

## **Lecture: Genes (page 168)**

Specifically in a twin and family study researchers are looking to see if people who are more related tend to resemble each other more than people who are less related. For example, if you were looking at monozygotic twins, identical twins, if they are more similar in how talkative they are compared to dizygotic twins, then researchers might conclude that genetic factors probably influence talkativeness in some way. This is the same idea as in adoption studies. Researchers might look at children who have been adopted from birth, to see if the adopted children are more like their adopted parents, with whom they share no genetic material, but presumably share the same environment, as compared with their biological parents with whom they share genetic material. You would assume that if children were more like their biological parents than their adopted parents in a certain trait, then you would think genes have to do with that trait.

Researchers might also look at monozygotic twins raised apart in two different families and see if they turn out similar. In fact, this is one of researchers' favorite things to do, and there is a big project in Minnesota where they look at twins who have been separated at birth, and they do not even know that their twin existed. Some time in adulthood they are reunited. Researchers like to look at the adults and how similar they are. This is from one of the famous studies. Researchers found monozygotic twins who were raised apart and reunited at 40 years old. They found that both had married a woman named Mary, both drove black Ford Mustangs, both loved to play tennis, and both loved to shop at garage sales. Both were salesmen, loved spicy foods, and had similar, undisclosed sexual fantasies. Now are you convinced? No, why?