



## GRATEFUL PEOPLE ARE HAPPY AND HEALTHY—BUT WHY?

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### REVIEWED BY:



**JACK AND  
ADDY**  
6–7 YEARS  
OLD

What are you grateful for today? Scientists have found that people who feel grateful more often are also happier, get better grades, and are more satisfied at school. They also sleep better, have less pain, and do not get sick as often. One explanation for this is that grateful people think about the world in a more positive way. Another explanation is that grateful people have better friendships, because they offer more help and receive more help in return. Thinking more positively about things that happen to you and having better friendships can both increase your happiness and improve your physical health. The good news is that practicing gratitude is a skill that you can get better at by simply writing down a few things that you are grateful for each day.

What are you grateful for today? This question will have different answers for different people, and your answers could change every day. You could be grateful for that delicious dinner you had, for having good friends, or for the fact that the sun is shining and you can spend time outside.

## IF YOU WANT TO BE HAPPY AND HEALTHY, BE GRATEFUL!

Gratitude is the emotion we feel when we notice that something good has come into our lives and we appreciate it. Some people feel grateful more often than others. For example, some people feel very happy and grateful every time the sun is shining, while others barely notice such things at all. One way scientists measure how often people feel gratitude is by using questionnaires. To get a feel for how these questionnaires work, try thinking about how much you agree with each of these statements, from 1 to 10 (1 = “I strongly disagree,” 5 = “neutral,” 10 = “I strongly agree”):

I think it's important to appreciate each day that I am alive.  
After eating, I often pause and think, 'What a wonderful meal.'  
I think it's important to enjoy the simple things in life.

After getting people's answers to questions like these, scientists can then compare people who score very high on these scales (meaning they feel a lot of gratitude) with people who score very low on these scales (meaning they feel little to no gratitude).

Research has shown that teenagers and adults who feel grateful more often than others are also happier, get better grades, and have better friendships. They also sleep better, have more energy, and have fewer illnesses and less pain [1]. If someone is more grateful than someone else, it does not mean that this person is grateful all the time. People who say that they feel grateful a lot of the time still feel negative emotions, like sadness, fear, or anger. Both positive and negative emotions are part of our lives, but it is possible to increase our overall happiness. One way to do this is to pay more attention to the good things that happen in our life and feel grateful for them.

## YOU CAN PRACTICE GRATITUDE JUST LIKE ANY OTHER SKILL

Studies have shown that you can practice being more grateful. Researchers asked teenagers to write down up to five things they were grateful for every day, for 2 weeks. After the 2 weeks, the teenagers said they felt more satisfied with their lives and happier with their school experiences [2]. The teenagers who completed the gratitude practice were still happier with their school experiences even *three weeks later*, when compared with teenagers who did not complete the gratitude practice [2]. It seems that gratitude has a lasting effect on happiness.

## WHY DOES GRATITUDE MAKE YOU HAPPIER?

Why does gratitude make you happier and healthier? To come up with an answer to this question, we searched for all of the research papers about gratitude that have already been published. We then put these findings together to show how two different stories (also called models or pathways) could explain why gratitude leads to a happier life.

### THE COGNITIVE PATHWAY FROM GRATITUDE TO HAPPINESS

The first story (or model) that could explain why gratitude leads to greater happiness is what we call the “**cognitive** pathway.” The words “cognitive” and “**cognition**” are used by scientists to talk about thinking. According to this first story, we would not feel grateful if we did not think about the good things in our life.

### IF YOU ARE MORE GRATEFUL, YOU WILL SEE THE WORLD IN A MORE POSITIVE WAY

Studies have shown that people who are more grateful than others will automatically think about the things that happen to them in a more positive way. Most situations that happen in our lives are not 100% good or 100% bad. How we think about or interpret what happens to us plays a big role in how we feel about the situation. Most people have learned “thinking habits” that they repeat over and over again.

One of these thinking habits is what is called a “positive interpretation **bias**,” which means that you are more likely to interpret a neutral or negative situation in a more positive way. For example, after falling off your bike, you could think “I got so lucky that I did not get hurt” and feel very grateful. Or, you could think “I can’t believe I was so stupid to fall off my bike” and feel really angry. Having the grateful thoughts would be an example of a positive interpretation bias. On the opposite side, some people with depression feel sad and down nearly every day, for long periods of time. These people interpret most things in their life in a negative way, which means they have a negative interpretation bias. In Figure 1, we show a real-life example of how a positive interpretation bias leads to more happiness after getting a bad grade on a test.

Another positive thinking habit has to do with how much attention you pay to the things around you. For example, someone who is scared of dogs will pay much closer attention when there is a dog on the other side of the street, while someone who is not scared of dogs may not even notice that there is a dog there. The person who pays close attention to the dog has a negative attention bias. If you are a more grateful person overall, you might pay more attention to the *good* things that happen around you, which would be a positive attention bias.

### COGNITION/ COGNITIVE

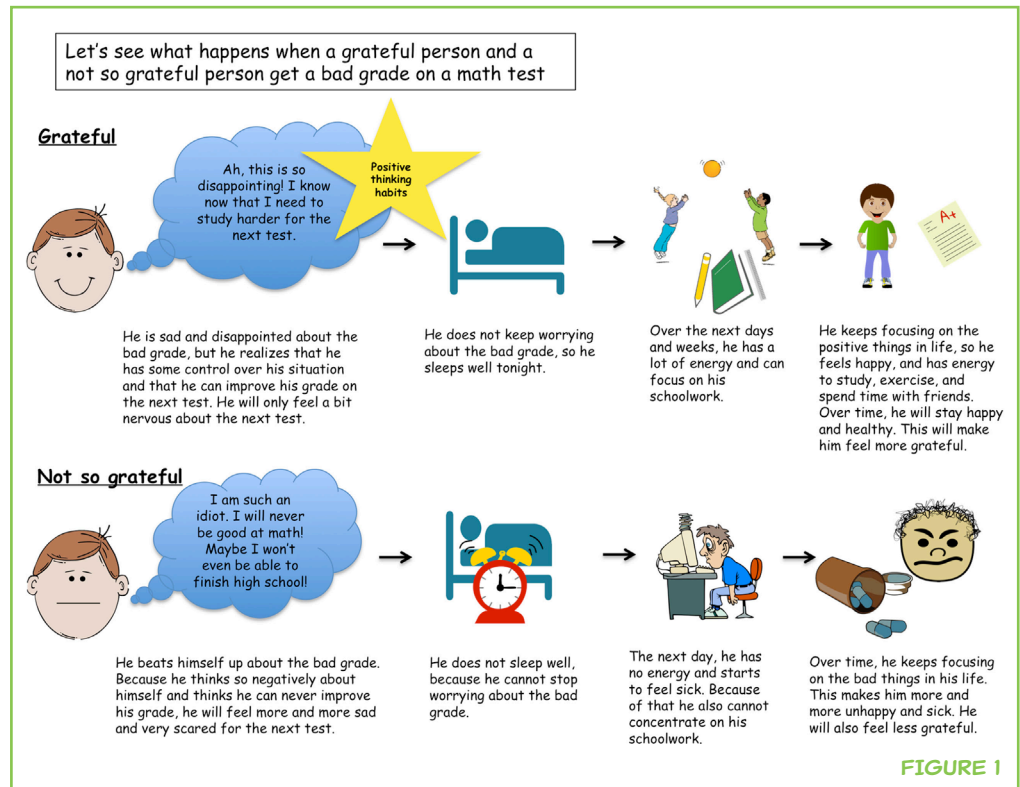
Another word for “thinking” or “thoughts.”

### BIAS

A habit of thinking in a certain way that makes it hard to change your mind. For example, a negative interpretation bias means that you interpret nearly everything that happens to you in a negative way. A positive attention bias, on the other hand, means that you mainly pay attention to the good things that happen.

**FIGURE 1**

Here is one example of how gratitude may influence the way we think about a situation (getting a bad grade), and how thinking differently about the same situation can lead to very different endings.



A third positive thinking habit is having a “positive memory bias,” which means that you are more likely to remember happy memories than sad ones. Studies have also shown that people who are more grateful remember more good memories than bad ones. This can happen for a couple of reasons. One reason is that grateful people might be better than less grateful people at *encoding* (or storing in memory) happy events when they happen.<sup>1</sup> For example, imagine two people are having a great birthday party. If one person is more grateful than the other, the more grateful person will encode the memory of the birthday in a more positive way (maybe because of the positive attention bias and positive interpretation bias we mentioned earlier). If they encode more positive memories of other situations they are in, too, then grateful people will end up having more positive memories than less grateful people. The other reason why grateful people might have this positive memory bias is that people are more likely to remember past happy things when they are currently feeling happy, and more likely to remember past sad things when they are currently feeling sad. So if grateful people are happier in general, they will find it easier to think of happy memories.

**GRATITUDE ALSO HELPS YOU STAY HEALTHY**

All of this might explain why grateful people are happier, but why are they also healthier, why do they sleep better, and why are they sick less often? We think that the cognitive pathway can also explain this. If you have fewer negative

<sup>1</sup> Interestingly, scientists have also found that the brain stores emotional memories (positive or negative) more strongly than neutral ones. So if something happens that makes you very happy, sad, angry, or afraid, it might be especially easy for you to remember that event later. This may be because emotional reactions increase activity in the parts of the brain that store memories.

thoughts about the world, it is easier to fall asleep because you are not lying awake worrying about everything that went wrong that day. You might have also noticed that when you worry a lot, you can experience negative feelings in your body, such as headaches or stomach pains. In addition, both not getting enough sleep and having a lot of negative emotions (feeling worried, stressed, sad, and angry) are bad for your immune system, which makes it difficult for your body to fight off diseases [3]. You see, the immune system normally increases inflammation when we get hurt or sick. Inflammation is the redness you can see around a cut on your skin, and the reason why you get a fever when you are sick, for example. Because inflammation kills bacteria, it is a good way for your body to heal. But researchers have now found that when we experience a lot of negative emotions for a long time, or when we do not get enough sleep, the body often responds in the same way—with inflammation. But because we are not sick or injured, and the inflammation keeps happening over a long period of time, the inflammation actually starts to hurt healthy cells. This cell damage makes the body weaker and makes it more likely that we get sick. Because gratitude helps us to feel less negative emotion, it also helps to stop these immune system problems, and this helps to keep us healthy.

### THE PSYCHOSOCIAL PATHWAY OF GRATITUDE TO HAPPINESS

We also came up with a second story (model) that may explain why grateful people are happier. This second story involves a **psychosocial** pathway, which means it is about how our relationships with other people influence our happiness.

#### GRATEFUL PEOPLE HAVE BETTER FRIENDSHIPS

Studies have shown that people who say that they are more grateful have better friendships. One study found, for example, that college students who said that they felt more grateful at the start of their first semester also reported having more social support (better friendships) at the end of the semester [4]. One possible reason for this is that studies have found that grateful people receive more help from other people and are also more likely to help others. Studies have shown that when you thank someone for their help, this person is more likely to help you and other people again in the future. So if you thank your friends for helping you with something, they will probably feel happy and may be more likely to help you again in the future. Grateful people are also more likely to help others. One study showed that when people felt more grateful after they received help with something, these people spent more time helping someone else, even though what they had to do to help out was really boring! We do not know exactly why people who feel grateful are more likely to help others. Maybe it is because feeling grateful often means that you received something that you needed or wanted from someone else. As soon as you realize that you feel happy and grateful because someone else was kind enough to help you, you might want to pass this on to someone else. It makes sense that this would

### PSYCHOSOCIAL

The combination of psychological factors (for example, your thoughts and emotions) and social factors (how well you get along with other people, for example, family members, teachers, and other kids at school).

increase the quality of your friendships, because people like to be friends with other people that they can rely on for help.

### **GOOD FRIENDSHIPS ARE GOOD FOR YOUR HEALTH**

Did you know that having good friends can also keep you healthy? People who report better social support have better immune system function, so their bodies can fight off illnesses better, and they can heal faster after getting sick [5]. When you have good friends and family, you will probably feel happier and less stressed. We talked earlier about how this can help your immune system to function better. Studies have also shown that social stress (when we experience stress in our relationships and friendships) causes problems for the immune system. For example, a study showed that when a married couple had an argument with each other, their cuts healed a lot slower than if they had a friendly conversation with each other. This is a sign that the immune system is not functioning well when we experience social stress. We all have arguments with our friends and family members from time to time, but if this happens a lot, it can cause stress, which results in problems for the immune system. In Figure 2, we show one example of how the psychosocial pathway may explain why grateful individuals are happier and healthier after receiving help from someone on a school project.

### **GRATITUDE MAY ALSO CHANGE THE BRAIN**

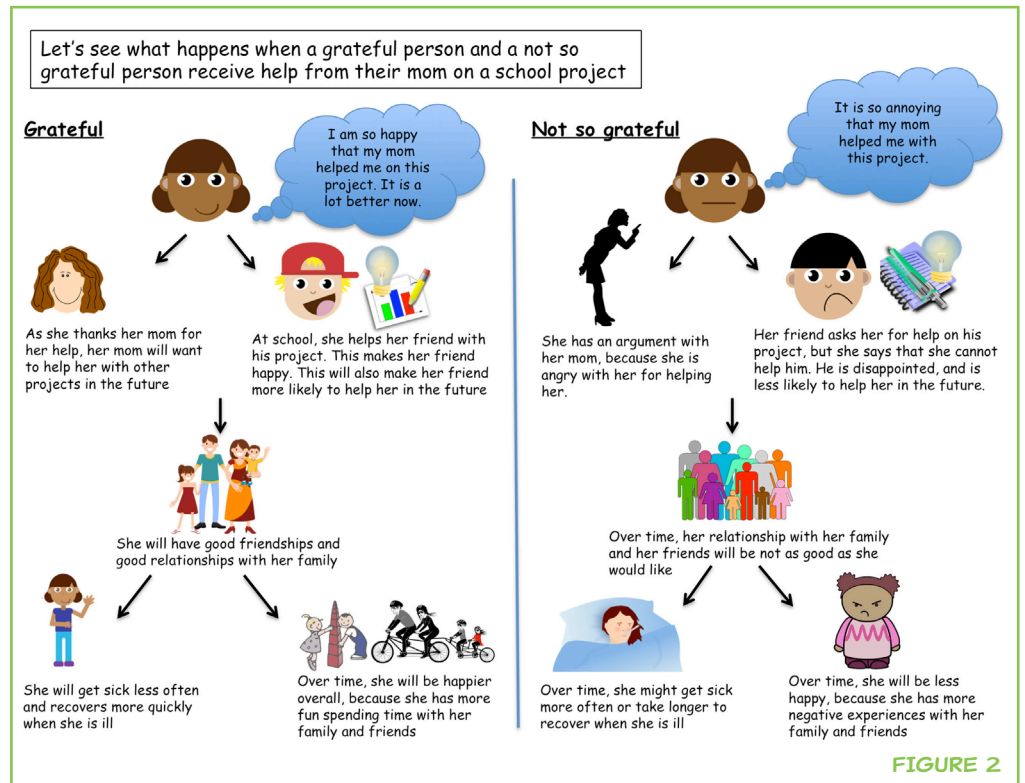
So far, there have only been two studies that investigated if the brains of more grateful people look different than those of less grateful people. One study found that one brain area, which is involved in thinking about the thoughts of others, was larger in people who were more grateful. The second study showed that people who said they were feeling more grateful after reading a story had more activity in brain areas that are important for many emotional and cognitive processes. So it seems like the brains of more grateful people do look different from those of less grateful people, but we need to do more research to find out exactly what this means.

### **HOW CAN YOU USE THIS RESEARCH IN YOUR OWN LIFE?**

Gratitude can be practiced in a lot of different ways. One way is to write a list every day before you go to sleep, to remind yourself of three to five things that happened that you are grateful for. Another way to practice gratitude is to write an email or a text message to a good friend, thanking them for something they have done for you. You can also get more creative and take a photo of something you are grateful for every day for a month. It is important to remember that this practice does not mean that we have to ignore bad things that happen to us. But sometimes we think that we need to be happy

**FIGURE 2**

Here is an example of how being grateful after receiving help may lead to better friendships and family relationships.



to be grateful, but that is not really true. If we are sad or things did not go as we wanted them to, it is easy to think that there is nothing to be grateful for. But research has shown that starting a gratitude practice actually worked best for teenagers who were not very happy and grateful to begin with [6]. This shows that we do not need to be happy to be grateful, but that gratitude leads to greater happiness.

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Jack and Addy attend St. Anthony Park Elementary School. Jack enjoys science, history, hockey, and Legos. Addy enjoys reading, gymnastics, hockey, and figure skating. Appropriately, they share a large collection of stuffed microbes!



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I am a professor at the University of Arizona and Harvard Medical School and am also an officer in the U.S. Army Reserve. I have a PhD in Clinical Psychology and a background in sleep and performance research. In my lab, we study how different kinds of stresses and injuries affect the brain and how we can improve people's mental performance. We study ways to help people think faster, feel better, and heal from traumatic experiences. Our work uses the most advanced techniques in brain imaging, brain wave monitoring, sleep monitoring, mental testing, Internet training, and other high-tech tools to study how the brain works and how to help people perform better and live healthier lives.