

Comparisons in Some Cases of Twins

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Received: 09 April 2019

Published: 23 April 2019

Keywords: *Identical Twin; Fraternal Twin; Similarities; Dissimilarities; History; Diseases*

Abstract

For understanding 'Genetics' and 'Behavior' the study of human twins are very positive. Within these twins, the real history of human development and behavior is hidden. Survey type study was helped for observing the similarities and dissimilarities of identical and fraternal twins. Result showed that more similarities on family history, birth gap, birth status, birth position, diseases, favorite food, emotion, thinking ability, color choice, and sharing personal matters in identical twins and dissimilarities in some cases of fraternal twins.

Introduction

When twins are same we understand it easily but if different it is not easy. Some families have regular twins birth. Human have special emphasis or interest on human twins. For dividing of the same zygote, in case of identical twins their desire, food, cloth, and disease incidents are more or less same. Within the same womb (uterus) for growing them sometimes one or both suffer by malnutrition which may lead a serious problem in their next life. Twins are given same type of environment, education, and other facilities so that they are grown with the same mentalities as well. Except human, twins are available in Cow, Sheep, Cat, Panda, Hare, Deer, Monkey and Elephant. In cows, the rate of twins is 1-4%. Twin in animals in any farms are good for their more profit. In history, most of the twins are in player and second in singer family. The father of

Western medicine Hippocrates mentioned human twins in his time. In Asia, the rate of twins are 1 per 160 births; in America (white) this is 1 per 100 births; Ireland 1.4 per 100; Nigeria 1 per 30 births and Brazil this is 1 per only 5 births [1]. The probability of measles attack in identical twins is 95% whereas in fraternal twins this is 87%; feeble mindedness in identical twins is 91% and in fraternal this is 45%; diabetes mellitus is found 74% in identical and 28% in fraternal, and tuberculosis incidence is 84% and 37% in identical and fraternal twins respectively [2]. Sir Francis Galton (1822-1911) mentioned twins when he described the characteristics of human. Other beliefs likened twinning to the practice of adultery or even the involved of an evil spirit, which could have decided the fate of twins [3]. The purpose of this research is to study the similarities and differences between personalities of identical and fraternal twins through familial, oral, and observing their overall behavior.

Materials and Methods

Sample of 5 identical twins and 5 fraternal twins, age ranging between 5 to 17 years were selected and interviewed. A cantonment school and the town were the target place for this work in Saidpur of Bangladesh. Local people were questioned for the twins of their area. All male-male, female-female, and male-female twins were interviewed several times. This work was mainly a survey type of study. During the time of this research work, direct observation was carried out especially to observe the behavior of those twins.

Result and Discussion

In this study, the feature such as family history, birth gap, birth status, birth position, diseases, favorite food, emotion, thinking ability, color choice, and sharing personal matters were same in identical twins and different in fraternal twins. This result is similar with other articles which have been included in bibliography section. Age group, sex, and socio-economic status including upper, middle and lower classes but most of them were middle class families. The numbers of female-female twins were comparatively higher than male-male twins. Most of the twins were come by caesar. The birth gap of those twins was 10 minutes in average and all were in second born (Table 1). It was indicated that identical and fraternal twins have few differences in their personalities. Identical twins reared apart are far more similar in personality than fraternal twins. Those observations suggest that personality is inherited. However, the environment must also be looked at researchers came to genotype-environment interaction. Identical twins share all of their genes whereas fraternal twins share one half of their genes. If phenotypic variation is caused largely by environmental variation, then identical and fraternal twins will be equally similar. If monozygotic twins are brought up as individual they also have the same personalities, if one is dominant, the other is also dominant. But when fraternal twins are brought up in the same environment then usually one is more dominant. The results showed that identical twins are more similar to each other in their personality traits [4]. It is concluded that despite sharing the same genes, their different environment, parents rearing practices and education do bring changes in their personalities [4].

Table 1: *Observation on some features in twins*

Features	Identical twins (n=5)	Fraternal twins (n=5)
Family history	Mostly found	Mostly found

Birth gap	10 minutes in average	10 minutes in average
Birth status	Mostly caesar	Mostly caesar
Birth position	2 nd	2 nd
Diseases	Same	Different
Favorite food	Same	Different
Emotion	Same	Different
Thinking ability	Same	Different
Color choice	Same	Different
Sharing personal matters	Each other and parents	Each other and parents

Conclusions

Age over 35 or 40 years of female/fair-skinned female, the rate of twins is high. Higher BMI (Body Mass Index) of female is prone to twins. In first pregnancy twins are rare. It is more common for a woman to have twins when one has already occurred in her family [5]. Research found that there is a relation between yam and milk for this twinning. For taking excess folic acid, twins may increase sometimes. In Medical Science, the history and causes of human twins are described. Types of diseases and mode of treatments for them are the basic points in this branch. Through the study of genetics we easily understand the incidence of human twinning. The molecular study of DNA can detect the real causes of twins. Twins are more emotional for staying together. The main reason for happening twins in the world is the use of fertility-stimulating drugs and assisted reproductive techniques (ART) such as in vitro fertilization (IVF). According to the most recent survey of ART programs in the United States, 56 percent of births resulting from these procedures were multiples [4]. According to Bergeman, Plomin, McClearn, Pederson, and Friberg (1998), one-third of the increase in multiple conceptions is due to the fact that now conceiving women over the age of 30 (who are more likely to conceive multiples) are numbered more than younger women. Sort out the twins in any institution and should treat them in a different way. It is urgent to open a 'National Twins Registry' which is available in most countries. To research on psychological matters of twins are very effective.

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