Human Personal Growth and Development

Meithiana Indrasari¹, Lilik Hidayat Pulungan², Siti Mujanah³, Amiartuti Kusmaningtyas⁴, Sumiati⁵

¹Dr Soetomo University, Surabaya, Indonesia. E-mail: meithiana.indrasari@unitomo.ac.id
²Universitas Muhammadiyah Sumatera Utara, Medan, Indonesia. E-mail: lilikhidayat@umsu.ac.id
³Universitas 17 Agustus 1945 Surabaya, Indonesia.
⁴Corresponding Author E-mail: Sitimujanah@untag-sby.ac.id
⁵Universitas 17 Agustus 1945 Surabaya, Indonesia

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Abstract: The two conditional parts of human being include quantitative material person who experience growth, and qualitative functional individual who experience development. Growth is defined as a quantitative change in material as a result of environmental influences. Quantitative changes can be in the form of enlargement or increase from nothing to being, from little to many, from narrow to broad, and so on. Personal growth as a quantitative change in personal material as a result of the influence of the material environment such as cell, chromosome, blood grain, hair, fat, and bone cannot be said to develop but grow. Likewise personal material, such as impression, desire, idea, knowledge, value, as long as they are not related to their functions and cannot be said to be developing but experiencing growth. Growth is expressed in term of change that occurs in the material part, but growth itself has the nature of unity and generality, in this case an organism.

Keywords: genetic, human personal, growth, development, environment

I. Introduction

Humans genetically occur first from one sperm and one ovum. One sperm enters an ovum and a new individual begins to open up. The early life of an individual is greatly influenced by the mother's condition, namely the woman who conceives it. The role of father in growing individual only gives the right possibility for the individual to be conceptualized. Whatever a father will deliver to his child is in the form of the qualities contained in one sperm that is produced. Sperm is a drop of intercourse water. One man consists of millions sperm that can be seen through a microscope in the form of rounded head circles, long-tailed, and moving. With its tail, the sperm moves and swims quickly to find its target. In one small sperm, there are twenty-four very small objects called chromosomes.

Millions of sperm swim into the mother's womb, only one of them can reach the target, namely the ovum. When sperm penetrates and enters the ovum, the head begins to open and compound twenty-four chromosomes that were previously wrapped. Big is thousands times the size of sperm, so our naked eye can observe it as big as a snake's eye. The weight of a human ovum is estimated to be around a million grams. Inside the ovum contains food with one small and light sphere called nucleas. The contents of the ovum can only be seen by a microscope when the sperm (the head only) enters the ovum and releases its twenty-four chromosomes at about the same time as nucleas. The broken ovum also releases its twenty-four chromosomes as a donation from the mother to form a child.

Individual is made up of forty-eight chromosomes. Each chromosome has a different shape and nature. Twenty-four chromosomes from the father and twenty-four chromosomes from the mother, each paired in the ovary. Twenty-four pairs of chromosomes are the determinants of physical derivation from human personal life. Growth continues with the process of division and redivision (cell division and division or redivision in cells). Cleavage and chromosomes pairing resembles a series of chain linkages to form as per that are getting closer together. At certain moment, the density of this chromosome grows more and forms more grains that resemble...
dew called the genes and it is a determining factor for heredity. Each gene has a certain function in human growth. 

After that, the ovum matures and nerves enter the mother's side. The cells no longer live together. When the number of cells is still limited, the cells begin to specialize. Some become bone cells, some become skin cells, some become flesh cells, some become brain cells, some become muscle cells, and so on. All those specialized cells continue to grow and form various parts of the human body. Among all those cells, there are certain cells that are reserved for other functions. The cells are germ cells taken from sperm and ovum that will function as hatchery. When this process occurs in boy, this material produces sperm. If this process occurs in female, this material will produce ovum in the womb. Seed production will be more apparent when the child steps on puberty. The production process continues throughout human life.

Sperm growth is somewhat different from the growth of cells. Cells grow from outside of the germ, which reserves cells from year to year not decreasing. Every time a man's intercourse secretes about 200,000 to 600,000 sperms, and soon after millions more substitute sperm are produced. The body always produces sperm ingredients and this production work runs mechanically like a machine activity. Even if the body is sick, injured, or getting old, it will only reduce the amount of normal production. In women, although old ovum occurs from germ cells, their survival is different from sperm growth. Ovum growth does not reach millions of numbers. When a woman reaches puberty, it is expected that normally she will only ripen one ovum every month, and this will only last for about thirty-five years. Women from birth have a new germ that will be ready to produce ovum after the woman steps on puberty. The chromosomes that people will inherit to their children later on will also be contained in each of their ovum. The process of ovum maturation is only in the form of ovum enlargement by filling up the food ingredients used to start a new individual's life.

The process of ovum phenomenon is not much different from the process of sperm phenomenon. The process of ovum occurrence from germ cells is called reproduction. Each ovum only occurs in half of the mother / woman chromosomes. The change of chromosomes structure can affect the work of genes. Things that are not inherited include several aspects, both physical and mental growth material. From the nature of genes owned, individuals can be people who are moody, cheerful, quiet, slow, or intelligent.

Not all aspects of the human characteristics are inherited from their parents. Things that are not inherited include several aspects, both physical and mental growth materials. From the nature of genes owned, individuals can be people who are moody, cheerful, quiet, slow, or intelligent. However, physical or mental conditions such as illness, fatigue, poverty, failure, or laziness are not inherited, but are obtained from education. The mental equipment and physical equipment of each individual from birth is the same as in adult. Material similarity in heredity can give birth to individuals who differ in physical appearance. This is not necessarily caused by heredity, but because of differences in growth conditions that are affected, both by heredity and the environment.

II. Growth Occurs Physiologically Toward Living Material

Apparently, material growth is not only quantitative but also qualitative. The laws governing growth are (1) growth is quantitative and qualitative, (2) growth is a continuous and orderly process, (3) the tempo of growth is not the same, (4) the stages of development of various aspects of growth are different, (5) the speed and growth sphere can be modified by the conditions inside and outside of the body, and (6) each individual grows in his/her own unique way. The uniqueness of growth in each individual is caused by differences in internal environmental condition, external environmental condition, material heredity, activity, physiological condition such as physical disability, age, sex, and learning outcome.

2.1 Growth is Complex

The aspects that affect growth are the child as a whole; a child's mental age affects his growth; behavioral problem often relates to growth patterns; and personal and social adjustments reflect the dynamics of growth.

2.2 Normal Physical Growth

Human growth begins in the womb when two germ cells meet, each of which is the sperm of a man and the ovum of a woman. Prospective baby called embryo. Embryo grows rapidly, especially during half of pregnancy period.
During nine months, the baby has grown so it has a complete body shape and structure including fingers, feet, arms, genitals, nervous system, sensory organs, endocrine gland, bones, skin, muscles, and others. From birth, the sense organs are ready to use, but only function a little after birth. After birth, the child's physical growth occurs rapidly in the first year, in the second year the child grows slowly but steadily for ten years. When children reach the peak of adolescence, growth occurs rapidly, after that to get to the level of adulthood, physical growth rate decreases. After the age of 21 years, the body progressively builds up into aging and eventually dies.

Physical growth includes glandular growth, general body growth, nervous system growth, and sexual growth. Glandular growth occurs rapidly from birth until the age of 10 years, and at the age of 12 years the speed decreases to the age of 20 years.

The growth of the human nervous system rapidly occurs from birth until the age of 4 years, after that the speed decreases until the age of 12 years. From the age of 12 years to the age of 20 years the growth of the nervous system has a constant speed. Sexual growth occurs prominently starting at puberty. In male, puberty generally begins at the age of 12 or 13 years, whereas in female it is earlier, namely since the first menstruation around 10 to 16 years, and on average before the age of 12 years. At puberty, special hairs begin to grow on the body, both male and female. In male, voice change begins to grow and the body becomes more robust.

Sexual growth that starts from puberty continues rapidly until the age of 20 years. Until the age of 21 years growth is constant but certain.

III. Human Development Cannot be Separated from its Growth

Growth is something related to physical material that can grow function and even change function in physical material. Physical change can produce maturity over its function. Maturity of Physical function greatly affects changes in psychological function. Therefore, human development cannot be separated from its growth.

Development characteristics show symptoms that are relatively regular, resulting in a pattern of systematic development. On this basis, the experts formulated it in the form of development principles. Some development principles are as follows:

a. Development is a physical and psychological function that takes place in an integrated whole process
b. Every individual has a speed of development;
c. A person’s development, both as a whole and each aspect is not constant but rhythmic;
d. The development process is by following certain patterns;
e. The development process occurs continuously;
f. Between one development aspect and the other aspect is interrelated or significantly correlated;
g. The development progresses from general to specific pattern;
h. Development is influenced by heredity and the environment;
i. Having a personality function that is physical, namely motor function in body parts, sensory function in the sense organs, neurotic function in the nervous system, sexual function in erotic body parts, respiratory function in the respiratory system, circulatory function in heart and arteries, and the digestive function of food in the digestive system. As for personality functions that are psychiatric, such as attention function, observation function, response function, memory function, fantasy function, thought function, feeling function, and will function.

IV. Conclusion

The law of development in personality includes: (1) development is qualitative, (2) development is strongly influenced by the process and learning outcome, (3) age also influences development, (4) each individual has a different developmental tempo, (5) in the whole development period, (6) each species individual development follows the same general pattern, and (7) development is influenced by heredity and educational environment. For this reason, efforts must be made such as creating conducive learning environment, motivating children's activities to learn, and guiding children's development towards optimal development.

V. References


