decisions of life like choice of career, type of friends, residence, etc. independently and accept responsibility and consequences for their own decisions. Every adult tries for recognition, job security and to excel in his job.

Middle adulthood period is explained in terms of a gradual decline in one's physical abilities, physical health, stamina etc, but the decline is gradual in nature. Both men and women feel tired easily. In this period people experience stress due to the double responsibility of caring for the aged parents and the growing children. Women usually experience hormonal changes which results in the loss of ability to reproduce, a process called menopause. Many psychological and intellectual changes occur in middle age. During this period, women express more assertiveness and men are more nurturant. The term "late adulthood" is roughly equivalent to old age. This is the final stage of physical change.

Robert Havinghurst lists major tasks in the middle years:

- Accepting and adjusting to physiological changes, such as menopause.
- Reaching and maintaining satisfaction in one's occupation.
- Adjusting to and possibly caring for aging parents.
- Helping teenage children to become responsible adults.
- Achieving adult, social and civic responsibility.
- Relating to one's spouse as a person.



- Developing leisure time activities.

Some people suffer from depression due to middle age crisis by thinking that some important years of their lives are over while some others try hard to achieve their goals by changing their life styles. Some people engage themselves in creative activities to get self satisfaction. Other people get worried about the future of their children and some start worrying about their post retirement activities.

(I) Physical Development

Physical growth and development is at its maximum during this period. Physical strength usually is more than previous years due to mature physical structures. strength, speed, coordination and endurance for activity is greatest during this period. A number of sensory and neural functions are optimal levels during this period. Full brain weight and mature brain wave patterns are observed at this stage of development. Changing life style pattern has an impact on growth and development.

In the middle adulthood period (during 20s) there is a decline in our physical stamina and health. At that time physical functioning are generally perfect, but physical attractiveness declines and biological changes in the sexual life occurs. The physical changes like loss of elasticity of the skin, resulting in facial lines as well as looseness in other parts of the body are easily noticeable through external physical appearance. There is a marked change in visual activity. People suffer from presbyopia –the far sightedness associated with aging. The auditory problem is also associated with increasing age, i.e.presbycusis. It means progressive loss of hearing. In this period loss of taste, smell and sensitivity to touch also occurs. Some physiological changes like enlargement of prostate gland, less enzyme secretion in the gastrointestinal tract, diminished ability to pump blood, reduced kidney functioning, etc. take place.

(IV) Psycho-Social Development

During early years of adulthood, people face the problem of choosing, preparing for and entering into careers brings a lot of social changes in the adult. They have cordial relationships with their siblings. They spend very few times with friends because their energies are consumed for family and work. Middle adulthood people have children of adolescent age. It is very difficult to handle their problems. Conflicts occur between parents and children regarding „giving“ and „getting“ independence. Parents have to help their children in their search for identity. Middle aged adult also have important responsibilities



towards their parents. In this period they also try to be satisfied at work place. People are worried about their jobs and pay packages because they have to meet the daily needs of themselves and of the family.

(V) Cognitive Development

Intellectual ability and cognitive skills are high in early adulthood. Middle adulthood people cannot learn new skills. Recent research suggests that intellectual development continues into late adulthood. Intellectual development continued and that are influenced by the accumulation of the experiences of life, i.e. verbal skills, social knowledge and moral judgements. During this period people show changes in logic and morality. It is observed that creativity peaks in the early adulthood but forms of creativity that require experience, revision and interpretation either remain unchanged or increase in middle age. People utilise their cognitive skills and creativity particularly at the work place in order to get recognition. Studies revealed that intelligence declines with age, but there is no certainty that intelligence and age are related with each other.

Early Adulthood

People in early adulthood are at the peak of both their physical and cognitive development. They are at their sharpest and most fit, making them fully capable to engage in the increased activities and stressors typical of middle adulthood, including college. This section discusses the physical, cognitive, social, and personality development during early adulthood.

4.1. Physical Development

Physical development is at its peak during early adulthood. The brain reaches its maximum size so cognitive advances can also peak. Senses are at their sharpest; eyesight will not begin to noticeably deteriorate until around age 40 and hearing is generally sharp enough that one can hear a watch ticking in a quiet room from 20 feet away.

During early adulthood it is important to maintain a state of physical health. Although people are at their strongest here, lack of exercise is very harmful to a person's health. It is recommended that people get 30 minutes of moderate exercise at least five days a week to maintain a healthy body. It has many advantages to those who do engage in this activity: it reduces the risk of osteoporosis, optimizes the immune response of the body, may decrease stress and anxiety, and provides a feeling of accomplishment. Ultimately it helps people maintain their physical health longer. Along these same lines, people must reduce their caloric and be more conscious of nutrition during early adulthood. Teenagers may be able to



maintain their health on a diet of soda and chips, but as bodies enter middle adulthood they grow less and will not burn through the excess fat and calories.

The statistics on obesity interesting. About 1/3 of American's are classified as obese. Some experts are arguing against dieting now, because of the bingeing behavior that follows a failed diet. Instead people should just eat what they want in moderation and ultimately control their weight better. Do you think this method would be effective?

Secondary aging is a state of physical decline that some experience during early adulthood. It is brought on by environmental factors or an individual's choices. Drug abuse and other factors can bring about this decline. Interestingly, secondary aging is related to the high death rate during early adulthood, especially among certain minority groups. Can you all think of any reasons why minority groups are more likely to die during early adulthood?

Good to spend a significant amount of time discussing stress and coping with stress. As someone who deals with stress and how to manage it. By definition, stress is the physical and emotional response to events that threaten or challenge us. So it has both a physical and psychological component. That is why when you are stressed you really do *feel* it: increased heart rate, increased breathing, sweaty palms. But you also feel it on a deeper, psychological level: a stifling inability to escape or perform all of the tasks one is obliged to. Even happy events in our lives can bring significant stress. Some stressors are acute and some are chronic, but in the long run both can be damaging to both psychological and our physical health.

Consider for a moment "hardy" individuals. The book names them as people with personality characteristics that help them cope with stress more effectively. These people are resilient because of many traits, one of which is the feeling that they are independent and able to shape their own fate. Can Christians fully exemplify what the book describes as a hardy person, then? Christians acknowledge God's control over their situations, but should this make them feel less able to influence their lives? Are there other characteristics of Christians which could make us more effective at handling life stressors?

4.2. Cognitive Development

Piaget theorized that after adolescence there was little continued cognitive development. However, many no longer think this is the case. As demands on young adults increase they must continue to expand their ability to think in order to meet these demands. The book explains these demands in terms of "grey areas" which logic alone does not enable us to determine a good answer. For example, as we get older and are able to understand things



from other people's perspectives, we do become more sensitive to the complexities of determining the appropriate course of action. Labovief even developed a separate stage of cognitive development, called postformal thought, to describe these characteristics of early adult cognitive development. Perry took a similar approach: as young adults proceeded through college their amount of dualistic thinking declined and was replaced by more relativistic thinking. However, all of the examples the book cited as potentially "grey" situations did not seem grey to me. Yes, it would be difficult for the young woman in her first job to have her boss make advances towards her. However, we have a set of moral guidelines that help us decide how to approach these decisions.

Young adults become more comfortable with subjective and relativistic thought. Subjective thinking does not determine what is right or wrong, though. How "grey" do you think our life really is? Does the world tell us events are grey when they are really black or white? Let's please discuss this complex and somewhat sticky issue!

Schaie sets up a model of postformal thought based on changes in how information is used during this stage rather than on changes in how it is acquired. He describes childhood as an acquisitive stage, in which information is gathered and stored. People enter the achieving stage in young adulthood as they make crucial decisions about their career and relationships. He describes the responsible stage and the executive stage during middle adulthood and describes the reintegrative stage of old age. Do you think Schaie's model is better than the other suggested models?

This section also explores different kinds of intelligence and how it has developed into early adulthood. Sternberg's triarchic theory of intelligence suggests that intelligence is comprised of three components: componential intelligence, experiential intelligence, and contextual intelligence. By using three components to more accurately describe intelligence, tests can predict more practical measures of intelligence. Practical intelligence can measure career success and is learned by modeling others. It enables people to handle new situations well by applying previously learned information. Emotional intelligence, on the other hand, deals with how someone is able to relate to and understand other people. Ideas about creativity were very interesting. It was suggested that creativity is stifled as people age because the more they specialize in a particular area the harder it is to think about it in new or different ways. Maybe this is why young people always seem to represent the cutting edge of new ideas. This is not always true, but seems fairly typical. In any case, it is valuable to be able to take a fresh look at problems and come up with novel solutions.

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Finally, this section discusses the way in which major life events effects cognitive development. Again we can see that cognitive development does not cease during early adulthood. Life events may trigger more cognitive growth and stimulate people to reevaluate their circumstances and relationships. In this way, young adults may begin to think about the world in a more multifaceted and complex way.

4.3. Social Development: Forming relationships

Relationships are very important during early adulthood, especially because they become even more intimate and in some cases will lead to marriage. Happiness, especially in Asian countries, is tied to relationships. In America, most people want to experience “falling in love.”

The social clock describes the timing of major milestones in a person’s life. The social clock is culturally influenced, so outline the events as you would see them. Men and women might come up with a slightly different timeline, but I think in today’s society their clocks would be fairly similar. I’ll start us off: children enter school around age 5 and complete their secondary education usually around age 18. Then what is typical? Or are there any important milestones in between these?

We all understand what Erikson’s intimacy vs. isolation stage describes. I was surprised about the details of Erikson’s ideas about intimacy, however. Intimacy, to Erikson, involves elements of unselfishness, sacrifice, sexuality, and devotion. How well would you say these elements match with our understanding of what love should be, especially between a husband and wife?

The book describes two kinds of love: passionate and romantic love. Passionate love is closer to obsession, including elements of physiological interest and elements of caring. Hatfield and Berscheid theorized that passionate love is largely due to the way we interpret situational cues and apply them to our feelings. Does this mean love could be any feeling in particular, like jealousy or fear, but situational cues lead us to label that feeling as love? Maybe I’m being a little too abstract here. But the theory is certainly interesting and explains why negative emotions sometimes only feed attraction.

Sternberg saw love as more complicated: there is an intimacy component, a passion component, and a decision/commitment component. Combining these components, Sternberg described eight types of love: nonlove, liking, infatuated love, empty love, romantic love,



companionate love, fatuous love, and consummate love. Each form of love develops from various combinations of the three components. Consummate love, in which all three components are present, may appear to be ideal. However many happy relationships are built on other kinds of love too.

Do you all think career consolidation exists as a valid stage of development? The book defines it as a time when young adults become centered on their careers. Education can only take a person so far; eventually they must enter the work force. They act with more independence and throw themselves into a specific career to try to excel in that particular area. It is an important decision and this stage could represent a link between the intimacy-isolation stage and the generativity-vs-stagnation stage.

Holland outlined several personality types that can be helpful guides for people as they select a type of career. They are limited, admittedly, but do cover a broad range of personalities. Did you all feel that Holland's types were so restrictive that they were not helpful? Or did you find some use in them?



UNIT V : OLD AGE

Old age: Characteristics and adjustments – Hazards and Happiness.

5.0. OLD AGE (LATE ADULTHOOD)

The term late adulthood is rightly equivalent to old age. This is the final stage of physical change. It is difficult to consider the exact age of a person for being old. The onset of old age may vary from country to country. Although the retirement age is considered as one of the criteria of old age, it varies from job to job. For example, in India the retirement age for government organisation is 58 years while for Universities it is 62 years and in some other institutions like IIT and IIM it is 65 years. Now-a-days people beyond 70 years are considered as old. It is the period of decline where the person thinks that he has done what he wanted to do and most of his life span is over.

Today researchers used two categories to describe old age people.

(i) The young Old: This category of older people irrespective of their actual age, are vital, vigorous and active.

(ii) The Old Old: Those older individuals who are infirm, inactive and suffer from physical problems include in this group. As most of older persons suffer from physical problems, they became less active. There are changes in body like wrinkles in face, rough skin, gray hairs, problems in hearing and eye sight, bones and joints problems, change in voice, etc. They may suffer from various diseases. Old people also suffer from irreversible mental problem, which is organic in nature and is called,, Alzheimer"s disease. During late adulthood period significant changes take place which are mentioned below.

(I) Physical Development

The experiences of old age are not same for everybody. Some people are worried about old age particularly those who are single or there is nobody in the family to support them economically or have continued physical ailments. It is a period in one"s life span that is characterised by physical decline. There are two types of physical changes during old age. They are (a) Primary ageing and (b) Secondary ageing. Primary ageing is that in which bodily deterioration occur by the passage of time or by genetic factors which is gradual and inevitable. Secondary ageing results from disease, disuse or abuse of body which is preventable. Many structural and functional changes occur as people reach old age. Common physical changes like decrement in sensory abilities of vision, hearing, taste, smell and other senses, skin becomes inelastic, decrease in fat and muscle tissue, loss of teeth, deterioration

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of bone tissue, decline in height due to compression of spinal disc and postural strop etc. occur due to primary ageing. Physical changes occur due to secondary ageing are also different for different people. For example, physical changes of diabetic people are different from persons who are suffering from arthritis. Old people are also inefficient in sensory-motor coordination. They cannot respond to the physical demands of stressful situations as quickly or efficiently as possible. They are prone to accidents due to decline of reserve capacity of physical energy. Thus, ageing affects appearance, sensation and motor abilities of a person.

However, despite the problems of old age some people lead a happy life due to their positive thinking towards life and they are physically fit by doing yoga and exercises. They are developing and enjoying their hobbies and their perception of old age for relaxation help them free from different ailments.

(II) Psycho-Social Development

Many psycho-social changes happen to people during old age. The statement that old age is a period for waiting death can prove to be a myth. Commonly people believe that old age is a curse so far as physical and psychological aspects of life are concerned. According to Erikson during late adulthood the outcome of a well integrated person is wisdom. Wisdom means accepting life as it is, accepting imperfections in self, parents and in life and having no regrets. Old people remain in a state of inward depression and dissatisfaction. These internal feelings are manifested in reaction formations for which they become over sensitive and demanding. Some old people depend on their children to a large extent. This undue dependence makes them sad. But those people who are independent and less expectations from their children and other support system, they are happy in their old age and they engage themselves in various activities.

They think that old age is the golden age because they are free from family responsibilities and burdens of job. There are many social and cultural factors influence the process of successful ageing. Financial security and close relationship with children or other relatives or good friends make people healthy in old age.

Ageing is a process of growing old. The most important theory that explains the psychosocial aspects of ageing are: (i) The activity theory, and (ii) The disengagement theory.

(i) The Activity Theory : This theory states the relationship between keeping active and ageing well. According to this theory, persons who age successfully keep themselves busy in



many activities and they find substitutes for activities which they have lost due to retirement and also they perform many roles. As role decreases, ageing increases.

(ii) The Disengagement Theory: This theory reveals that successful ageing by mutual withdrawal between society and the older person. Generally, older people voluntarily minimise their activities by retiring and also society encourages this by making individuals retire.

(III) Cognitive Development

People commonly believe that with old age intellectual decline occurs. Intellectual decline is associated with respect to certain functions such as; speed, perceptual integration ability, memory and inductive reasoning. People show variability in intellectual functioning in late adulthood period. Researchers classified intelligence into two types. They are: (1) Fluid intelligence and (2) Crystallized intelligence. Fluid intelligence declines as age increases. Fluid intelligence involves ability to perceive relations, form concepts and reason abstractly. Crystallized intelligence involves the ability to remember and use learned information. Fluid intelligence includes reasoning, memory and information, processing capabilities, whereas crystallized intelligence is the acquired knowledge of the person. During old age people forget that may lead to dementia or Alzheimer's disease which is possible due to Fluid intelligence, because it relates to neurological functioning. On the other hand, crystallized intelligence helps in storing information. Therefore, in old age people should keep their minds active by mental exercises such as problem solving analysis and other operations etc.

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