GROWTH AND DEVELOPMENT OF CHILDREN

Ms Poonam
Ms Nancy
Research ScholarJJT University ,Rajasthan

Abstract

Understanding of growth and development will helps us to plan educational growth and development of the child. Human life starts from a single ferlized cell. This cell is under constant interaction with the environment in the mother's womb and after birth with the outside world. This interaction leads to the Growth and Development of the child. The increasing of an organ or limb of the baby, in size and weight is Growth. Division of each cell and their growing into thousands in number, or their changing tissues, blood or bone, is part of the process of development. The primary purpose of studying the growth and development of children is to understand them better. As a teacher or a parent, can manage children more effectively if he is aware of how they grow and develop in a systematic manner right from the moment of conception. An orderly pattern is found in the growth of every organ of the body and area of development.

Although the development process is continuous, the rate or speed of development varies at different ages of the child. For example, children grow most rapidly during the first three years of life. In their middle childhood, i.e., from 6 - 12 years, their rate of growth is comparatively slow whereas it is accelerated again when they approach adolescence. A knowledge of the trends and patterns of growth and development will enable he to know how children grow and develop; when and what to expect from them, how to guide them in each stage and provide the environment for their optimum development. The purpose of this article is to familiarize us with the fundamental facts and various characteristics of Growth and development

Keyword: Growth, development, human, children and understand.

Introduction

Understand the meaning of these two important terminologies. 'Growth' and 'Development' are often used as synonymous terms. But, in fact, growth is different from development. Growth means an increase in size, height, weight, length etc. which can be measured. Development, on the other hand, implies change in shape, form or structure resulting in improved working or in functioning. Improved functioning implies certain qualitative changes leading to maturity. Growth and Development are the important characteristics of a living organism. Development involves a series of progressive, orderly and meaningful changes leading to the goals of maturity. Normally Growth contributes to Development. In reality though 'Growth and Development' are different, but they are inseparable. Generally process of Growth and Development goes on simultaneously, often used as synonymous terms, important characteristics of a living organism, growth refers to change in size and development implies overall changes in the individual. The process of Growth and Development goes on simultaneously.

Relationship of Growth and Development

The term growth is used in purely physical sense. It generally refers to an increase in size, length, height and weight. Changes in the quantitative aspects come into the domain of growth. 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.

Growth is one of the parts of developmental process. In a strict sense, development in its quantitative aspect is termed as growth. Development is a wider and comprehensive term. It refers to overall changes in the individual.

Growth describes the changes which take place in particular aspects of the body and behaviour of an organism. Development describes the changes in the organism as a whole and does not list the changes in parts.

Growth does not continue throughout life. It stops when maturity has been attained. Development is a continuous process. It goes from womb to tomb. It does not end with the attainment of maturity, the changes however small they may be, continue throughout the life span of an individual.

The changes produced by growth are the subject of measurement. They may be quantified. Development implies improvement in functioning and behaviour and hence brings qualitative changes which are difficult to be measured directly.

Principle of Development

Understand the principles of development also, which will help us to know how development occurs and also know what the various dimensions of development are as following are the important principles of Development –

Development is a continuous process:

First development is a continuous process. Development does not stop at any time. It continues from the moment of conception until the individual reaches maturity. It takes place at a slow or a rapid rate but at a regular pace rather than by leaps and bounds. Surprised to know that the physical manifestations of certain features may appear to be sudden; the process of development is continuous. For example, speech does not come over-night. It has gradually developed from the cries and other sounds made by the baby at birth. The fact that development is continuous emphasizes the point that each stage of development has its foundations built upon a preceding stage and has a definite influence on the succeeding stage of development. There may be a break in the continuity of growth due to illness, starvation or malnutrition or other environmental factors or some abnormal conditions in the child's life.

According to Growth and Development, the life of an individual can be divided into the following major developmental periods:

* Pre-natal period (from conception to birth)
* Neo-natal period (birth to 10-14 days)
* Babyhood (2 weeks to 2 years)
* Early childhood (2 years to 6 years)
* Late childhood (6 years to 12-13 years)
* Adolescence (from 12-13 years to 18-19 years)
* Adulthood (from 18-19 years and onwards)

Development follows a pattern:

Secondly, development occurs in orderly manner and follows a certain sequences. In nature we find that every species or organism follows a pattern of development. The same is

the case with human beings. Development occurs in orderly manner and follows a certain sequence which, in general is the same for most children. Each stage of development leads to the next. For instance, all children first learn to sit up without support before they stand. Similarly, they learn to draw a circle before attempting to draw a square. The rate and speed of development may vary in individual cases, but the sequence of the pattern is the same. A child from a disadvantaged home and a child from an affluent home, both follow the same pattern of development, although the latter may develop at a faster rate due to the facilities available at home. One of the sequential patterns of development relate to the two directions in which development proceeds. Firstly, development proceeds from the upper portions of the body toward the lower portions. This is referred to as "head to toe" sequence. This means that improvements in the structure and function in a child's body come first in the head region, then in the trunk and last in the leg region. This growth pattern helps to explain why children sit before they can stand and crawl before they can walk. Secondly, development proceeds from the centre line of the body outward towards the distance or peripheral parts referred to as "near to far" sequence. Hence, in a fetus, the head and the trunk are fairly well developed before the rudimentary limb buds appear, gradually the arm buds lengthen and then develop into hands and fingers. This growth pattern explains, for instance, why children in the early years are more adept at controlling larger muscles than the whole limbs. They are unable to control finer muscles that are required for the manipulation of tiny objects with fingers.

Development proceeds from general to specific responses:

Thirdly, it makes from a generalized to localized behavior. In studying the development pattern of children, it is observed that general activity always precedes specific activity. The early responses of the baby are very general in nature which is gradually replaced with specific ones. The earliest emotional responses of the new born are generally diffused excitement and this slowly gives way to specific emotional patterns of anger, joy, fear, etc. Babies wave their arms in general, random movements before they are capable of such specific responses as reaching for an object held before them. Similarly, in early stages of language development the child may use a particular word for any type of animal/ eatable. Gradually, as his / her vocabulary increases, he/she will learn to use correct specific words. Thus, uncoordinated movements/ responses are gradually replaced by specific ones.

Development involves change:

Development involves a progressive series of changes. The human being is never static. From the moment of conception to the time of death, the person is undergoing changes. Nature shapes development most clearly through genetic programming that may determine whole sequences of later development. It refers to a progressive series of orderly coherent changes. Growth on the other hand refers to quantitative changes increasing in size and structure. Development implies both quantitative and qualitative changes

Development is a product of interaction of the heredity and environment:

Child at any stage of his growth and development is a joint product of both heredity and environment. But it is not possible to indicate exactly in what proportion heredity and Environment contribute to the development of an individual. The two work hand in hand from the very conceptions. The environment bears upon the new organism from the beginning. Among, the environmental factors like nutrition, climate, the conditions in the home, the type of social organization in which individual move and live, the roles they have to play and other.

Principle of uniqueness:

Development is individualized process. Although the pattern of development is similar for all children, they follow the pattern at their own rate. These individual differences arise because each child is controlled by a unique combination of hereditary endowment and environmental factors. Every child follows a developmental timetable that is characteristically unique for each child. All children therefore do not reach the same point of development at the same age. Individual differences are caused by the both hereditary and environmental conditions. The child's physical development, for example, depends partly on the hereditary potential and partly on the environmental factors such as diet, general health, climate etc. Development is also affected by the genetic factors. A child should be provided with opportunities for experiences and learning, these include:

a) A stimulating environment where the child can explore. The environment must include materials which arouse curiosity and facilitate learning, and

b) Encouragement and guidance from parents and teachers. Each child is a unique individual. No two children can be expected to behave or develop in an identical manner although they are of the same age. For example, in the same class, a child who comes from a deprived environment cannot be expected to do as well in studies as a child of the same ability whose parents put high value on education and encourage the child to study.

The Principle of Interaction of Maturation and Learning:

Another important principle of development is that it occurs as a result of both maturation and learning. Maturation refers to changes in a developed organism due to the unfolding ripening of abilities, characteristics, traits and potentialities present at birth. Learning denotes the changes in behaviour due to training and or experiences. Maturation is the inner growth process unaffected by training. Another factor that causes growth is 'learning'. Learning implies exercise and experience on the part of an individual. Learning may result from practice, which in due course of time may bring about a change in the individual's behaviour. Maturation and learning are closely related and one influences the other. This means that traits potentially present will not develop to their maximum without effort or learning. Thus, learning have a great influence on growth and development, maturation provides the raw material for learning and determines to a large extent the more general patterns of the individual's behaviour.

Development is often predictable:

Development psychologists have observed that each developmental phase has certain common traits and characteristics. We have seen that the rate of development for each child is fairly constant. The consequence is that it is possible for us to predict at an early age the range within which the mature development of the child is likely to fall. But all types of development, particularly mental development, cannot be predicted with the same degree of accuracy. It is more easily predictable for children whose mental development falls within the normal range rather than for those whose mental development shows marked deviation from the average.

Conclusion

Growth refers to change in size; development implies overall changes in the individual. The principles of development state that it is a continuous process; it follows a pattern; it proceeds from general to specific responses; it proceeds at different rates for different parts of the body; there are individual differences in development; it is both

quantitative and qualitative and it is often predictable. There are internal, external and other factors that affect the growth and development of the child.

There are two main phases of the process of development i.e. the stage or phase of before Birth and the stage or phase of after Birth. The second phase of life has four stages, i.e. Infancy, childhood, Adolescence and Adulthood. The period of infancy covers the period from birth to 5 years, childhood from 6 to 12 years and adolescence from 12 to 18/19 years. Each stage of development has its own specific characteristics.

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