

Course Name-Bachelor of Physical Education

Year – IInd (Part-1)

Paper Name - Psychology with Special Reference to Physical Education

Topic Name - Heredity and Environment

Topic No. - Sec - C (7)

Paper No. - IInd

Lecture No. - 10

Lecture Title

Heredity and Environment

FAQ's

Q1: What is Heredity?

Answer: Heredity is anything we inherit from our parents. Broadly, heredity is of three types: biological, Sociocultural and material. Biological heredity stands for sum total of the traits potentially present in the fertilized ovum. It is the transmission of the traits from one generation to another through genes. Sociocultural heredity is the transmission of mores, cultural values from one generation to another. Material heredity is getting material objects from forefathers in the form of property, bank balance, jewelry, etc.

Q2: How has Woodworth defined Heredity?

Answer: According to Woodworth, Heredity covers all the factors that are present in the individual when he began life right from conception, about nine months before birth.

Q3: Explain Laws of Heredity.

Answer: Laws of Heredity are:

1. Like Begets like: This law states that children tend to be similar to their parents. The children of tall parents tend to be tall and those of short parents tend to be short. Similarly bright parents tend to have bright children and dull parents tend to have dull ones.
2. Law of Variation: This principle states that children are not the exact replicas of their parents. According to this law white parents may have black children and intelligent parents may have dull children. This can be justified when we study the detailed mechanism of heredity.
3. Law of regression: It is the tendency for the children of very bright parents to be less bright than their parents and a tendency for the children of less intelligent parents to be less inferior to their parents. There is the tendency of the off springs to proceed towards to the normal.

Q4: What do you understand by Environment?

Answer: Environment stands for all those circumstances which are asserting their influence on the child from conception to death. Environment consists of physical, intellectual, social, moral, economic, political and cultural forces. All these forces do exert their influence in molding the personality and behavior of the child.

Q5: What according to Woodworth Environment is?

Answer: In words of Woodworth, "Environment covers all the outside factors that have acted on the individual since he began life."

Q6: What are different types of environment?

Answer: Environment is the sum total of the experiences surrounding the individual since conception. It is mainly of three types:

- a) Physical Environment includes physical objects surrounding the individual like food, temperature, climate, home and school building etc.
- b) Socio Cultural environment includes parents, members of the family, relatives, playmates, friends, neighbors, teachers and society at large.
- c) Mental environment consists of books around the child, libraries, laboratories, radio, museum, recreation rooms, associations, intellectual tastes and interests of the parents.

Q7: What influence does environment exert on identical twins?

Answer: Physical, intellectual and emotional differences were found when identical twins were brought up in different environment. Newman, Freeman and Holzinger kept 20 identical twins in different environment. He kept one member of each twin in village and the other member of the each twin in city. Notable differences were found after a few years. Those children who were brought up in the village were more worried, less intelligent and less cultured than those who were brought up in the city.

Q8: Discuss Woodworth's views regarding relative importance of Heredity and environment on the development of the individual.

Answer: According to Woodworth, the individual is a joint product of his heredity and environment just in the same way as the area of rectangle is the joint product of its length and breadth. It would be absurd to speak of the personality being the product of the heredity alone, or of the environment alone, as it would be odd to talk of the area of a rectangle being due to its length alone or its breadth alone. Heredity is responsible for all inborn traits, instincts, emotions, intelligence, reflex actions and physical traits; environment is responsible for the growth and development of physical, intellectual, emotional and social traits.

Q9: Out of Heredity and Environment, what according to Landis and Landis influence development of and individual and to what extent?

Answer: Both heredity as well as environment according to Landis and Landis affects the growth and development of an individual. Heredity gives us the capacities to be developed but opportunity for the development of these capacities must come from the environment. Heredity gives us our working capital; environment gives us opportunity to invest.”