COVER

HOW YOUR BIOLOGY AFFECTS YOUR FINANCIAL BEHAVIOUR

Our emotions have a biological function. The grieving process, for example, is critical in cleansing the body of built-up cortisol released in a stress response as well as in seeking comfort in a group when we are vulnerable. The biology behind this important psychological process is our tear ducts that house different types of tears. Reflex tears are when your eye waters if you get something in your eye that can be flushed out. Continuous tears keep your eyes moist. Emotional tears, however, flush your body of cortisol and contain traces of oxytocin which is the trust and bonding hormone.

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We feel better when someone embraces us when we cry because nature rewards us for getting into a group when we are vulnerable. The links between biology, chemical processes and financial behaviour are now more widely studied as the costs of brain imaging and genetic sequencing have decreased substantially in recent decades. In fact, the personality dimensions that form the basis of modern personality theory are rooted deeply in our genetic code.

Roughly half of your personality is passed down in your genetic code. These are your 'factory settings' which your environment and interactions can moderate. These effects have been studied in several studies of twins (who share the same DNA) and in extreme cases were separated at birth but maintained the same personality when measured many years later. These findings indicate the strong effect of DNA on personality independent of the environment.

While psychology focuses on observed behaviour, the roots thereof are underpinned by chemicals distributed by neurotransmission. For example, the personality trait associated with anxiety is neuroticism. People with high levels of this trait tend to interpret more stimuli as a threat and as such the biological effect is twofold.

Firstly, these people tend to have higher levels of cortisol. When activating the fight or flight response the body receives a signal from the brain that results in an elevated heart rate, sweaty palms and dilated pupils. The signal sent back to the brain, however, is to block access to higher order thinking in the prefrontal cortex. Biologically people run or fight first and ask questions later.Think of this biology, however, in respect of making emotional investment decisions.

Secondly, it appears that a genetic root of neuroticism lies in the neurotransmission process of serotonin which is inhibited by a genetic polymorphism. A "polymorphism" here means that the holder of the gene has problems in serotonin uptake (reduced serotonin levels). Serotonin is our natural mood stabiliser and impacting on serotonin levels has been linked to elevated levels of neuroticism or anxiety(4).

In an investment context this has been linked to the familiarity bias or preferring local stocks over offshore stocks and loss aversion. Loss aversion can be particularly damaging in an investment context. The Momentum Investments Sci-Fi report showed approximately R650 million destroyed in investment value during the COVID pandemic in unit trusts. Trying to avoid losses by switching to perceived safer asset classes like cash often results in the opposite because it locks in a behaviour tax as the losses are realised.

From the above, it is evident that our personality and emotions play a huge role in our decision-making and the better we understand our behaviour, the more likely we are to achieve our financial goals. With us, investing is personal and what is more personal and unique as your fingerprint or your money fingerprint? Momentum Investments will soon launch an assessment, called Your Money Fingerprint, which will give advisers the ability to diagnose their clients' personality and have much more personal discussions about their financial behaviour.