

Upbringing Alone Shapes Human Children

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Have you ever observed that “culture” of one group of cows is significantly different than other group of cows in the same city? Do Zebras in Kenya National park “behave” significantly different than zebras in Serengiti National Park? Or the Dogs becoming trained so much that they demand a particular type and colour of dress every day and wear it on their own?

The answer to all the above questions is of course “NO”!

But we have certainly observed people insisting on a specific community and describing “traits”. The underlying assumption is that these traits are “genetic” factors that are transferred from one generation from another generation. There is a deep belief about the importance of biological basis for accomplishment in the world. Leaders are “born”, achievers are “born”, and winners are “born”. People, therefore, tend to think that these traits for worldly accomplishment are “in-built” or “hard-wired”.

Well, nothing can be further than the truth. There are a few biological traits and liking that are genetically transferred; but that’s that. There is a fundamental difference between the human children and the children of other mammals, including primates. This difference is in the evolutionary biology and the brain. This profoundly separates humans from the other species.

Consider this. Thousands of years ago, some African apes stood on their hind legs and tried to look beyond the tall African grass. Continuous efforts stimulated their brains. They began standing on their hind legs more and more. This enabled them to use their front legs more and more for manipulating objects. The continual stimulation of brain caused its size to increase. This increased size caused more stimulation and more use of the brain. Speciation into humans occurred.

But the size of the brain had more than doubled by that time. So, although the brain has become more powerful, it caused problem of birth. A big brain could not pass through the birth canal. It would be dangerous for the mother and the child. No good. What was the evolutionary solution?

The evolutionary solution was a master stroke of the nature. This solution also gave rise to the upbringing of children that is very different from the other animals. This solution also gave rise to “culture”.

The nature solved this problem by giving birth to human infant early in the development cycle. The brain is small enough to pass through the birth canal. The rapid growth of the brain occurs in the first six years of human life. It nearly doubles the size in these years.

Of course, this also means that the human infant does not come with a lot of “pre-programmed thoughts or “behavioural traits”. The brain, including the cerebellum, is yet to develop fully. This is why human infants can’t walk for a full year. The newborn in other mammals can walk in a few hours to a few days, but not a human infant. It also needs a year or more to develop speech. We know it’s from Broca’s Speech area.

Since human infants are born early, the instinctive behavior, pre-programmed behavior in them is very less. For example, instinctively, a human infant can grasp or suck. It shows a distinct preference for a

female voice. It may inherit liking for music. But the other traits that it inherits are bodily traits, like hair colour, or skin tone. Not behavioral traits. At birth, brain wasn't developed fully to carry all patterns. As a matter of fact, most of human behavior is not instinctive at all. It is learned.

So, who teaches them? The mother, father and other adults in society. This teaching forms the basis of behavioural traits for the growing child. He acquires those traits which he is taught or which he observes. The brain utilizes its potential and power to use these acquired traits. Since the brain development occurs outside the mother's womb, the learning occurs in the outside world. That is why, the "pedigree" of humans is less important. That's why, the biological parenthood matters little in performance and choices and accomplishments in the outside world.

This is also the reason, why there is a wide difference in skills, choices, habits and behavior in the human species. Since brain size is large, the learning can be continuous, flexibility is more and ability is more than other primates. Humans are born with ability to make patterns based on education. they don't come with a specific "built-in" behavioral pattern.

All this amounts to infinite number of possibilities. Upbringing and behavioural influence in formative years thus becomes a paramount importance. Human species has infinite capacity to learn and utilize that learning.

