

HUMAN GROWTH AND DEVELOPMENT

•Growth and Development

Growth : The term growth implies an increase in size. When the body or any part is described as having growth it usually means that it has become larger and heavier. It is thus we say growth of arms, brain, muscles, or the body in general. Growth means increase or addition in size, height, length, or weight and can be measured.

Development : Development implies certain qualitative changes. These are the changes in character leading to maturity of improvement in functioning. Arms grow large but also develop by undergoing certain changes which equip them for better work. Development means change in shape, form or structure so as to improve in working or functioning. Growth and development go side by side.

Difference between Growth and Development :

Growth :

(i) Growth is used in purely physical terms. It generally refers to change in size, length, height, and weight of an individual. Changes in quantitative aspects come into the domain of growth.

(ii) Growth is one of the aspects of development process.

(iii) Growth does not continue throughout life, it stops when maturity has been attained.

Development:

(i) Development implies overall changes in shape, form or structure resulting in improved working or functioning. It indicates the changes in the quality or character rather than in quantitative aspects.

(ii) Development is wider and comprehensive term; it refers to overall changes in the individual. Growth is one of its aspects.

(iii) Development is a continuous process.

•Factors influencing Growth and Development

(i) Heredity : Heredity and genes certainly play an important role in the transmission of physical and social characteristics from parents to off-springs. The shape, size, structure, height are related to heredity factors thus it plays an important role in influencing growth and development. Different characteristics of growth and development like intelligence, aptitudes, body structure, height, weight, color of hair and eyes are highly influenced by heredity.

(ii) Environment : The climate, weather, temperature, pollution, natural environment plays role in growth and development. Clean, safe and hygienical environment helps to gain good development, whereas dirty, polluted, dangerous, hazardous and un-hygienical environment decline growth and development.

(iii) Gender : Male and female have different growth patterns at various stages. Males are taller, heavier than female. Males have stronger muscles and have more speed; whereas female have more flexibility. Males have hard, more prone to redness and darker skin, whereas skin of females is soft, sensitive and fair.

(iv) Nutritional : Growth is directly related with nutrition. The human body requires an adequate supply of calories for its normal growth and this need of requirements vary with the phase of development. Unbalanced diet, malnutrition and under nutrition affects growth and development. If the children are malnourished, this slows their growth process.

•Growth and Developmental Characteristics at different Stages

These stages of Growth and Development are :

(i) Infancy Stage (from birth to 5 years)

(ii) Childhood Stage (from 5 to 12 years)

(iii) Adolescence Stage (from 12 to 19 years)

(iv) Adulthood Stage (19 to 65 years)

(v) Old Age (60 years onwards)

(i) Infancy Stage (from birth to 5 years) : Infancy has two stages :

(a) Pre-natal Stage (from Conception Till Birth) : The development of individual starts from conception period. Its stages are zygote stage, then embryo stage and then foetus stage. The developments during these stages occur within the mother's womb. The development (especially growth) is very rapid during pre-natal stage as it starts from single cell to multisystems of the body. The perceptual development of individual starts at this stage but at slow pace. During this stage, mother has to take proper diet for development of foetus. She has to go for regular medical check-ups and follow Doctor's advice. Mother should remain happy, moreover healthy atmosphere should be provided to her.

(b) Babyhood Stage (from Birth to 5 years) : During this stage of body, the growth and development occur in progressive manner. Individual gains considerable weight and height. The cognitive development starts as child tries to balance and tries to gain control over big muscles. The vocabulary of child is with simple words. Attachment of child is more with mother based upon basic needs of thirst and hunger. During this stage of child, parents (especially mother) should understand the child's needs like proper feeding, hygienic environment, sufficient rest and sleep vaccination of child, etc.

(ii) Childhood Stage (from 5 to 12 years) : Childhood stage is divided into three stages :

(a) Early Childhood Stage (from 5 to 7 years) : This is the age from 3 to 8 years of childhood. In this age, the growth is slower and it takes place in shifts or bursts after some time period. In this age the neuro-muscular development is slow, thus weak coordinative abilities. The intellectual development is also slow during this stage. Learning takes place through cramming, repetition and practice, moreover it is slow. Social relationship is only related to close ones. Thus child should participate in multiactivities. These activities should consist of easy and light exercise; playful with lot of recreational games. Hygienic habits and moral values should be inculcated during this age.

(b) Middle Childhood Stage (from 7 to 10 years) : In this stage of childhood, they gain some slight improvement in flexibility and coordination along with strength, endurance and speed. Thus lot of playful activities should be there in their curriculum like running; obstacle running or jumping, dribbling the ball; Calisthenics exercises; easy or modified

games; yoga asanas. The child should be guided about positive social qualities, team effort along with hygienic habits in this stage.

(c) Later Childhood Stage (from 11 to 12 years) : This is the age from 11 to 12 years of childhood. During this stage, growth is slower whereas development is very rapid. Muscles gain strength, moreover neuro-muscular coordination also improves. Intellectual development comes through repetition, practice and experience. Social development comes through family members and friends.

(iii) Adolescence Stage (from 12 to 19 years) : This period is delicate period and challenge for parents. In teen age, children want to live independent as they consider themselves to take responsibility like adults. Sex difference is prominent and brings sex consciousness. Adolescence age causes many changes related to social and psychological. Teenagers often give importance to friends and neglect family. Adolescents need good diet, heavy physical workout, creative activities, logical explanation, good friends. Teenagers should be motivated to develop moral values, controlling the emotions, proper use of finance, etc.

(iv) Adulthood Stage (from 19 to 65 years) : It has two phases :

(a) Youth Stage (from 19 to 35 years) : Youth development is a process that prepares a young person to meet the challenges of adolescence and adulthood and achieve his or her full potential. Youth development is promoted through activities and experiences that help youth develop social, ethical, emotional, physical and cognitive competencies.

b) Adult Stage (from 35 to 65 years) : Adult development encompasses the changes that occur in biological and psychological domains of human life from the end of adolescence until the end of one's life. These changes may be gradual or rapid, and can reflect positive, negative, or no change from previous levels of functioning. It means developing an independent sense of self and gaining the traits associated with wisdom and social maturity

Adolescence Changes :

(i) Physical Changes : In this period, rapid physical changes happen. Puberty brings remarkable sex difference which changes the shape of an individual, such as breast

development, muscular changes, bone hardening, moustaches and change in voice, blackheads, pimples and acne over skin, etc. Adolescent needs good diet, heavy physical workout, creative physical activity, suitable clothing, hygienic habits, healthy sports environment, etc.

(ii) Psychological Changes : As compared to physical development, psychological changes are at lesser pace. The identity of good and bad is not upto the mark in teens, maybe due to lack of experience. Though the intelligence of an individual is developing but it is lacking in practical approach. Teens try to hide their mistakes.

iii) Emotional Changes : The emotions in adolescence are very sudden and very intense. These emotions are sometimes uncontrollable in the adolescence. Teens often have an aggressive attitude and rebellious behaviour. Adolescence in this period needs moral and character development habits, spiritual guidance, proper attention, time, understanding family needs, emotion control and expression of emotions in proper way, etc.

(iv) Social Changes : A teenager enjoys the company of his friends, thus family attachment declines. His loyalty towards group is more and he wants to prove his importance in friends. He needs good friends, parents to act as friends, socialization qualities and its development.

Problems of Adolescence :

(i) Aggressive and Violent Behaviour : Adolescent has aggressive behaviour and often becomes violent very fast. They easily become irritated and repulsive when work is not of their interest.

(ii) Overconfident and Hide Mistakes : Teenagers are often overconfident and pose themselves as heroes. They hide their mistakes and try to befool others through their intelligence.

(iii) Friends given Importance : Teenager likes the company of friends and enjoys in peer group. Sometimes they make bad friends with antisocial habits and try to follow them.

(iv) Wastage of Time : Teenager often wastes time in useless things like gossiping, talking, watching television, listening music, idle sitting, etc.