
UNIT 2 FACTORS INFLUENCING PERSONALITY

Structure

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Hereditary Factors
 - 2.2.1 Physique and Physical Health
 - 2.2.2 Endocrin System
 - 2.2.3 Nervous System
- 2.3 Environmental Factors
 - 2.3.1 Social Factors
 - 2.3.2 Cultural Factors
 - 2.3.3 Economic Factors
- 2.4 Let Us Sum Up
- 2.5 Unit End Questions
- 2.6 Suggested Readings

2.0 INTRODUCTION

We can assume that after going through the first unit you would have developed a fair understanding of what personality is. Personality is something that we partially inherit from our parents and partially it is product of the environment in which we are brought up. Therefore, in this unit we will try to understand those factors which go in the making of personality or in other words we will be studying factors that influence and shape our personality. These factors can be categorised under two broad headings, viz., (i) Hereditary factors and (ii) Environmental factors.

2.1 OBJECTIVES

After reading of this unit, you should be able to:

- 1 discuss the concept of heredity;
- 1 discuss endocrine system and its impact upon personality;
- 1 discuss the role of nervous system in the development of personality; and
- 1 discuss the role of environmental factors that influence development.

2.2 HEREDITARY FACTORS

Heredity includes all those factors that we inherit from our parents. Such factors are innate, that is, they are present in the individual before the time of birth or at the time of birth and determine the path of development of our personality. Hereditary factors that contribute to personality development do so as a result of interactions with the specific social environments in which people live. In other words, personality is the sum total of what a person is. That is, it consists of behaviours, thoughts and feelings that endure throughout life. Heredity is just like the blue print of our personality

which defines the broad limits of personality within which our personality will take shape. Hereditary factors include the following: (i) Physique and physical health (ii) Endocrine system (iii) Nervous system

2.2.1 Physique and Physical Health

By physical structure we mean height, color, constitution, composition of body etc. Generally, a person with good physical structure and constitution enjoys good health. Traits of physical structure are largely received in inheritance. For example, you would have observed that children of parents having good height are often taller while children of parents with shorter height are often less tall. Similar is the case with color, children of fair color parents are often fair and children of parents with dark complexion are often dark. However, this rule is not followed in every case. Very often we see children having physical characteristics or traits that do not appear similar to that of their parents but with their ancestors. This means that heredity goes beyond our immediate parents. A child in fact is likely to receive biological characteristics of ancestors in the previous seven generations.

Mendel (an Austrian Saint) through his experiments on pea plants proved that children inherit the average of the physical traits of their parents. For example, If the father is tall and mother is of short height, the children in all probability gain average height of both parents. You must be wondering why I am telling you all this about physical features. Actually our physical make up affects our mental or psychological traits and ultimately our behaviour.

Very often we notice that individuals with good physical structure and beauty are centre of attraction of others. Their parents, neighbours, teachers and peers develop favorable attitude toward them. As a result such children develop traits of self-confidence, responsibility, sociability, and punctuality and sometimes feeling of superiority as well, while children not gifted with good physical structure and physical beauty are looked down upon by others. Consequently they develop feelings of inferiority, emotional instability. They become shy and introvert.

The effects are more pronounced when the individual is actually afflicted with physical deformity. When scores on emotional stability test of a group of crippled girls were compared with that of normal girls, it was found that the crippled girls had significantly low mean scores on emotional stability. That means they were less emotionally stable. You must have observed in your surroundings that such individuals often have tendency to seek other's approval. Have you ever thought why do they behave like this? They try to endear us by seeking our approval only to compensate their physical lack.

Self Assessment Questions

1) What do you understand by the term heredity?

.....

2) What are all factors that are part of heredity endowment?

.....

2.2.2 Endocrine System

Our glandular system affects our personality and behaviour a great deal. It is well known that the many glands in our system regulate varied types of activities that are going on within our bodily system. However the question arises as to how are these glands which regulate our system affect our personality. You know at times we are very active but there are also times when we are depressed without any apparent reason. Actually the reason for this lies in constant chemical changes taking place in our body. These changes are a result of functioning of glands.

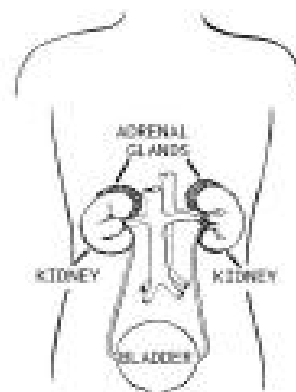
Glands are of two types — **endocrine glands** and **exocrine glands**. Of these, the more important one is the endocrine glands. While secretions of exocrine glands go out of our body, the endocrinal secretions are released directly to our blood stream. Following are some of main endocrine glands: (i) Pituitary gland (ii) Adrenal gland (iii) Thyroid gland (iv) Pancreas and (v) Sex gland.

- i) **Pituitary gland** is located in the brain below the hypothalamus. Anterior part of the pituitary secretes a hormone called somatotropin or growth hormone. Excessive secretion of this hormone in early childhood makes a person giant. If you read newspaper, you would have read about a Pakistani national being the tallest (8 feet 1 inch) person of the world. It is because of over secretion of growth hormone. Hypo secretion of this leads to dwarfism.



Posterior pituitary secretes pituitrin responsible for maintaining blood pressure, alertness in smooth muscles and helps kidneys function normally. Hormones released by anterior pituitary other than somatotropin are called tropic hormones. These hormones help regulate and control the functioning of adrenal gland, thyroid gland and sex glands. Any abnormal functioning of these glands is corrected by this part of pituitary thus ensuring continued normal development of personality. Therefore, pituitary is called the master gland.

- ii) **Adrenal gland** is located above the kidneys,. It has two parts. Outer part is called **adrenal cortex** while inner part is called **adrenal medulla**



Adrenal cortex produces cortin which helps regulate carbohydrates, salt and metabolism. The malfunctioning of this gland may result in the individual's increased

inactivity leading to tiredness and insomnia. Excessive lack of it may even cause unconsciousness.

Adrenal medulla secretes adrenaline and noradrenaline. Of the two, adrenaline is more important which controls emotional state of the individual. It helps prepare our body to meet emergency situation so that we can adjust ourselves with the environment. For this reason it is also called emergency hormone as well. Adrenaline when pumped into the blood stream, (i) increases activity level of the individual, (ii) heart beat and respiration are increased, (iii) the digestive system gets suspended, (iv) blood sugar increases and (v) the body is ready to fight emergency situation.

For example, when we find a stray dog running towards us we just run away from it with our full strength. In such emergency situations it is the adrenal gland that secretes adrenaline which prepares our body to meet this unexpected situation. Our heart works faster and pumps more blood, respiration increases to supply greater amount of oxygen to lungs. Similarly, digestion gets suspended to save energy and release it for emergency action.

iii) **Thyroid gland** is located in the throat and produces thyroxin that regulates metabolic activity of the entire body. Its functioning affects physical growth a great deal. Hyposecretion of thyroxin in early childhood results in dwarfism while its lack in adulthood leads to a specific physical condition known as myxedema.

Hyposecretion lowers metabolic activity which in turn slows down heart beat, respiration, and body temperature. Over secretion of thyroxin makes a person overenthusiastic and overactive. Blood circulation increases and there is gradual reduction in body weight. The individual show signs of irritability and appears anxiety ridden.

Parathyroid very small in size it weighs only 1 gm. Its hormone is called parathormone. Parathormone regulates quantity of calcium and phosphate in blood. Blood calcium maintains excitability level of nerve tissue. Higher quantities of calcium in blood keep the balance in nerve excitability. Less than normal secretion brings about lethargy in body and the nerve tissues are not able to function properly. Destruction of parathyroid sometimes leads to death of animals.

iv) **Pancreas:** This gland is located just below the stomach. As an endocrine gland it secretes two types of hormones from two different types of cells. Beta cells are responsible for the production of *insulin* while alpha cells produce a hormone called *glucagon*. Of the two types of hormones insulin is more important which controls the quantity of blood sugar in blood. Insulin initiates oxidation of sugar in blood so that body gets adequate energy. Hyposecretion of insulin results in higher quantities of sugar because oxidation is not taking place. This increased sugar is released through urine, a disease known as *diabetes*. While hypersecretion of insulin results in lowered quantities of sugar because of too much of oxidation, a condition known as *hypoglycemia*. Victims of hypoglycemia appear anxiety ridden, they experience illusions and hallucinations and in cases the patient may even enter state of unconsciousness.

v) **Sex gland** female sex glands are called ovaries while male sex glands are called testicles. Testicles produce androgens which are of two types namely testosterone and andosterone. These are responsible for development of primary and secondary sex characteristics among males. On reaching puberty a spurt in the secretion of these hormones is seen. Hormones secreted from ovaries are called estrogens and progesterone. Increased levels of estrogens in

blood result in development of secondary sexual characteristics among girls like shrilling of voice, growth of hair at certain parts of the body, development of breasts etc. Progesterone prepares uterus to ensure proper development of fetus.

Discussion of various glands and the hormones secreted by them makes it amply clear that they affect the development of physical as well as mental traits. Although all these glands are independent of each other yet they function in an interlocking manner such that disturbance in the functioning of one gland is partly corrected by other gland.

2.2.3 Nervous System

Why is it that some people are more intelligent, have more impressive personality? Does it have anything to do with the nervous system? Does nervous system play any role in the formation of personality? Often when we meet some intelligent persons we say he has more gray matter. But what do psychologists say in this regard? Psychologists usually believe that a person with more complex and developed nervous system has greater level of intellectual capabilities, and is considered more able to adjust with different situations. Such individuals are viewed favourably by others and are praised for their personality traits. Development of nervous system determines a person's actual accomplishment in the society and his social status in the society. For example, any maldevelopment in hippocampus leads to deficits in short term memory in that the person is unable to process information from short term to long term memory.

Have you seen Amir Khan's movie "Gazini" where the hero is unable to retain information. Just imagine what would be your personality if cerebellum is under developed or gets damaged. Let me tell you, our cerebellum coordinates our motor activities. When we walk it controls our gate. Now imagine what will happen if cerebellum gets damaged. Our walk will be disorganised and we may become subject of ridicule and fun. Such experiences do affect our thinking and psychological makeup.

Now we come back to gray matter, actually all our higher mental process are controlled and regulated by cortex encased in the bony skull and if the bony skull is removed it appears gray colored. Now the established fact is that greater the number of convulsions in cortex the more developed it is and the more weighty it would be. Therefore, people with developed nervous system are more intelligent. Such individuals are fast in developing traits like responsibility, punctuality, emotional stability, self-confidence and ego-strength. On the other hand, individuals with less developed nervous system have less ability to adjust. Because of their limited intellectual capabilities they often fall prey to many character disorders and their personality development is adversely affected.

Self Assessment Questions

1) What are the various glands that contribute to growth and development? Give in detail.

.....

.....

.....

2) What is the gland that is associated with pancreas and what are the hormones that they secrete and how do they contribute to growth and development?

.....

3) Activity for the student

Match the following glands with hormones they secrete

- | | |
|----------------------|-----------------|
| A) Pituitary gland | A) Thyroxin |
| B) Adrenal gland | B) Somatotropin |
| C) Thyroid gland | C) Insulin |
| D) Parathyroid gland | D) Adrenaline |
| E) Pancreas | E) Parthorone. |

2.3 ENVIRONMENTAL FACTORS

Personality is not born out of only hereditary factors. Heredity provides only the blue print in terms of chromosomes and genes. But the actual action on that gene is dependent on the availability of environment conducive for that. For example, a person may have mathematical ability but this ability cannot be refined unless that person is provided the opportunity to exercise his ability for maths. Similarly, an individual gifted with talent for music may not become a musician until he gets training and exposure to music. Thus, heredity only provides the raw material what is to be developed out of that material solely depends upon environment in which the person is brought up. Environmental factors are broadly summarized under three headings:

- i) Social factors,
- ii) Cultural factors, and
- iii) Economic factors.

2.3.1 Social Factors

Human beings are social animals. We are born and brought up in society. Therefore, social conditions, social institutions – family, school, marriage, religion, peer groups and neighbourhood as well as various other social groups will all affect the development of personality. Some of the more important social factors are:

- 1 **Parents** – parents are the first persons who enter into interaction with the child. Different parents treat their child differently. Some are very permissive and indulgent in that they just ignore the mistakes and try to do everything for the child not letting him fend for himself. Children of such parents become callous, demanding and exploitative in interpersonal relations besides they lack in self-confidence. Whereas parents who are strictly disciplinarian make their children submissive, shy and emotionally unstable.
- 1 **Home environment** – the kind of environment in a family exists affects our personality a great deal. Families which enjoy strong emotional tie among siblings and parents, are supportive and encouraging to their children. Children from such families are self-confident, proactive and emotionally stable.

- 1 **Birth order** – Adler was the first psychologist to propagate that ordinal position of a child among his siblings i.e. birth order also affects the way personality is shaped. Adler on the basis of his study told that first born children are often seclusive and introvert while the youngest or last born have feelings of inferiority, lack of confidence and self-reliance. Single or only child have the trait of dependency and self-centeredness. They are exploitative and demanding also. Middle order children have self-confidence, ego-strength and need for achievement.
- 1 **School** – After family school is the second agent which profoundly affects shaping of personality. School affect personality in two ways – first, it affects development of personality traits. Second it leads to self-confidence. Teacher’s personality, classroom environment, discipline system and academic achievement all influence the child. Children learn social traits of cooperation, adjustment and sharing. They develop realistic self-concept. Academic achievements and co-curricular activities at school result in high ego strength.
- 1 **Neighbourhood** – The kind of neighbourhood one lives in has a decided impact upon ones personality. Since birds of the same feather flock together, neighbourhood families are not different in their social class, etc., and provide a smooth transition from home to culture. They share almost similar values and rearing patterns but expose the child to different family styles, and the child learns how to deal with the variety. The characteristics of neighbourhoods are that they are more objective than the parents, treat the child as a person and therefore they are both less approving and less critical, and with different emphasis in child-behaviour. You might have noticed that often criminals come from social milieu where moral standards and values receive back seat and living conditions are abysmally low. Children from such environments lack in discipline, responsibility, sensibility, and self-respect.
- 1 **Social acceptance** – Social acceptance means receiving approval and praise from significant others. You know all of us crave for social acceptance from our parents, teachers and friends. Therefore in order to gain acceptance from them deliberately mould our behaviour and attitude. People who receive greater social acceptance have qualities of leadership, self-confidence and feelings of superiority while those who receive less social acceptance often are introvert, low self-esteem and lack of social adjustment.

2.3.2 Cultural Factors

Culture is a broad term and includes in it all the customs, traditions, folks, fashions, fads and mores. We all are part of one or other culture. Therefore, cultural effect on personality is bound to take place. Cultural effect is most prominently seen in the way we welcome and greet people. In India when we meet someone greet with folded hands and say namaskar while when a Japanese meets someone he bows before and when an American meets someone he either shakes hand or kisses the other person. This apparent difference in welcoming another person is simply because of learning in a culture. Let me cite you an example of how culture affects development of personality traits. In a classical study by Gadiner (1969) children from America, Thailand, Taiwan, and Germany were compared on hostility trait. Results showed Thai children scored the highest on hostility with American children scoring the least. In another study of drawings by Mexican and Anglo-American children it was found that drawings by Mexican children exhibited masculine traits more than that of Anglo-American children, and this may be because in Mexican culture higher value is placed on the development of masculinity.

Child rearing practices – Different cultures have different child rearing practices. In cultures where physical punishment is heavily relied upon for bringing up children, traits of hostility, aggressiveness and introversion develop more frequently. But in cultures where parents make less use of physical punishment and interact with children more frequently traits of curiosity, extroversion and creativity find more expression among children.

Do you know that sex differences in personality are determined by culture ? Arapesh, a tribe living in New Guinea does not make much difference between males and females and places more emphasis on femininity, consequently male and female both have traits of cooperativeness, gentleness and submissiveness. Males in this tribe are self-confident and peace loving. Mundugumor another tribe of New Guinea places emphasis on masculinity therefore both male and female are aggressive and violent. Members of this tribe look down upon those who fail to develop these traits. Members of this tribe develop traits of aggressiveness and quarrelsomeness. Tchmbuli tribe is totally different in the males in it perform tasks usually performed by females in our culture. Females in this culture take ruling position. Therefore males are polite, cooperative and shy by nature while females are aggressive and dominating. I think above examples make it amply clear that personality is the mirror of a particular culture in which the person is brought about. culture.

2.3.3 Economic Factors

In an interesting study children from low income group and rich families were asked to estimate the size of different circles of light with the size of coins of different denominations. It was found that children from poor families overestimated while those from rich families underestimated. Thus it showed that economic factor affects our attitude and perception and consequently our personality. Besides you might have seen that often children from low income groups have low self- confidence, feelings of inferiority and shyness. Economic condition determines access to opportunities to develop personality.

Self Assessment Questions

- 1) Discuss the role of social factors in the formation of personality.
.....
.....
.....
- 2) Discuss the role of economic factors in the formation of personality.
.....
.....
.....

2.4 LET US SUM UP

In this unit we studied and discussed heredity. What does heredity mean? What does heredity consist of? and how does heredity work? We discussed in detail various endocrine glands like pituitary gland, adrenal gland etc. Besides we threw light on secretions of different glands and how these hormonal secretions determine

our personality traits and behaviour. Although nervous system has not been discussed in too detailed a manner but discussion on it was sufficient to make you understand its role in shaping of personality and behaviour. This was followed by a discussion on environmental factors affecting personality. In it we discussed the concept of environment and various components of environment like social factors, cultural factors and economic factors. In social factors we discussed the role of parenting style and its impact on the personality of children. We also discussed the role of neighbourhood, school and peer groups in the development of personality traits among children. This was followed by discussion on culture. We tried to understand what culture stands for. Through examples of different tribes and their cultural practices we tried to understand the way culture affects development of different personality traits. In the last we discussed the importance of economic factors in the development of personality. Thus we now can assume that you will have fair understanding of factors affecting personality development and discuss these things in your own words.

2.5 UNIT END QUESTIONS

- 1) Define heredity and discuss in detail various factors of heredity.
- 2) What is endocrinal system and how does it affect our personality? Discuss.
- 3) Write a detailed note on environmental impact upon personality.
- 4) “Personality is mirror of culture” discuss the statement.
- 5) Discuss the role of social factors in the formation of personality.

2.6 SUGGESTED READINGS

Bradberry, T. (2007). “The Personality Code”. New York, New York: Putnam.

Hall, Calvin, S. Lindzey, Gardner and Campbell, John B. *Theories of Personality*. John Wiley & Sons., NY

Mischel, W. (1999). *Introduction to Personality*. Sixth edition. Fort Worth, Texas: Harcourt Brace.