Genetica®

G-Awareness

Self Awareness

Explore Your Genes
Define Your Future

www.genetica.asia

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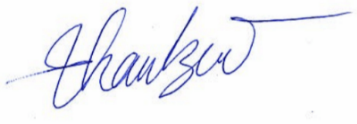


Duyen Bui
Founder & Chief Science Officer
at Genetica®

Dear Mr. SAMPLE_NAME,

On behalf of Genetica® team, I would like to send you our warmest greetings with deepest gratitude for your interest and trust in our Genetica® gene decoding technology consultation service.

With the recipe for success of prestigious and reputable scientists in the genetics field and artificial intelligence technology, Genetica® sincerely believes that we can bring about greater values and meanings into each of our customers' lives. This is the mission, the aim I and my colleagues are pushing our hardest efforts to reach. Everyday, we thrive to seek for more knowledge and to perfect our service, bringing gene decoding closer to public's heart. The precious gem of unlocking one's genomes is no longer limited to elitists of expertise knowledge, with Genetica®, it now extends its embrace to you, to your family and to everyone, the embrace of unearthing uncountable mysteries buried deep in our unique genomes using scientific technologies.

Our dear customer, the report on your hand now narrates a map for you to explore yourself thoroughly and to listen to your own body. From this map, you can direct your own ultimate working, fitness, rest, education, and diet plans towards your best life.

On choosing "Genetica®, Explore your genes - Define your future", you will always be accompanied with our most experienced experts for all consultations needed. Therefore, do not hesitate to contact us should you have any inquiries upon your results. You can also log into our Genetica® application to update helpful information curated specifically for your genomes.

We truly hope you have had a great experience using our service.

It was our greatest pleasure being your guide on this journey,

Cao Anh Tuan
Founder & Chief Technology Officer at Genetica®

BACKGROUND

Human genomes contain 20,000 to 25,000 genes. Genes in our bodies are inherited from our parents. Some genes don't have any negative effects, but some definitely do. Our genes make us unique as the way we are.

Basic Terminologies in Genomics

Genome

A gene is the basic unit of heredity which is a phenomenon of parents passing on their characteristics to offspring. In most cases, the material constituting genes are DNA, and genes are passed on to the next generation by replicating DNA. DNA carries genetic code, defined by 4 different bases A, T, G, C.

DNA

DNA, or deoxyribonucleic acid, is the hereditary material in humans and almost all other organisms. Nearly every cell in a person's body has the same DNA. The information in DNA is stored as a code made up of four chemical bases: adenine (A), guanine (G), cytosine (C), and thymine (T).

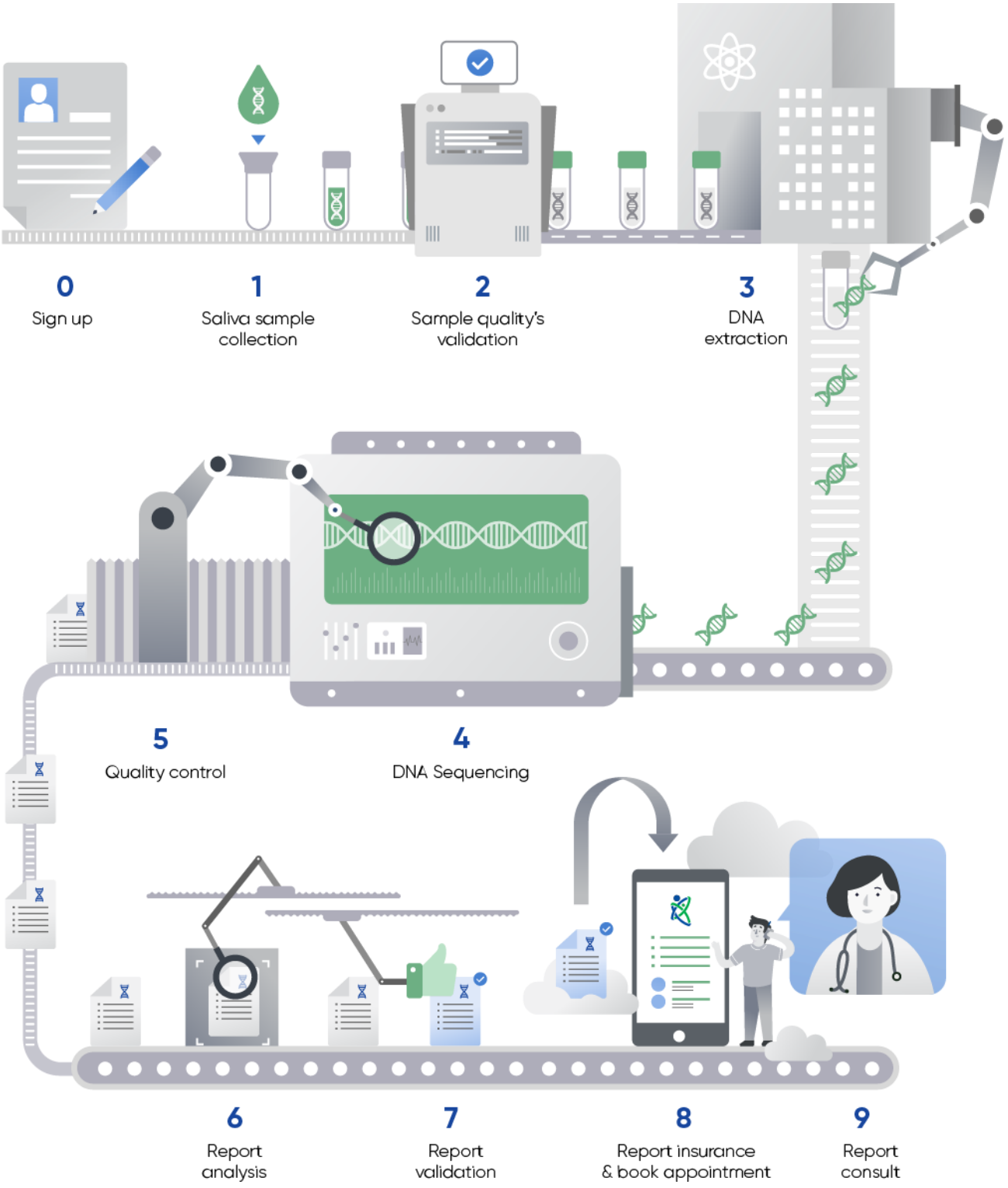
A **single-nucleotide polymorphism (SNP, pronounced snip)** is a DNA sequence variation occurring when a single nucleotide adenine (A), thymine (T), cytosine (C), or guanine (G) in the genome (or other shared sequence) differs between members of a species or paired chromosomes in an individual.

Mutation

Mutation is a change that occurs in our DNA sequence, either due to mistakes when the DNA is copied or as the result of environmental factors such as UV light and cigarette smoke.

Genes can be referred to as the "integrated body of information" which constitutes our bodies, and the purpose of genetic testing is to learn the genetic impacts of the occurrence of a specific disease in advance, and moreover, to control environmental factors as much as possible.

HOW THIS REPORT IS GENERATED?



GENETIC TESTING: AN OVERVIEW

Technological advances have dramatically impacted almost every aspect of daily life, especially in healthcare. Scientists study the complete DNA sequences and perform genetic mapping to help understand what causes disease, what makes a person to lose weight or gain weight faster than the others, and individual differences in behaviors, such as cognitive ability and personality.

With a few drops of saliva, a person can gain a wealth of personal insights. For example, a person with family history of breast cancer can find out if she carries a mutation in BRCA genes. Research shows that mutations in breast cancer (BRCA) genes significantly increase the chances of cancer. In particular, a BRCA1 mutation can increase the chances of breast cancer up to 81% and ovarian cancer up to 54%. Genetic tests will provide the information a user and their doctor need in order to take appropriate preventive actions.

On another spectrum, parents can **leverage genetic information** to create an optimal education plan to **unlock their child's potentials. Every child is unique**. A one-size-fits-all education will hinder children to unleash their innate talents. A child who has a tendency to be extrovert performs prolonged study everyday, which may lead to depression. For the past two decades, researchers have found dozens of genes that increase a child's susceptibility to anxiety, attention-deficit hyperactivity disorder, heightened risk-taking, and antisocial. However, unless the child suffers a traumatic or stressful childhood, the above traits are not revealed when they grow into adulthood. Genetic studies have shown that children with certain gene variants may need and benefit greatly from more maternal support.

According to Dr. Jennifer Stagg, the author of the (best seller) book **Unzip your genes, genomic testing provides information that was not clinically available just a few years ago**. She can now provide guidance to patient questions such as, "It seems like I get fat when I weight-train. Is that possible?" or "I've tried every low-carb diet and it doesn't work. How could that be?" It is really quite simple. A patient's saliva sample can provide answers. "Mrs. Smith, genetically you are predisposed to gain fat mass with an intensive strength training program" and "Mr. Morgan, with your genetic makeup, you will do better on a Mediterranean diet."

Genomics allows us to see how variations in our DNA can interact with one another and impact our growth, behavior and overall health. However, **our genes are not our destiny**. The way our genes get expressed is also affected by our lifestyle, environmental and psychosocial factors.

TABLE OF CONTENT

INTRODUCTION TO G-AWARENESS

Self awareness.

Life often throws a lot of obstacles your way. Factors like your personality, talents, and actions can address these hurdles. While your genes set the foundation for these factors, they don't determine all of who you are, how you act, or whom you can become. The environment around you, and the conscious choices you make, complete this picture. Nevertheless, an understanding of your unique genetic variations can reveal a lot of critical information.

To that end, this report will teach you about your genetic advantages.

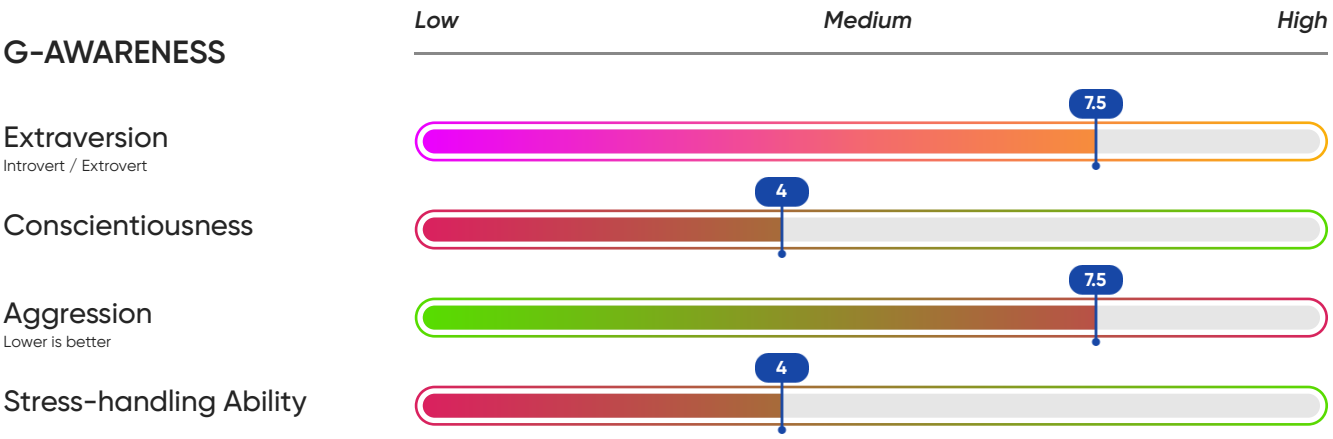
What are your mental and emotional strengths? What are your intellectual talents? Which personality traits can you leverage to prosper in life?

Sometimes, they are advantages that you're already aware of but can strengthen nonetheless. This report will show you how you can do exactly that. Other times, these advantages are "hidden". Perhaps you think you're terrible at math but your genes say otherwise. You'll learn how to tap into these hidden genetic strengths in order to succeed at work or improve your personal relationships. Likewise, this report will reveal your genetic vulnerabilities. Don't worry! They're not set in stone.

Instead, this report will show you how you can minimize or overcome these weaknesses in a way that may bolster your intelligence, talents, and mental resolve.

OVERVIEW

G-AWARENESS

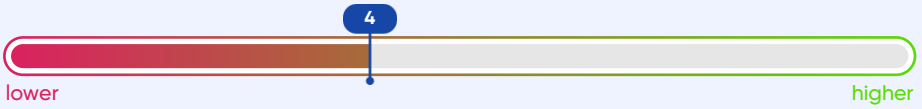


Extraversion

11 genes analyzed	1 beneficial variant	You are likely to be an extrovert

You have a tendency to be an extrovert. Your genotype shows that you easily feel happy with others' happiness. Your emotions might be influenced by the energy around you. Therefore, you should make friends with people having positive energy.

Conscientiousness



19 genes analyzed	4 harmful variants	Bottom 31% of Asian population

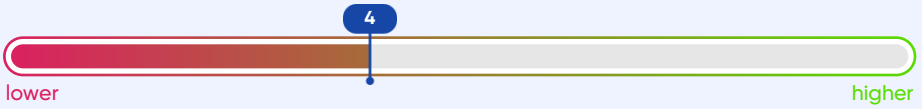
It might be a bit challenging for you to be disciplined. Your genetic code shows that you're more likely to act rebelliously compared to others. Because of this, it's particularly important that you address any defiant behavior when you notice them. Studies show that advancing your education can also help counter bad behavior. Furthermore, you may have weaker self-control. Since your self-control is generally strongest when you have energy, try to focus on completing your most important tasks first.

Aggression

11 genes analyzed	5 harmful variants	Top 27% of Asian population

Your aggression is likely higher than others. You prone to express anger and expression towards others due to a harmful variant of the MAOA gene. You also have a tendency of physical aggressive behavior due to harmful variants of the GABRA2 gene. Carrying these variants does not mean you are a violent or "bad" person. Genes aren't the only factors involved in our personality traits. You should improve your self-control to prevent unmanageable anger. Do not need to face with the situations make you uncomfortable or angry. In addition, consider trying relaxation techniques, such as deep breathing, to calm and relax your mind.

Stress-handling Ability



19 genes analyzed	4 harmful variants	Bottom 30% of Asian population

It might be a bit challenging for you to handle stress. Your genetic code indicates that you may not handle stress very well, possibly due to a buildup of "fight or flight" hormones in your body. You can practice slow, deep breathing to help you calm down. Additionally, you have a higher than normal risk for alcoholism resulting from stress. Because of this, it's imperative that you don't drink alcohol when things go bad. Instead, try to find healthier ways to relieve your stress.

RECOMMENDATIONS

- You should be self-aware about your inborn tendency to react with negative emotion. Therefore, you should learn to listen to your emotions and then take steps to let them go.
- Excitement-seekers aren't motivated by danger. They're driven to conquer new challenges and soak up every experience life has to offer—and they simply don't let danger dissuade them. However, you should be aware that excitement-seekers are also susceptible to have unintentional risk. Therefore, you should strengthen your self-awareness about harmful activities that may excite you.
- The brains of introverts and extraverts may be wired differently from birth so that each handle dopamine differently. Most introverts tend to carefully think through before acting, which has obvious advantages. On the other hand, extroverts practice a more intuitive, emotional approach to decision making.
- Please note that happiness-related empathy was invoked in both positive and negative conditions. This suggests that positive and negative conditions may have evoked different emotional responses than the neutral condition. Happiness may be "transmitted" to someone in a neutral mood. However, it is possible that negative feeling may also be transmitted. As a result, you should be aware that your feeling may be naturally influenced by people around you. For your genotype, it is strongly recommended that you make friends with people having positive thinking and actions. You have an inborn talent to absorb their happiness and make it yours.
- You have a specific change in the BDNF gene that impairs the episodic prospective memory. This may mean you may struggle with goal setting and planning. Fortunately, there may be ways to improve this personality trait if you feel you have trouble following through on your plans. Cognitive remediation or cognitive training is a set of techniques that improve mental abilities, like memory or planning. This training consists of a series of exercises that are guided by a therapist (a cognitive specialist) and provided via a computer program. The exercises are meant to improve specific skills. For example, solving a maze helps people develop planning and goal-setting skills that are characteristic of conscientiousness.

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EXTRAVERSION

11 genes analyzed

2 detailed results

2 personalized recommendations

WHAT IS **EXTRAVERSION**?

Extraversion is one of the five fundamental personality traits. People with this personality trait are called extraverts. Extraverts are primarily focused on the external world, like their social life. In other words, extroverts usually don't like to stay at home alone.

Instead, extraverts are known for their:

- **Sociability**: extraverts typically have a lot of friends and they see their friends often.
- **Self-confidence**: extraverts may think they're popular with others.
- **Liveliness**: extraverts are commonly cheerful, energetic, and enthusiastic people.
- **Boldness**: extraverts tend to lead others and have no problem publicly stating their opinion.

So if you've ever met a person who likes to party, is the center of attention, and loves to talk to strangers, then you've met an extravert.

On the other end of the spectrum are the introverts. Introverts are individuals who are primarily focused on their internal thoughts and feelings. Introverts are often shy, quiet, and may lack confidence. They typically prefer to stay at home, alone or with a very close friend, instead of going out and meeting new people.

Some people, however, are neither extraverts nor introverts. They're both. They have a mix of extraversion and introversion to their personality. These people are called ambiverts because "ambi-" means "both".

As to real-life consequences, extraversion is associated with numerous advantages, especially at work. For instance, extraverts tend to be promoted to leadership positions and are paid more as a result.

But there are downsides to extraversion as well. As a case in point, extraverts are sometimes impulsive. This means they may act without thinking, which can get them in trouble.

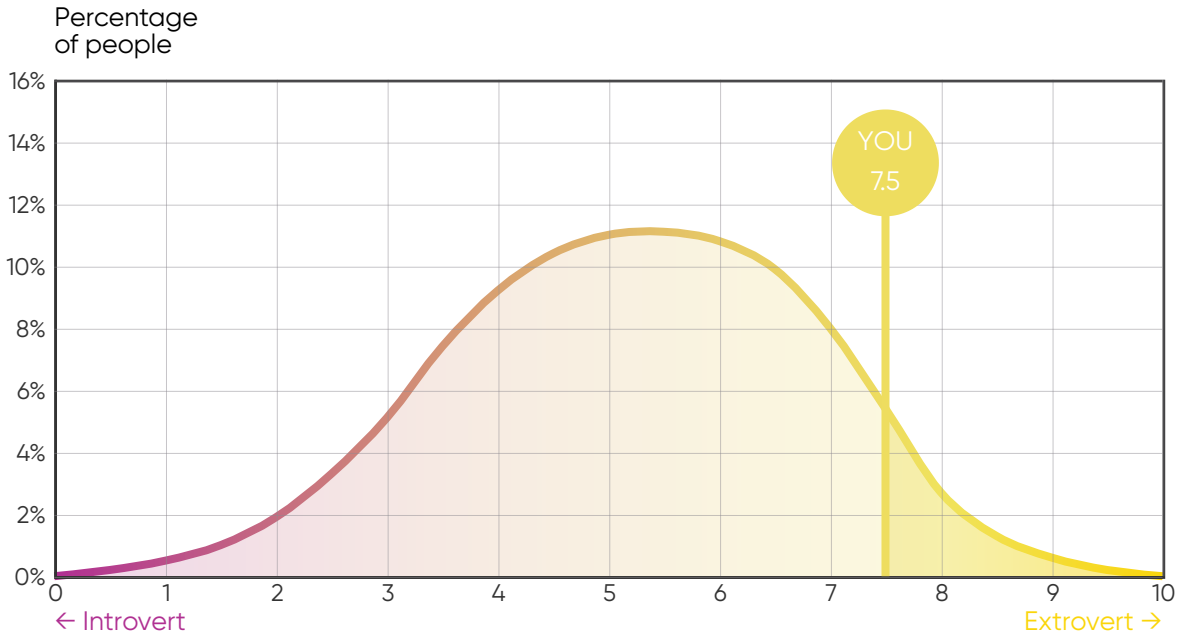
Regardless, the biological basis for extraversion lies partially in our genetic code. In fact, many genes and variations of those genes have been associated with extraversion.

Up to 60% of this personality trait is determined by genetics.

For example, the *DRD2* gene is involved in your brain's reward system. Extraverts appear to have a very specific version of this gene. A version that allows them to form positive and rewarding emotions more so than introverts.

However, not everything can be explained by genetics. Researchers believe that environmental factors can modify your personality as well. For instance, emotional stress during childhood may lead to a more introverted personality, even in people who are "extraverts" genetically.

SUMMARIZED ANALYSIS



How your Extraversion compares to the Asian population.

You are likely to be an extrovert
You gain energy by socializing or surrounding yourself with people.

Top 21% of Asian population.
You have a tendency to focus on the outer world and require plenty of socializing.

What does this tell you?

Do not carry variants associated with extreme introversion/extroversion
Research found common variants that are frequently found in extreme introverts/extroverts; however, you don't carry these variants.

Feels happy from other people's happiness
Research studies showed that for people of your genotype, happiness was influenced by the presence of a companion. In particular, they feel more positive when their friends experienced positive events, i.e more empathy for happiness.

RESULTS & RECOMMENDATIONS

OVERALL

You have a tendency to be an extrovert. Your genotype shows that you easily feel happy with others' happiness. Your emotions might be influenced by the energy around you. Therefore, you should make friends with people having positive energy.

Do not carry variants associated with extreme introversion/extroversion

- *The brains of introverts and extraverts may be wired differently from birth so that each handle dopamine differently. Most introverts tend to carefully think through before acting, which has obvious advantages. On the other hand, extroverts practice a more intuitive, emotional approach to decision making.*

Feels happy from other people's happiness

- *Please note that happiness-related empathy was invoked in both positive and negative conditions. This suggests that positive and negative conditions may have evoked different emotional responses than the neutral condition. Happiness may be "transmitted" to someone in a neutral mood. However, it is possible that negative feeling may also be transmitted. As a result, you should be aware that your feeling may be naturally influenced by people around you. For your genotype, it is strongly recommended that you make friends with people having positive thinking and actions. You have an inborn talent to absorb their happiness and make it yours.*

THE SCIENCE BEHIND

We analyzed 11 genes to correctly determine the genetic condition of your Extraversion. Notable among these are:

RBFOX1

Result: TT (normal)

Impact to your Extraversion: MEDIUM HIGH

RBFOX1 regulates the developmental and tissue-specific RNA in heart, muscle, and neuronal tissues. When the cells are under stress, the RBFOX1 protein localizes to cytoplasmic stress granules (cytosol composed of proteins & RNAs), which were formed after failure of proton processing from RNA. Mutations of RBFOX1 are associated with Epilepsy, Autism disorder, Attention-Deficit Hyperactivity disorder, and extraversion.

People with TT variant are not associated with extreme extraversion.

HTR2A

Result: TC (normal)

Impact to your Extraversion: MEDIUM

HTR2A protein is one of the receptors for serotonin, a neurotransmitter with many roles in the central nervous system. This protein is involved in receiving molecules from outside and using them to activate genes inside the cell. Mutations in this gene are associated with susceptibility to schizophrenia and obsessive-compulsive disorder. It is also associated with response to the antidepressant citalopram in patients with major depressive disorder (MDD). MDD patients with mutations of this gene have a significantly reduced response to citalopram, since this antidepressant down regulated the expression of HTR2A gene. This gene has many roles in normal biological functions, including cerebral cortex excitability, platelet aggregation, smooth muscle contraction, vasoconstriction, dilation, inflammatory processes, and hormone signaling.

People with TC variant are more empathy for happiness.

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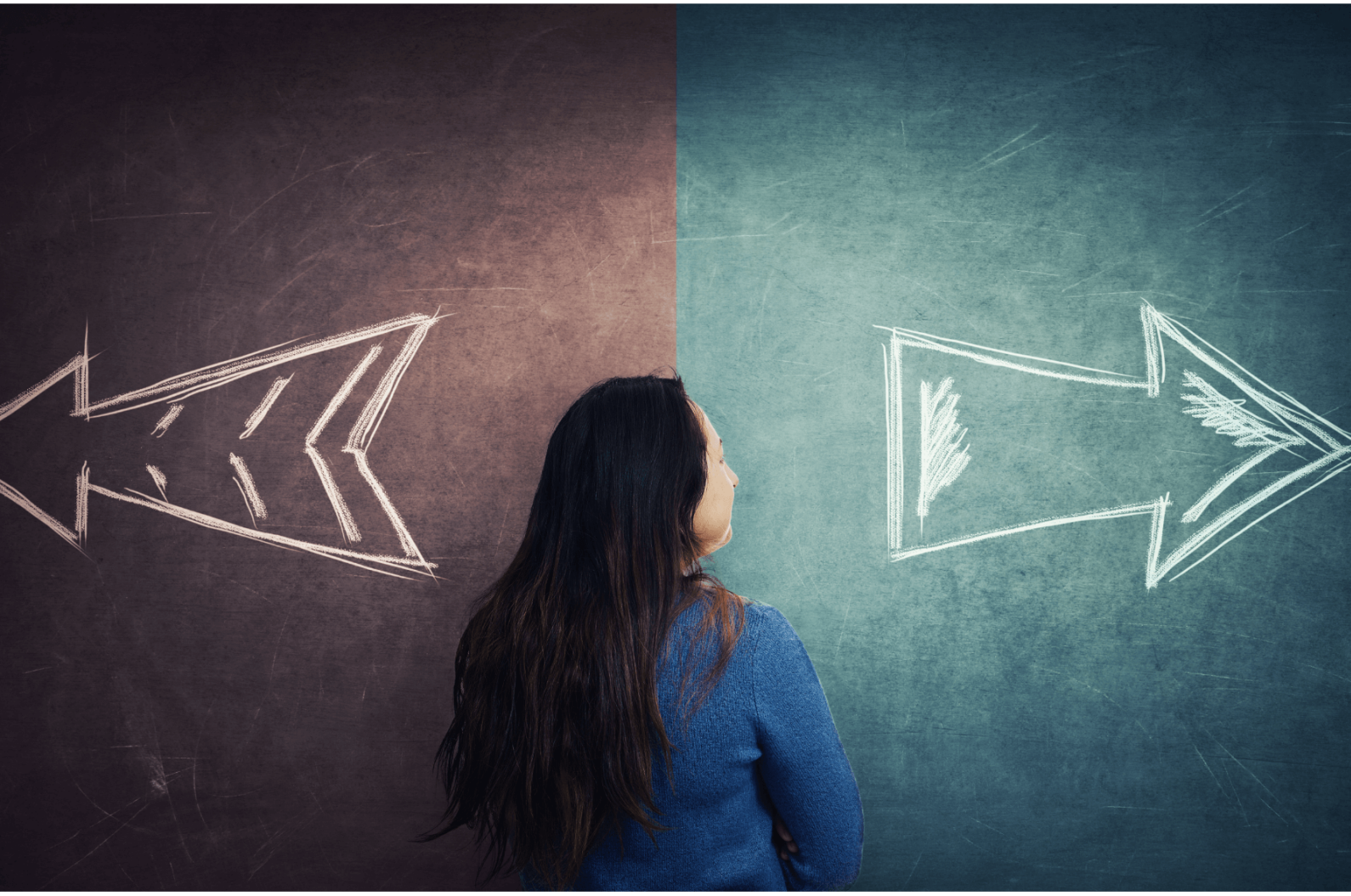


CONSCIENTIOUSNESS

19 genes analyzed

2 detailed results

2 personalized recommendations

WHAT IS **CONSCIENTIOUSNESS**?

Conscientiousness is one of the five primary personality traits.

Conscientious people are able to focus on long-term goals. This means they are able to plan ahead and delay instant gratification for a much bigger payoff down the line.

Moreover, conscientious individuals follow proper social norms and control their impulsivity. Put another way: if you are conscientious, you typically think about something carefully before acting.

Furthermore, conscientious people are:

- Punctual
- Disciplined
- Persistent
- Formal
- Traditional
- Responsible
- Reliable
- Industrious
- Orderly

Perhaps you know of someone exactly like this at work.

They always come in on time. They're polite and never swear. They'll turn down lunch in order to get everything done as quickly and efficiently as possible. As a result, that person is probably conscientious.

As you can imagine, there are numerous advantages to all of this.

For example, conscientious people can find a way around the obstacles they face. This is probably why conscientiousness is associated with better job performance.

There are even a few hidden benefits to conscientiousness as well. For instance, this personality trait is associated with longevity and good health.

However, there are some downsides to this personality trait. Too much conscientiousness can lead to decreased well-being, obsessive-compulsive traits, and workaholism.

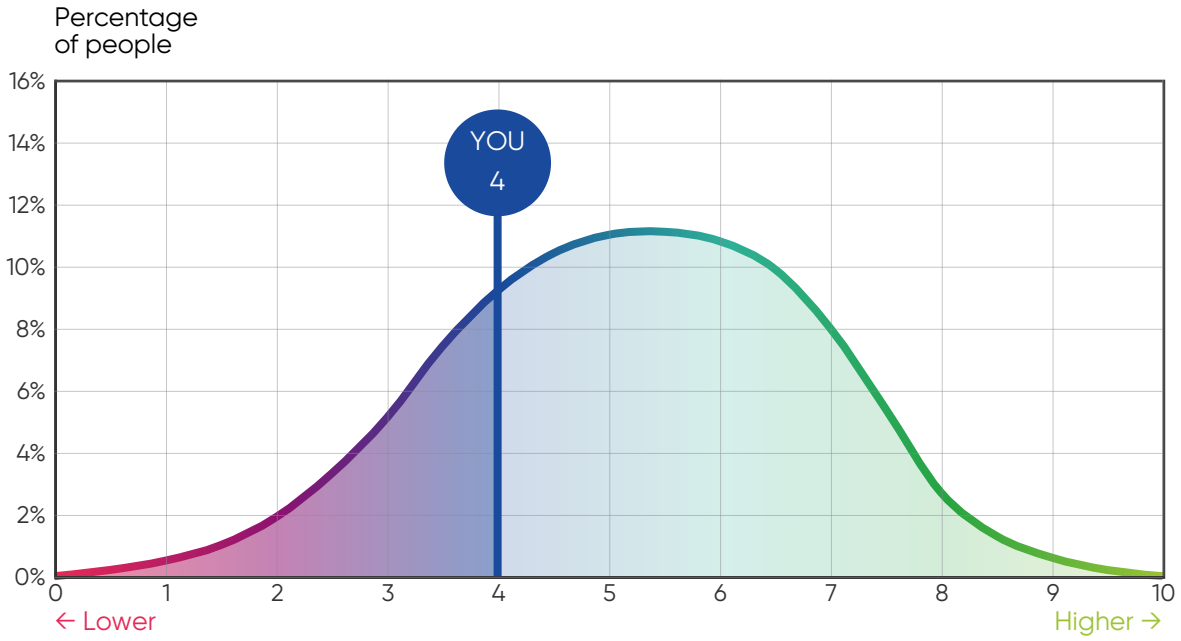
As with other personality traits, conscientiousness is impacted by our genetic code. But no single gene explains everything about conscientiousness. Rather, many genes and their variations are involved.

Take, for example, a gene called *ADH1A*.

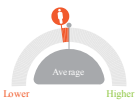
Some variations of this gene predispose a person to substance abuse, like alcoholism. This is something a conscientious person wouldn't partake in, as it's unhealthy.

On the flipside, other variations of this gene may make a person more conscientious and less likely to engage in risky behaviors such as substance abuse.

SUMMARIZED ANALYSIS



How your Conscientiousness compares to the Asian population.



You have lower level of conscientiousness.
We found several variants that are associated with lower levels of inborn conscientiousness.

Bottom 31% of Asian population.
You may lack the ability to plan ahead, be attentive, and pay attention to details.

What does this tell you?

Likely to have rebellious streak, tied to a neuropeptide gene
You have a defect in the NPY, neuropeptide, gene. This genetic defect is associated with lower levels of conscientiousness and, therefore, the possibility that you're a bit of a rebel.

Difficulties controlling inner urges tied to a self-regulation gene
You have a harmful mutation in the MTMR9 gene that is linked to a lower level of conscientiousness, predisposing you to a lack of self-control.

RESULTS & RECOMMENDATIONS

OVERALL

It might be a bit challenging for you to be disciplined. Your genetic code shows that you're more likely to act rebelliously compared to others. Because of this, it's particularly important that you address any defiant behavior when you notice them. Studies show that advancing your education can also help counter bad behavior. Furthermore, you may have weaker self-control. Since your self-control is generally strongest when you have energy, try to focus on completing your most important tasks first.

Likely to have rebellious streak, tied to a neuropeptide gene

- *The NPY gene encodes neuropeptide Y. Neuropeptide Y is a small, protein-like, molecule that neurons (brain cells) use to communicate with one another. You have a mutation in this gene that is linked to a lower level of conscientious behavior and, therefore, the likelihood that you're a bit of a rebel. If you think that you have a rebellious edge to your personality that sometimes gets you in trouble, start with trying to identify what might be at the root of that. After all, genetics only influence part of your personality.*
- *There are other factors that influence rebellious behavior, such as family conflict, substance use, a neighborhood full of crime. Depending on what may be leading to the rebellious behavior, you may need to alter your lifestyle factors, seek the help of a therapist, or even take medication. It is proven that one of the protective factors against rebellious behavior is education. The higher a person's education, the less likely they are to engage in rebellious—especially criminal—behavior.*

Difficulties controlling inner urges tied to a self-regulation gene

- *Our analysis shows that you have a defect in the MTMR9 gene which lowers your level of conscientiousness. By extension, this might impair your ability to control your inner urges. To strengthen your self-control, perform some mental energy accounting. You only have so much energy for self-control. Take a look at the week ahead and figure out which mentally-draining activities you can postpone or get rid of in order to save your energy. This strategy may improve your self-control in general, such as your ability to focus on important tasks.*

THE SCIENCE BEHIND

We analyzed 19 genes to correctly determine the genetic condition of your Conscientiousness. Notable among these are:

NPY

Result: TT (harmful)

Impact to your Conscientiousness: MEDIUM

NPY is involved in regulation of stress responses. It is known that higher levels of NPY caused resilience against posttraumatic stress disorder. NPY and NPY receptors in limbic and brain stem areas have an important role in the regulation of physiological and behavioral response, which may be relevant to PTSDs such as stress and anxiety, fear, learning and memory, control of blood pressure, and sympathetic activity.

People with TT variant are likely to have rebellious streak, tied to a neuropeptide gene.

MTMR9

Result: AG (harmful)

Impact to your Conscientiousness: MEDIUM

MTMRs proteins function in cytoskeletal and cell junction dynamics. Mutations in MTMRs genes result in two severe disorders: XLMTM (X-linked myotubular myopathy; a type of centronuclear myopathy) or CMT (Charcot–Marie– Tooth) disease which manifest in skeletal muscle or in peripheral neurons respectively. Among the MTMRs family, genetic variants of MTMR9 were found to be associated with both personality traits and responsiveness to antipsychotic medication.

People with AG variant have difficulties controlling inner urges tied to a self-regulation gene.

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AGGRESSION

11 genes analyzed

2 detailed results

2 personalized recommendations

WHAT IS **AGGRESSION**?

Aggression is a behavior that has numerous dimensions to it, including:

- Physical aggression, like hitting someone.
- Verbal aggression, such as yelling insults at a person.
- Anger, which is characterized by annoyance, displeasure, or a war-like attitude towards others.
- Hostility (unfriendliness).

As you can imagine, aggression can lead to numerous problems, such as ruined relationships, risk of injury, or even a criminal record.

There are, however, a few benefits to aggression. Aggression, when properly channeled, can help us achieve what we want in sport or even at work.

As with other facets of our personality, a wide range of genes are associated with aggression.

Of these genes, many of them are responsible for the proper function of neurotransmitters. Neurotransmitters are the chemicals in your brain that tells you to act or think in a certain way.

One of these neurotransmitters is called serotonin. High levels of serotonin in the brain have been associated with aggression.

Normally, a gene called *MAOA* produces an important molecule that gets rid of excess levels of serotonin.

But some people have a version of this gene called *MAOA-L*. This version of the gene doesn't work very well. It doesn't get rid of the serotonin efficiently.

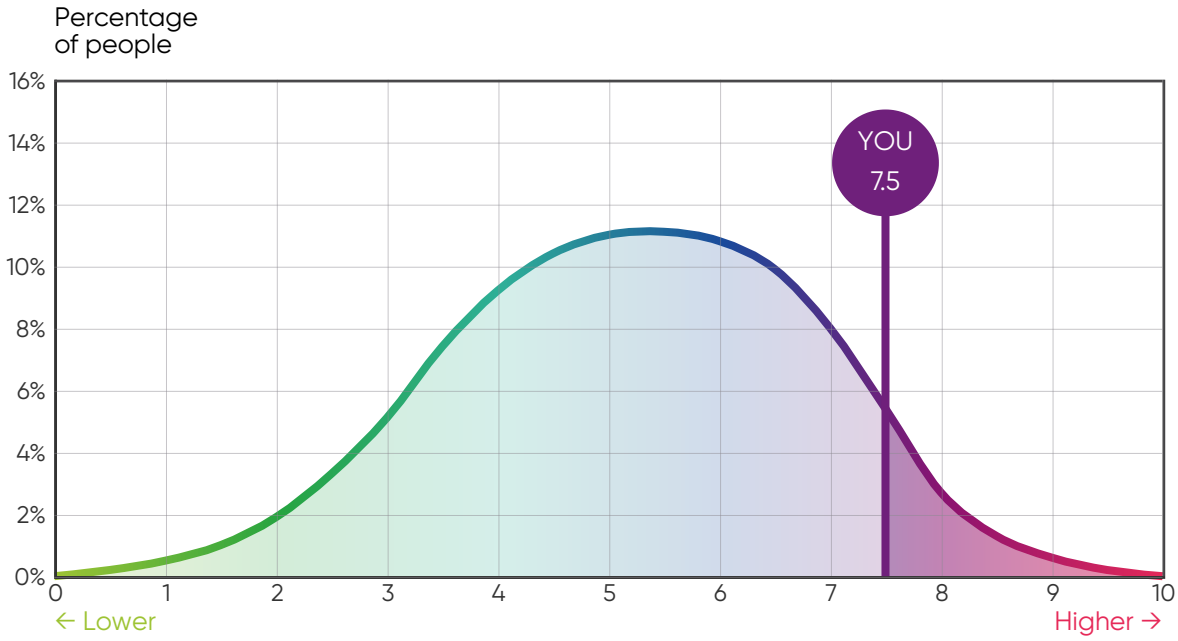
This results in high levels of serotonin in the brain, which predisposes to aggression.

Of course, things aren't that simple.

For instance, people with the *MAOA-L* gene may exhibit aggressive behavior, but only in highly stressful situations. This means that small problems are unlikely to lead to any aggressive behavior.

Therefore, environmental factors - not just genetics - can greatly influence a person's aggressive behavior.

SUMMARIZED ANALYSIS



How your Aggression compares to the Asian population.

You have a tendency to be more aggressive than others.
Aggression, throughout evolution, serves an important role in the survival of human species. You carry multiple variants that increase your level of aggressiveness.

Top 27% of Asian population.
It is likely that you may have difficulty dealing with anxiety or frustration and can't verbalize your feelings to calm down quickly.

What does this tell you?

Increased, outwardly expressed, anger and aggression linked to serotonin gene
The MAOA gene regulates the balance, or activity, of the serotonin hormone, that influences aggression behavior. You have a mutation in the MAOA gene that is tied to an increased level of anger and aggression.

Higher chance of physical altercation linked to a mutation in a brain receptor
You have a mutation in the GABRA2 (GABA brain receptor) gene, which is tied to many behavioral disorders. In your case, the mutation is linked to a higher risk of physically aggressive behavior.

RESULTS & RECOMMENDATIONS

OVERALL

Your aggression is likely higher than others. You prone to express anger and expression towards others due to a harmful variant of the MAOA gene. You also have a tendency of physical aggressive behavior due to harmful variants of the GABRA2 gene. Carrying these variants does not mean you are a violent or "bad" person. Genes aren't the only factors involved in our personality traits. You should improve your self-control to prevent unmanageable anger. Do not need to face with the situations make you uncomfortable or angry. In addition, consider trying relaxation techniques, such as deep breathing, to calm and relax your mind.

Increased, outwardly expressed, anger and aggression linked to serotonin gene

- *The MAOA gene tells your body to create an enzyme called monoamine oxidase A. This enzyme is able to break down the following neurotransmitters: serotonin, epinephrine, norepinephrine, and dopamine. Serotonin, in particular, plays a role in mood and emotion.*
- *The link between serotonin and aggression is highly complex but some evidence shows that a low level of serotonin, or a low level of its activity, is to blame for increased aggression. If you ever experience outwardly expressed anger, you must learn to control it before it controls you.*
- *One strategy to help with anger is to learn a relaxation technique. Take deep breaths, using your diaphragm. Repeat a calming phrase, such as "take it easy" as you breathe deeply. As you repeat this phrase, imagine yourself in a favorite, relaxing, place of yours. Maybe you enjoy relaxing at the beach or maybe you find it relaxing to be at a bar with friends. Imagine being there and enjoying yourself in order to calm your mind.*

Higher chance of physical altercation linked to a mutation in a brain receptor

- *The GABRA2 gene encodes part of a GABA receptor. GABA is a very important neurotransmitter (brain messenger). We've detected that you have a mutation in this gene that is linked to physical aggression. Scientists believe that many of the behavioral disorders tied to GABRA2 may have one link in common: neurotransmitter imbalance. This overall chemical imbalance in the brain leads to an inappropriate amount of excitatory and inhibitory signaling between brain cells.*
- *While the mutation you carry doesn't guarantee that you're a violent person, it may point to the need to be mindful of any impulsive thoughts or actions you may have. To that end, consider employing some measures that can improve your self-control. A great way to improve self-control is to avoid any temptation that may lead to anger. This may mean having to avoid a person you dislike or watching the news, if news reports make you angry.*
- *Another technique is the "if, then" method. Let's say that talking about politics triggers an impulsively harsh word to come out of your mouth. Before going to a dinner party, tell yourself "if someone brings up a political topic, then I'll politely steer the conversation in another direction, ask them to speak about something else, or excuse myself from the table for the moment."*

THE SCIENCE BEHIND

We analyzed 11 genes to correctly determine the genetic condition of your Aggression. Notable among these are:

MAOA

Result: T (harmful)

Impact to your Aggression: MEDIUM

MAOA is known as the ''warrior gene'' because of its link to aggression in several studies. This gene breaks down of serotonin, epinephrine, norepinephrine, and dopamine in the brain. MAOA gene is associated with several aspects including social anxiety, depression, substance abuse, attention deficit disorder, and other psychiatric disorders. Variants of this gene are linked to increased levels of aggression and violence, in comparison to unaffected members with no mutation.

People with T variant have increased, outwardly expressed, anger and aggression linked to serotonin gene.

GABRA2

Result: CC (harmful)

Impact to your Aggression: MEDIUM HIGH

GABA is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA-A receptors, which are ligand-gated chloride channels. Chloride conductance of these channels can be modulated by agents such as benzodiazepines that bind to the GABA-A receptor. At least 16 distinct subunits of GABA-A receptors have been identified. This gene plays an important role in the formation of functional inhibitory GABAergic synapses in addition to mediating synaptic inhibition as a GABA-gated ion channel.

People with CC variant have higher chance of physical altercation linked to a mutation in a brain receptor.

STRESS-HANDLING ABILITY

19 genes analyzed

2 detailed results

2 personalized recommendations

Genetica®

WHAT IS **STRESS-HANDLING ABILITY**?

Simply put, stress is nothing more than the body's reaction to something that throws it out of balance. This reaction depends on your brain cells as well as chemical messengers called hormones and neurotransmitters.

There are two very general types of stress, eustress and distress.

Eustress is "good stress", such as the physical stress people feel during exercise. Eustress is good stress because, in the end, it improves the body and mind.

On the opposite end of the spectrum is distress, or bad stress. This type of stress can actually harm the body and mind over time. Moreover, some people are better at handling this type of stress than others.

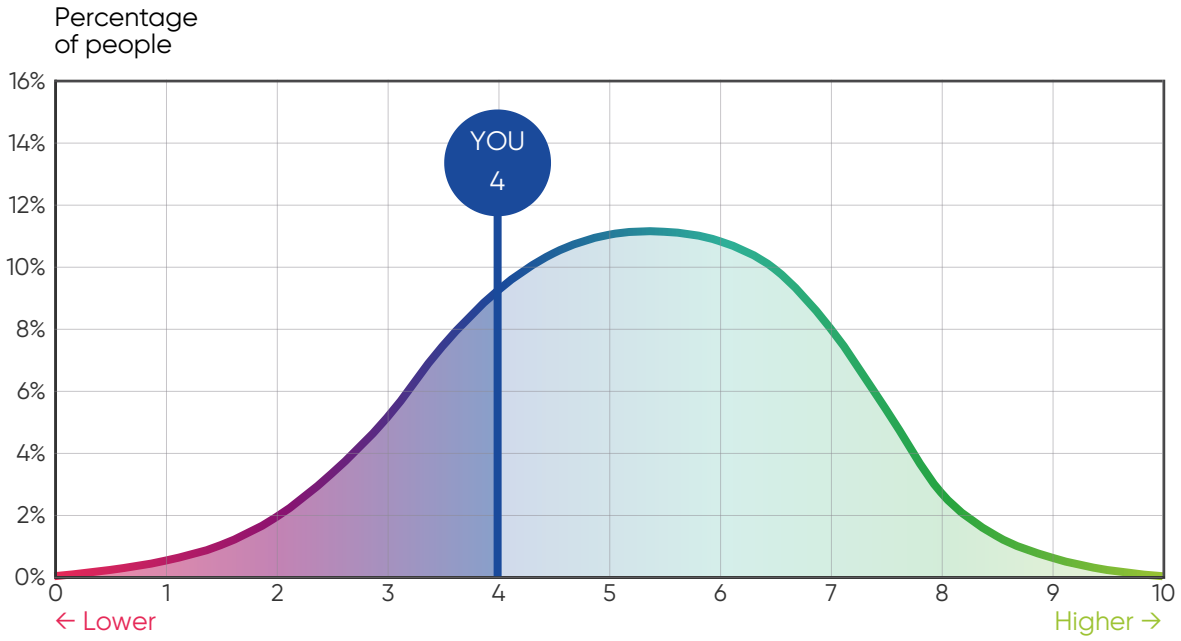
In fact, with respect to the genetics behind stress-handling abilities, some people are labeled as **"warriors"** and others as **"worriers"**.

Warriors are people who break down stress-related hormones better than others. Therefore, they're able to thrive under pressure. On the other hand, worriers are individuals who aren't able to break down stress-related hormones as well as warriors. Consequently, worriers are unable to perform very well under stress and may even be prone to anxiety.

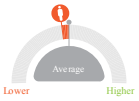
Of course, not everything is determined by genetics.

Your stress-handling ability may be influenced by your environment and lifestyle. For instance, people who practice meditation may be able to reduce their stress or prevent it from overwhelming them in the first place. Similarly, if you grew up in an abusive environment, then this may affect the way you perceive and react to stress as well.

SUMMARIZED ANALYSIS



How your Stress-handling Ability compares to the Asian population.



It is challenging for you to handle stress.
You break down the stress hormones slower than other people.

Bottom 30% of Asian population.
Stress hormones are accumulated in your body much longer than other people.

What does this tell you?

Reduced activity to break down stress hormones
You carry unbeneficial variants that are related to decreased clearance of catecholamines that makes you less effective to handle stress. Catecholamines are hormones made by your adrenal glands which are released into your blood when you're physically or emotionally stressed.

Prone to alcohol drinking following stressful events
When exposed to stress, people carrying your genotype exhibited significantly higher drinking activity.

RESULTS & RECOMMENDATIONS

OVERALL

It might be a bit challenging for you to handle stress. Your genetic code indicates that you may not handle stress very well, possibly due to a buildup of "fight or flight" hormones in your body. You can practice slow, deep breathing to help you calm down. Additionally, you have a higher than normal risk for alcoholism resulting from stress. Because of this, it's imperative that you don't drink alcohol when things go bad. Instead, try to find healthier ways to relieve your stress.

Reduced activity to break down stress hormones

- *Stress induces cortisol and adrenaline, which in turn cause the rapid breathing that is associated with the 'fight or flight' response. You should try to take slow, full breaths, which will slow down the secretion of stress-inducing hormones and helps you feel calmer. You can also train your body to better handle stress by incorporating deep breathing exercises into your daily routine.*

Prone to alcohol drinking following stressful events

- *Researchers have found that alcohol takes a psychological and physiological toll on the body and may actually compound the effects of stress. Drinking alcohol may seem to provide some relief—positive feelings and relaxation—in the short term, but as stressful events continue long-term, heavy alcohol consumption can lead to medical and psychological problems and increase the risk of developing alcohol use disorders. You should be aware that you are susceptible to drinking alcohol while stressed. Therefore, you should proactively find a different stress coping mechanism and stay away from alcohol usage.*

THE SCIENCE BEHIND

We analyzed 19 genes to correctly determine the genetic condition of your Stress-handling Ability. Notable among these are:

MAOA

Result: T (harmful)

Impact to your Stress-handling Ability: HIGH

MAOA is known as the ''warrior gene'' because of its link to aggression in several studies. This gene breaks down of serotonin, epinephrine, norepinephrine, and dopamine in the brain. MAOA gene is associated with several aspects including social anxiety, depression, substance abuse, attention deficit disorder, and other psychiatric disorders. Variants of this gene are linked to increased levels of aggression and violence, in comparison to unaffected members with no mutation.

People with T variant are associated with reduced activity to break down stress hormones.

CRHR1

Result: AG (harmful)

Impact to your Stress-handling Ability: MEDIUM HIGH

CRHR1 encodes a G-protein coupled receptor that binds neuropeptides of the corticotropin releasing hormone family that are major regulators of the hypothalamic-pituitary-adrenal pathway. The encoded protein is essential for the activation of signal transduction pathways that regulate diverse physiological processes including stress, reproduction, immune response and obesity. Diseases associated with CRHR1 include Irritable Bowel Syndrome and Depression. Among its related pathways are long-term depression and glucocorticoid pathway (HPA Axis), pharmacodynamics. CRHR1 enables normal embryonic development of the adrenal gland and for normal hormonal responses to stress. It also plays a role in the response to anxiogenic stimuli.

People with AG variant are prone to alcohol drinking following stressful events.

Other services from Genetica®

65 genes

G-Care

Foundation To Your Quality Life

Over 18 years of age

NutriCare
- Carbohydrate metabolism
- Protein metabolism
- Fat metabolism

Facts-to-Know
- Béo bụng
- Chuyển hóa affeine
- Nguy cơ mất ngủ

HealthCare
- Breast Cancer or Prostate Cancer
- Stomach Cancer
- Asian Flush

Personality
- Belly fat
- Caffeine sensitivity
- Insomnia tendency

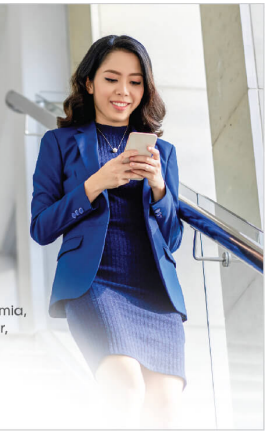
PhysiCare
- Endurance ability
- Power performance
- Cardiorespiratory fitness

300 genes

G-Pro

Unearth Your Potentials

Over 18 years of age



Mind & Spirit
- Personality
- Behavior tendency
- Cognitive ability
- IQ, EQ
- Educational attainment
- Language ability
- Math ability
- Music ability

Nutrition
- Protein, Fat, Carbohydrate metabolism
- Vitamin requirements
- Liver Detoxification
- Food and Drink sensitivities
- Eating behavior
- Cardiometabolic risk
- Diabetes risk scores
- Cardiometabolic health

Fitness
- Endurance ability
- Power performance
- Cardiorespiratory fitness
- Recover ability
- Tendency to get injuries
- Weight Management Difficulty
- Tendon/ Ligament strength
- Exercise benefit

Resting
- Insomnia tendency
- Belly fat
- Caffein metabolism

Health

Up to 20 common cancers for both genders
- Breast, Bladder, Brain, Cervical,
- Colorectal, Colon, Esophageal,
- Uterine, Kidney, Stomach, Leukemia,
- Liver, Lung, Pancreatic, Testicular,
- Prostate, Ovarian, Skin
- Pheochromocytoma and
- Paraganglioma

125 genes

G-Kid Care

Foundation For Child's Development

From 0 to 18 years of age

Behavioural tendencies
- Extraversion
- Conscientiousness
- Emotional instability

Macronutrient metabolism
- Carbohydrate metabolism
- Fat metabolism
- Protein metabolism

Health risk
- Obesity risk score

Intelligence
- IQ
- EQ
- Cognitive ability

300 genes

G-Kid Pro

Reaching An Optimal Future

From 0 to 18 years of age

Mind
- IQ
- EQ
- Educational attainment
- Cognitive ability
- Math ability
- Language ability
- Music ability
- Fitness potentials

Body
- Vitamin requirement
- Mineral requirement
- Macronutrients requirement
- Eating behavior
- Sweet and bitter taste
- Health risk: Obesity Cardiometabolic/ Diabetes risk.

Spirit
- Personality
- Behavior tendency

Other services from Genetica®

97 genes

G-Health

Access Risk Of Hereditary Diseases

Over 18 years of age

Up to 20 common cancers for both genders

- Breast
- Bladder
- Brain
- Cervical
- Colorectal
- Colon
- Esophageal
- Uterine
- Kidney
- Stomach
- Leukemia
- Liver
- Lung
- Pancreatic
- Testicular
- Prostate
- Ovarian
- Pheochromocytoma
- and Paraganglioma
- Skin

48 genes

G-Autism

Hereditary Autism Risk Screening

The G-Autism report will unveil the genetic risk of an individual via:
- Detect any known pathogenic or likely pathogenic mutations associated with ASD.
- Evaluate the Autism Risk Score: A polygenic score which indicates the user's increased risk of autism.

Everyone will benefit from this report. However, young children who display symptoms of autism are especially advised to take the genetic test.

This report will provide you:
- In-depth knowledge about gene-related causes of ASD.
- Information that enables best-suited personalized therapy and developmental care in regard to the user's risk of autism.

32 genes

G-Immunity

Hereditary Susceptibility To Respiratory Viral Infection Screening

Traits tested:
- SARS-CoV
- Influenza
- Acute Respiratory Distress Syndrome (ARDS)

Everyone will benefit from this report.

Benefits:
- Provide users the genetic information about their susceptibility to viral infection.
- Mainly focusing on respiratory viral infections at this time.
- Provide actionable guidelines and recommendations based on research studies from epidemics that have happened, such a SARS epidemic, ...

73 genes

G-Stroke

Hereditary Stroke Screening

The G-Stroke report will provide the following information:
- Pathogenic or likely pathogenic mutations that increase risk of strokes (ischemic stroke, hemorrhagic stroke).
- Stroke Risk Score: a polygenic score that indicates the patient's increased risk of stroke.

Everyone will benefit from this report.

Benefits:
- In-depth knowledge about gene-related causes of stroke.
- Information to make informed medical and lifestyle decisions in regard to the user's risk of stroke.
- Personalized recommendations for preventive and monitoring options.

28 genes

G-ADHD

Hereditary ADHD Risk Screening

The G-ADHD report will provide the following information:
- Pathogenic or likely pathogenic mutations that increase risk of ADHD.
- ADHD Risk Score: a polygenic score that indicates the user's increased risk of ADHD.

Young children and teenagers are especially advised to take the genetic test.

Benefits:
- In-depth knowledge about gene-related causes of ADHD.
- Information to help make informed medical and lifestyle decisions in regard to the user's risk of ADHD, as well as available treatment options.
- Helpful and personalized recommendations.

DISCLAIMERS

Gene Friend Way provides genetic assessment services for research or investigational use. Gene Friend Way does not provide any direct medical advice to individual patients. Genetic information must always be considered in conjunction with other information about your health such as lifestyle, family history, risk factors, biomedical data, diet, nutrition and physical activity among other factors.

Gene Friend Way's role is limited to providing results of genetic test and providing a broad set of general recommendations. More detailed recommendations that may be specific to you are to be made by qualified Professional Practitioners only. General guidelines provided in our report are for information purpose only and are meant to aid your Professional Practitioner to render the relevant professional or medical advice and treatment. While assessing your genetic parameters and providing the report and recommendations, we do not consider your past or existing health conditions and or any medication taken by you (either in the past or currently), even if you may have provided us with such information. Our report and the recommendations therein are to be acted upon in consultation with a medical or other health and wellness professional practitioner.

Your reliance upon the report is solely at your own discretion. As with all health and medical related matters, you should exercise adequate care in using the information provided in this report or on our website. Gene Friend Way disclaims any responsibility for any errors and/or omissions by you or other persons either during collection of DNA samples or delivery of the DNA sample to Gene Friend Way. We make no warranties of any kind, either express or implied, including, without limitation, the implied warranties of merchantability, fitness for a particular purpose, accuracy and non- infringement. The information in this report is for Research Use Only (RUO) or Investigational Use Only (IUO), meant to assist in further clinical diagnosis or treatment by Professional Practitioners.

If your sample is rejected or testing results are invalid, it means your sample was sub-optimal and could not be tested. You will be advised to re-collect and re-test. All samples not valid for testing are disposed of according to guidelines for biohazardous waste and are HIPAA compliant.

Laboratory Developed Test (LDT). This test was developed and its performance characteristics determined by Genetica in a manner consistent with CLIA requirements. It has not been cleared or approved by the U.S. Food and Drug Administration. This test is not intended to be used without first consulting your physician and subsequent clinical testing as deemed appropriate.

Thank you,

It is our honor to be able to contribute
to your healthy and happy life.

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in Vietnam and in the US.

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