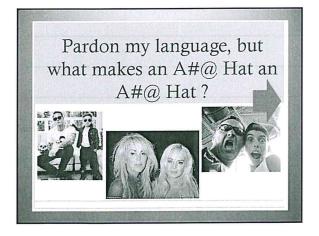
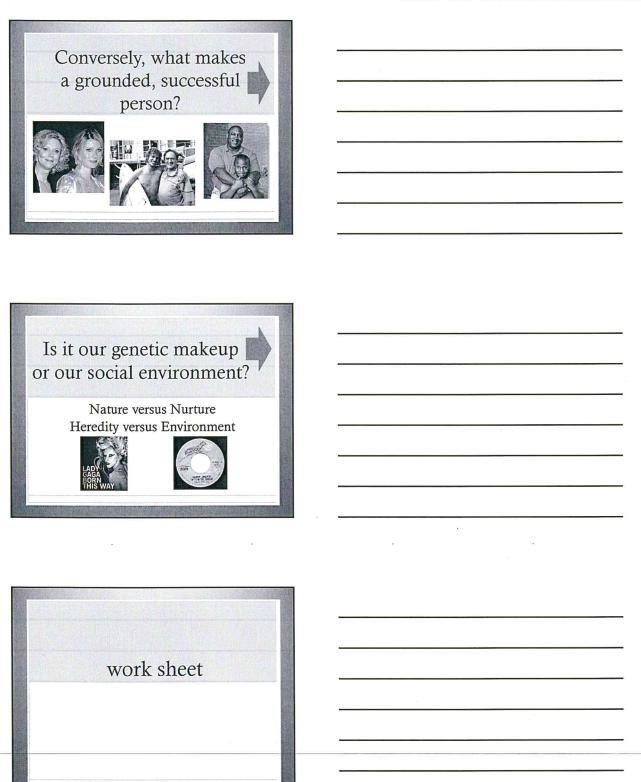


How do we become who we are?
Is our personality within us at birth or shaped by the people in our lives?





Heredity

• Heredity refers to physical characteristics and aspects of your personality and behaviour that are part of your genetic structure

If both your parents are left handed you are more likely to be

Environment



• Family, peers, socioeconomic background, culture, birth order, level of education, type of education and so on

The Edith Experiment

- The Edith experiment was created by Aaron Stern, and he tried to prove that the right environment could create a genius his daughter Edith was the subject of the experiment
- Stern played classical music and showed flash cards to Edith since birth







Does this prove that a genius can be made? What factors should we consider before coming to this conclusion?

Talk to someone else for a moment and then write something please so you have something to look back on



The Genie Wiley Story

- <u>Genie</u> (real name Susan) was found at the age of 13
- She appeared developmentally delayed, and psychologists wondered if she was born this way or turned out this way due to neglect



John Wiley

- This is Genie's brother John
- He lived in the same home but was less neglected by his parents



What does Genie's story tell us about heredity versus environment? What factors are involved in this story?

Talk to someone else for a moment and then write something please so you have something to look back on

How can we sort this out?

Twin Studies

- twins are two people who are born in the same pregnancy—they can be identical or fraternal
- psychologists study both identical and fraternal twins to understand the influence of environment and heredity



 however, new research shows that's not the case—in female twins, each twin has two X chromosomes, and in females one chromosome is more dominant than the other (chances are, twin females have different dominant chromosomes, meaning they're not genetically similar)

Twins Raised Apart

- twins that were raised apart are used to determine what aspects of personality are inherited
- in one example, the "Jim" twins had much in common—they both drove the same car, had the same interests, named their dog the same, married women of the same name, vacationed in the same places etc.
 - · Mark and Jerry, fire fighters

Limitations of Twin Studies

- there are limitations to twin studies—behaviour involves many genes, and it's difficult for researchers to determine which behaviours have genetic tendencies
 - research shows that some characteristics are more likely to be inherited—height, weight, shyness~

IQ & Genetics

- twins tend to have the same IQs—but it's hard to tell if their intelligence level is due to environment or genetics because twins have the same genetics and are raised in the same environment typically (the same house) however, twins who were raised apart still have similar IQs (higher when raised together though)
- · this tells us that genetics may play a big role

IQ & Environment

• environmental influences can affect IQ scores improved schooling, housing, & nutrition in the USA, have impacted IQ scores positively, and since the genetics haven't changed, it must mean that the environment Americans are being raised in are better (high quality homes, smaller family sizes, nutrition)

What about my siblings?







We're so different!

Siblings Similar but Different!

- If you have the same parents and grow up in the same house, how can you be so different?
- Using twin and adoption studies we see that genetics account for approximately 50% of differences in traits
- However, psychologists believe that the other 50% can be explained by the fact that even though they are potentially genetically similar and grow up in the same home, they have unique experiences outside the home and even with their parents, each impacted by interactions and personalities