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Principles of Development

Child psychologists are interested understanding and predicting behaviour. This presupposes knowledge of principles of development and normal developmental patterns.

In the area of child psychology very often doubts arise concerning the meaning of the two terms most commonly used : Growth and Development. The two terms are, however, very clearly different in their meaning. Generally growth refers to quantitative changes in physical development while development refers to qualitative changes occurring in behavioural characteristics of the child leading towards maturity. In course of the process of growth and development certain basic characteristics appear and are quite prominent. Growth and development are incremental processes.

TYPES OF CHANGE

Each year the child undergoes a series of changes in size, height, weight, etc. Similarly as would be from the works of Piaget and cognitive developmental theorists, the child's development also undergoes qualitative changes *i.e.* sensori-motor, preconceptual, concrete and formal operations.

Proportion is another dimension where growth changes are noticed. With increase in age not only the body proportions changes but also the level of thinking. Thinking instead of based on pleasure principle gradually becomes reality oriented. Interest patterns undergo dramatic changes.

Certain physical features do disappear such as the baby hair, baby gland, thymus gland function, first teeth, baby reflexes, mental symptoms like egocentrism, baby speech and so on. Instead, new features appear in children which were not present earlier. For example, physical features undergo changes in middle childhood, and early adolescence. Besides these, mentally the child becomes a different one at each successive of growth. He becomes

more curious, especially about sex and moral standards, religious habits, language usages etc.

Further, when we speak of development be it physical or mental, it appears that it is not a uniform process. It is very rapid in babyhood especially upto 3 years. From a microscopic cell the baby grows into a perceptible human being. The rate growth between six and adolescence slower down a bit but again it makes it up during puberty. Mental development is also quite rapid at first. It is observed that about $\frac{1}{3}$ of intelligence and mental ability is developed by age 3 years, $\frac{1}{3}$ between age 6 to 10, and the remaining $\frac{1}{3}$ by age 16 years.

Studies in genetics have shown that behavioural development follows a pattern even though there is individual difference among children. The various principles of development are mentioned below :

(a) Development is similar for all children. There is a sequence in physical as well as in mental development. The rate of development may differ in case of average, bright, and dull children, but the baby must stand before he walks, he must babble before speech appears.

(b) Development of behaviour proceeds from general to specific. For example, before birth the fetus moves the whole body but is incapable of making specific responses. In emotion, there is general excitement at the beginning and specific emotions develop late in the process of growing-up.

(c) Development is continuous. There is no discontinuity in development. Speech for example, is not developed overnight. Instead, it gradually develops from cooling, babbling, monosyllabic sounds.

(d) Development proceeds at different rates for different behaviours. Development of mental and physical traits are continuous but is never uniform for the entire organism. The feet, hands reach their maximum level early in adolescence; the face and shoulders are slow in development.

(e) There is correlation rather than compensation in development. Gesell observed that there is a relationship between the development of physical and mental traits. Development of language is related to development of speech organs; sexual behaviour depends on the maturing of gonads; school readiness depends upon maturational development of the various parts of the body. Evidence contrary to this assumption does not exist. One cannot find someone who is above average in one trait but below the normal in another trait. As a matter of fact, genetic studies of the genius have shown that desired traits go together. Negative relationships are not observed.

(f) Development follows two sequences. Cephalo-caudal and proximodistal sequences : The cephalo-caudal sequence means that development spreads over the body form head to foot. That is structural and functional

developments occur first in head then in trunk and lastly in legs. The baby can turn his head, lift it up before he lifts his chest or legs. At the fifth month, the baby can control eye movement, head movement, shoulder but he cannot sit in the chair.

Proximodistol laws explain the development from central part of the body towards peripheries or extremities. In the prenatal period, the head and trunk are fairly well developed and at that time the rudimentary limbs appear. Gradually arms enlarge and then developed into hands and fingers. Proximo-distal development is better known as side-wise development. These two sequences suggest that the development is predictable in some ways :

<i>Onto- genetic sequen- ces of behaviour</i>	5 years	— Sociability
	4 years	— Concepts of from/number
	3 years	— Speech, Sentences
	2 years	— Bowel control
	18 months	— Larynx, words, phrases
	12 months	— Legs, feet, stands
	40 weeks	— Trunk, fingers, sits, creeps
	28 weeks	— Hands, grasps, manipulates
	16 weeks	— Head, balance
	4 weeks	— Eyes ocular control
	0 birth	— Vegetative functions, vision
	24 weeks	— Autonomic Nervous System
	20 weeks	— Tonic neck-reflex
	18 weeks	— Hand closure and grip
16 weeks	— Perspiratory movement	
10 weeks	— Swallow, Babinsky reflex	
8 weeks	— Trunk extension	
1 weeks	— Embryonic stage	
0 weeks	— Conception	

(g) All children do not reach the point of development at the same age. Depending upon the interacting influence of heredity and environment children attain various behavioural characteristics at different age and in differing degree. In other words, there is individual difference in the development pattern. Individual differences arise due to various conditions prevailing in the homes : emotional climate, cultural milieu, emotional deprivation, socio-economic status of the family etc.

(h) Early development is more important than later development. Early childhood is characterised by plasticity and the child is most malleable during this period. As such, early childhood experiences such as emotional, cultural, and nutritional have a greater say in the developmental progression.