Heredity vs environment

Psychology

Developmental psychology is that which seeks to understand how people come to distinguish, perceive, and act within the world and how these processes vary throughout life as they age. The general focuses include intellectual, cognitive, neural, social, and/or moral development. As well as studying children, developmental psychologists also study aging and processes throughout the duration of life, especially at times when rapid change may occur (such as adolescence and old age).

Many psychology researchers are in agreement that heredity and environment both contribute significantly to the development of various human traits. However, researchers may be undecided on the extent to which heredity and environment combined, contribute to the development of a particular dimension and disagree on how various factors could affect each other to make a certain human characteristic (Douglas Wahlstein). Five broad dimensions of personality which have been scientifically discovered to identify human personality are known as the ‘ Big Five’ factors.

The five factors (proposed by Lewis Goldberg) consist of openness, conscientiousness, extroversion, agreeableness, and neuroticism. They are each known as in-depth and complex traits commonly perceived in human beings, but exactly how much are these traits influenced by heredity and/or by environment? It could depend on an individual’s lifestyle at home, their family and surroundings, the idea that their traits were developed through genetics, or that it could be a mixture of both.

A trait is a notable feature or quality in a person and each person has a different combination of traits that makes them unique. Traits are sometimes

passed from generation to generation, meaning people inherit traits from their parents, and then pass those traits onto their own children. Non-genetic (environmental) influences in people's lives are just as important in shaping traits, and can sometimes even change them. An environmental trait is basically an attribute that is solely influenced by an individual's surroundings.

Just as there are very few genes which are the only influence to some behaviour or another, there are limited traits that are considered to only be environmental. An example is mother tongue, however, no human baby can learn a single language better than another; it's just whatever language they are exposed to first that they tend to pick up. While not disregarding that genetic tendencies may exist, supporters of the nurture theory believe they ultimately don't matter and that one's behavioural aspects originate only from the environmental factors of their upbringing.

Sure, it is fair to say someone got their red hair from their mother and their blue eyes from their father, but where did they obtain their ' thrill-seeking personality' and openness? A parent's interests aren't generally passed on through generation, so for one to have that ' openness' (inventive, emotion, appreciation for art) trait they would have been exposed to particular surroundings, therefore being influenced by their environment and affecting their variety of traits.

Nevertheless, the role of heredity should not be ignored as it has been examined that heredity undoubtedly contributes to the development of human traits. The obviously possible genetic traits can include physical

appearances and a feasibly a medical condition. The idea of “ range of reaction” helps people to conceptualize the complex relationship between heredity and environment; people with varying genetically influence predispositions respond differently to environments. Moderate (rather than high) levels of intellectual motivation might create better cognitive performances in others.

In comparison however, the same moderate levels of stimulation could cause some children to display cognitive performances that are even worse than how they performed in a lower stimulating environment. So the ‘ optimal’ or ‘ minimal’ performance levels may vary for different individuals, depending on their genetic makeup and other factors in their lives. Using this example, the individual differences in ranges of reaction illustrate that there is no exact formula for creating environments that ease the development of particular characteristics in everyone.

Rather than heredity versus environment, heredity via environment might therefore better distinguish this perspective. So even with virtually all biological and psychological traits, genes and environment work in concert, communicating back and forth to create an individual. In the mid to late twentieth century, there were many clinical psychologists, social workers, and educators who focussed only on environmental factors while discounting the contributions of hereditary factors.

Among the theories they supported were that homosexual males particularly come from families with domineering mothers and no masculine father-like figures, that poor academic performances were a result from lack of

intellectual stimulation in early childhood, and that autism begins from poor parenting skills. People still often continue to believe (to some extent) that proper environments can prevent and " cure" these ‘ abnormal’ characteristics, not realizing that heredity might actually play significant roles in the development of these traits.

However it is important to repeat that individual differences, compared to group differences, in genetic predispositions are clear in the development of most emotional, behavioural, and cognitive traits. With this in mind, it is also important to realize that focusing on optimizing environmental influences while ignoring heredity influences could potentially lead to the neglect of the developmental needs of some individuals, and it may be just as harmful in some cases if one was to only focus exclusively on heredity influences, especially as there is a nearly unlimited amount of possible traits that could be used to describe a personality.

A journalist once asked psychologist Donald Hebb “ which, nature or nurture, contributes more to personality? ” and he asked in return, “ which contributes more to the area of a rectangle, its length or its width? ” So, was the way human beings behave engrained in them before they were born? Or has it developed over time in response to each individual’s experiences?

Researchers and psychologists on all sides of the nature versus nurture dispute agree that the link between a gene and behaviour is not the same as cause and effect. While a gene may add to the likelihood that a person will behave in a particular way, it does not force people to do things, which means that every individual will still have that opportunity to choose who

they’ll be when grown up. An increasing understanding of the human genome has made it clear that both sides of potential influences are partly right.

Nature provides an individual with inborn abilities and traits; nurture takes these genetic tendencies and moulds them as the individual continues to learn and mature. It is not possible to determine whether nature or nurture takes control when influencing human traits, it is only certain to say that both heredity and environment unite to manipulate and create the various traits seen in everyone, defining who they are as a human being.