

# [The main sources of genetic variability](https://assignbuster.com/the-main-sources-of-genetic-variability/)

[](https://assignbuster.com/)[Psychology](https://assignbuster.com/essay-subjects/psychology/)

Sources of Human Psychological Differences: The Minnesota Study of Twins Reared Apart By Thomas J. Bouchard, Jr.; David T. Lykken; Mathew McGue; Nancy L. Segal; Auke Tellegen   
This journal article is concerned with a study to determine human genetic variation. In the study, dizygotic and monozygotic twins were reared apart to determine whether they will have variations in certain characteristics. The Minnesota study of 100 twins and triplets across USA and UK which began in 1979 was also intended to find out the impact of genetic and environmental factors on human characteristics. The participants of the study were taken through psychological and medical assessment for 50 hours. There are certain factors that lead to psychological and behavioral variation between people. The study found out that genetic factors affect behavioral variability pervasively while environmental factors have negligible influence on psychological traits of humans.   
The journal article shows a key focus on the analysis of IQ as a human characteristic. From the study, it was found out that 70% of human variation in IQ was associated with their genetic variations (Bouchard et al, 1990). Furthermore, other characteristics such as temperament, interests, and social attitudes were analysed and it was found out that monozygotic twins reared apart with these characteristics are similar to monozygotic twins reared together. Therefore, genetic differences affect psychological differences in a large way, but mainly indirectly through environmental influences of the developing child.   
I chose this article because it is relevant in the field of psychological psychology, especially in the topic of genetic variations. The article was also chosen because it has a good information about the importance of genetic variation and how twins can be influenced by genetic and environmental factors. The article is also interesting because its study is quite unique and has lasted for a long time. The journal article was written and published in a reliable and well accredited journal so it can be trusted for reliable and accurate information about genetic variations among humans.   
One of the things that I found most interesting and intriguing is how the study was conducted and the results of the study. Twins were brought up in different environments to determine whether they will behave the same despite the differences in environment (Bouchard et al, 1990). It is clear that bringing up twins in different environments does not change their IQ. This is interesting to me because it seems the children maintain their genetic characteristics that define their IQ. This makes me to wonder what would happen if children from different parents were brought up in the same parenting and education standards? Nonetheless, the environment has some influence on human behaviour.   
The information contained in the article contributes to existing physiological psychology knowledge base because it puts theory into practice by using the experiment of twins reared apart. The article presents a real-life test on the influence of environmental and genetic factors on human behavior which is part of the genetic variation theory in physiological psychology. The journal article also contributes to the knowledge base of physiological psychology by providing knowledge on how the environment and genetics affect the IQ and behavioral characteristics of human beings.   
References list   
Bouchard, T. J., Lykken, D. T., McGue, M., Segal, N. L. and Tellegen, A. (1990). Sources of Human Psychological Differences: The Minnesota Study of Twins Reared Apart. Science, 250(4978), 223-228.