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## What Influences Do Nature And Nurture Have On Being An Extrovert Or Introvert?

There are many different theories as to whether introversion and extroversion is predominately influenced by nature or nurture. It can be influenced predominately by one or the other or seen to be both working together. The brain contributes to this and brain activity, there are areas of the brain that relate to either introversion or extroversion. Polygenic inheritance can influence which of these personality types you are as well as studying the different stages of life. The research has found that an interactionists approach is the main cause.

Through many different sources and sites there are many different conclusions you can draw about whether introversion and extroversion are influenced by genetics or environment, the nature and nurture debate. Introversion and Extroversion are personality types, extroversion being outgoing and socially confident person and introversion being someone who is shy and quiet. Everyone is considered to be one of these two types of people and determining factors are debated.

According to (Kandler, 2012) personality types and introversion and extroversion are based on the environment we are in and due to age-grade social roles we act different ways according to who we aim to be, meaning that he believes that nurture has a bigger role to play, he does not fully eliminate the fact that genetic influences still do effect who you are as a person. Whereas (Solo, 2016) states that there are 3 different points to being an extrovert and introvert, the degree to which you are an introvert or extrovert is inherited in your genes, these personality types are predominately inherited but environmental factors still do have an influences. Both of these scientists believe that both nature and nurture effect what type of person you are but the dominant influences are opposite between these two pieces of evidence.

The brain also plays a very important role in how we act and the personality types that we are. Inside our brain there are chemicals being released that make us feel and act a different way. Dopamine is a chemical that our brain releases that makes us feel energised, researchers have found that extroverts release more of this chemical. Extroverts rely on the release of Dopamine to activate their energised personality and extrovert's brains are also a lot more responsive to Dopamine (Stafford, 2013) (Helgoe, 2016) (Booker, 2013). This points to the facts that our brain activity effects whether we are an introvert or an extrovert, knowing this, you would draw a conclusion that nature is the cause of being an introvert or extrovert as you receive genes from your parents which affect the way your brain works. Where the brain activity is in our brain also effects our personality type. Introverts have been proven to rely on internal brain stimuli and environment in order to act as an introvert whereas introverts rely on external brain stimuli to react (Howe, 2014). This concludes that there is an interactionists approach to being an introvert or extrovert. Researchers also found (Gray, 2010) that introverts have been found to have more brain activity in their frontal lobes, which involves processing information, planning, problem solving and memory, all of these things show a connection to how introverts act, very conserved and shy. On the other hand extroverts have higher activity in sensory, auditory and visual processing. Again this shows a greater link to nature as brain activity is something you inherit from your parents.

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Twin case studies researchers show that introversion and extraversion are based on polygenic inheritance but also environmental, (Scarr, 2008) suggests an interactionists approach. This research suggests that introversion and extroversion is a way of responding to an environmental, therefore making the causes, nurture. Along with this it suggests that instinct and how you react to start with comes from inheritance and how you have seen others act. In this interactionists approach it shows a lean towards the nurture side. The twin case study showed that their instincts were the same but their actual qualities were different.

Another interactionists approach was a study that followed people throughout their entire life. (Khen, 2016) Research shows that genetic factors and information effect younger children and their personalities and this shapes what type of person you are for the rest of your life. Once you are older your genetic factors stabilize, meaning that once you have grown up your genetic factors are set in place and it is unlikely they will change. As you get older environment can still impact and change how you act around others, moreover, environmental factors tend to have greater influence near the later stages of life, this leads to a decline in genetic contribution. This study shows that nature and nurture work alongside each other throughout the lifespan of a human.

The research collected leads to different conclusions, an interactionists approach, nature being dominant and nurture being dominant. The research concludes to introversion and extroversion being an interactionists approach with nature being slightly more dominant. (Howe, 2014) (Gray, 2010) Research that concludes to this is the brain activity and chemical release. They show that you can see where brain activity is happening and see whether people are introverts or extroverts and all of this activity is inherited from your parents, but to act this way you need an environment to do it in, therefore leading to an interactionists approach. Then (Khen, 2016) shows that it is inherited in earlier life and then is set in place for late adulthood again showing an interactionists approach. You can conclude that nature is the main influence but nurture still has a small amount of impact.