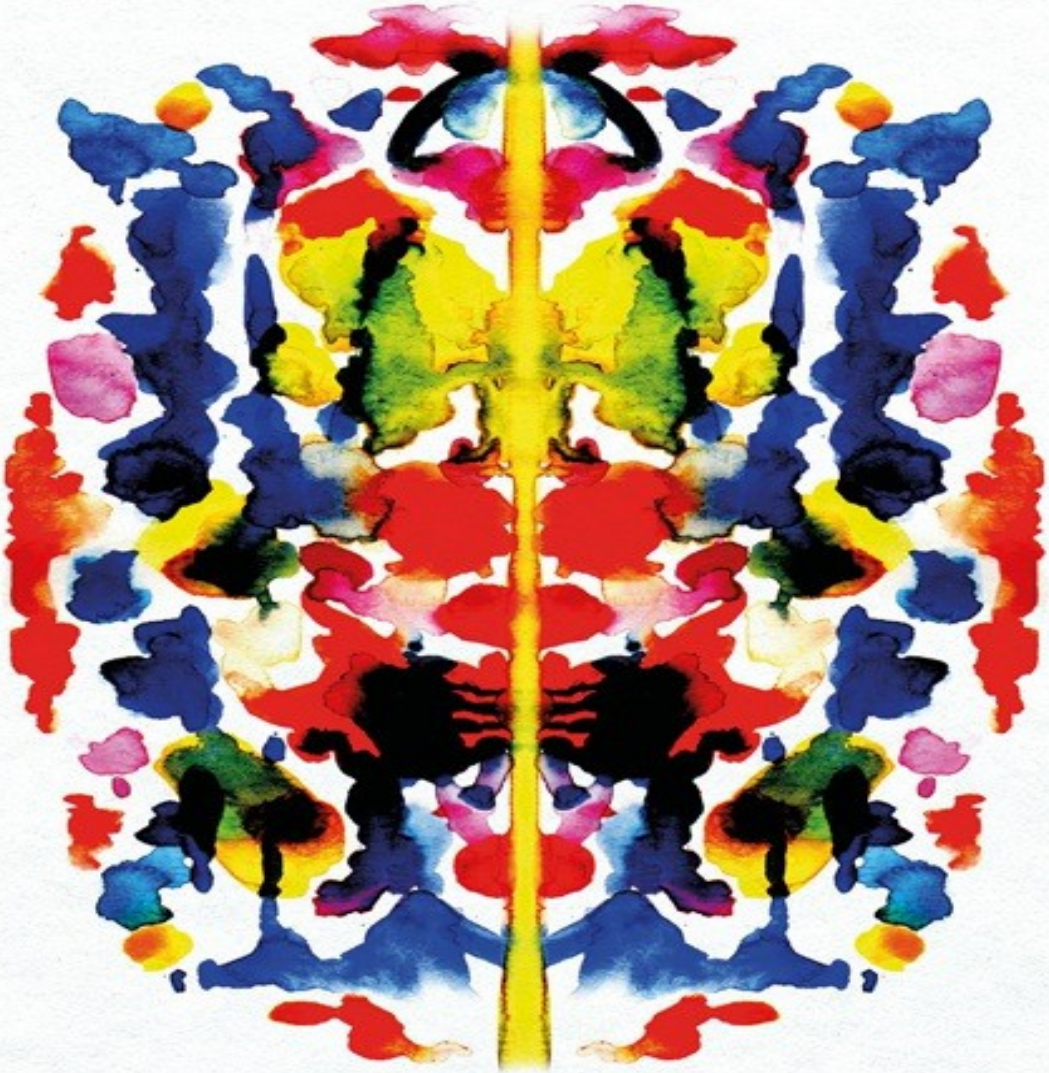
ANA IBÁÑEZ

SORPRENDE A TU MENTE



ENTRENA TU CEREBRO Y DESCUBRE
EL PODER DE TRANSFORMAR TU VIDA

Planeta

INDEX

SYNOPSIS

THE BRAIN IS TRAINED: DEVELOP YOURS TO THE MAXIMUM!

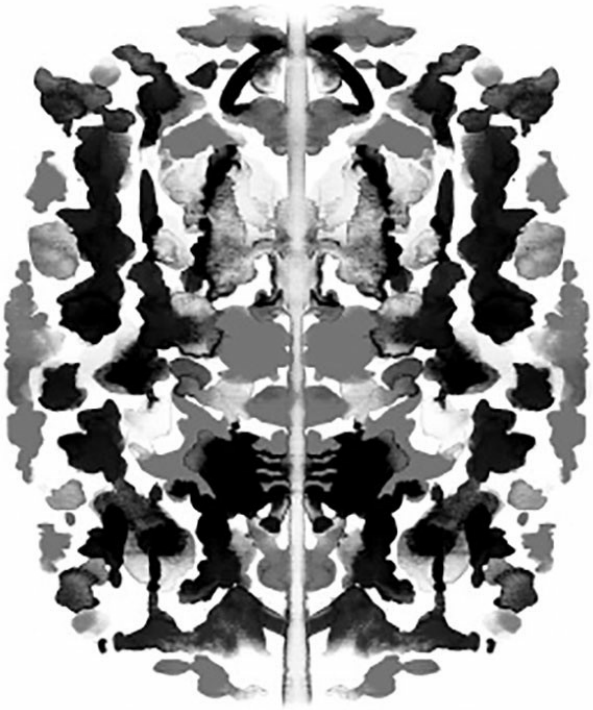
From breathing, to eating or sleeping, to the ability to reason, to fall in love or to argue with someone, everything we do is controlled by the brain. Our brain defines who we are and what potential we have, and training it to get the most out of it is possible.

In this book, Ana Ibáñez reviews the problems that most often occupy our brain and prevent it from giving its best. Stress, insecurity, anxiety, insomnia, concentration or lack of control of our emotions sometimes seem to overcome us, but here you have the perfect manual to exercise your mind and overcome all these obstacles. You control your brain: train it and you will discover that the possibilities are endless.

Discover how your brain works and learn simple techniques that will give you the power to influence your mind and your abilities.

ANA IBÁÑEZ

SURPRISE YOUR MIND



TRAIN YOUR BRAIN AND DISCOVER THE POWER TO TRANSFORM YOUR LIFE

Planeta

To Olivier,
Chloé
and
Olivia,
for
illuminating
all my days.

"Let's look for something good, not in appearance, but that is solid, stable, and most beautiful in its most secret part. That we have to discover. It's not far away, we'll find it, you just have to know where you're reaching out to."

LUCIUS SENECA

The sounds you surround yourself with are decisive when it comes to training your brain and, if you know how to handle them, they can become a decisive tool. For this reason, I have created a playlist that you can use as a complement to the reading of this book and that, I hope, will be only the first of many that you will create later.

Start training your brain!

INTRODUCTION

I had wanted to write this book for a long time. It was partly a personal goal, but the truth is that the main reason I started thinking about it was because many of the people I train in my MindStudio centers started insisting on how useful it would be to have a summary of all the things I tell them during our sessions. They are, after all, guidelines to get them to a better mental place and, although often those who attend them record me or take notes - something I not only accept, but encourage - I was aware that it was becoming more and more necessary to find the time to sit down and write.

To write not just anything, but an approach to all that knowledge that, after years of study and practice, every day I share with other people to help them to live better, based on a brain training that they did not even believe possible.

So, when Planeta showed up at my door, it found a very willing and excited Ana. That gave me the push I was waiting for. This book you are holding in your hands is that compilation, which I thought was so necessary, of everything I have learned and discovered since I have dedicated myself body and soul to neuroscience.

Neuroscience is (finally!) becoming fashionable. If you want me to explain in a simple way what it is, I will tell you that it is the branch of science that

is in charge of studying our nervous system, where the main organ is the brain. It is such a lively science that those of us who work in it discover new aspects on a daily basis, which for some might be exhausting, but which I personally find fascinating. Doing science on a daily basis is a privilege and a responsibility, and in both senses I enjoy it.

The purpose of my research is to bring this neuroscience, which is unknown to many, to as many people as possible, so that they can benefit from its advances as of today. I am interested in simplifying the complex as much as possible to be of help in real time, with no frills, no time to waste.

I have trained the brains of hundreds of people over the past sixteen years, people from many different backgrounds: demanding professionals, elite athletes, students, high performance teams, children or adults with different needs and issues, and of course, my entire family and myself. I have been very fortunate to have this field of science come into my life and to feel that my talents and passion are well suited to it. When your interests and your innate abilities come together, you feel that you are where you are meant to be and that, in a way, what you are realizing is your life purpose.

In the following chapters I will share with you, in a practical and simple way, several of the great mental aspects that affect us and that in so many cases make us suffer. I will show you how to surprise your brain, your mind, because part of the discovery is to see that the path your thoughts take you down is not the only one available. There is always an alternative and, if you take control of your own mind, you will discover that you can change whatever you want.

If there is one thing I have learned and proven over the years, it is the extraordinary ability we all have to change. Our brains have an amazing capacity for transformation, regardless of our age. It has never made less sense that "this is who I am and I can't change".

In these pages you will never read that in order to change you need to "work hard". Whoever says that doesn't know how our brain works. I'll tell you right now: our brain works with a balance between duty and pleasure, between love and fear, between work and rest. If you want your brain to change and improve, the first thing you need to do is to **get it excited** and **convince it** that this change is good for it. Do not threaten it with hard work, as if you were going to give up before you have even started: this training is not only possible, but it is much simpler than you imagine.

If I tell you that no book, no advice, no therapy is going to change your life, you should not be surprised. It's like this. It is not the book that will change your life, but whatever you dare to experience for yourself, physically and emotionally. I offer you the guidelines to do it, the theory that supports it and the practice to get you going: the rest is up to you.

Without emotion, there is no learning or change. Experiencing emotionally is what allows us to change. That is my goal: to make you feel, to generate an emotional change in you as you read. I'm not just going to give you answers and results; I'm going to encourage you to ask questions and, if all goes well, by the time we're done you'll have discovered that the questions are the most important part.

I have decided to take a simple approach to some of the big issues that concern our mind. And yes, I have included scientific information and descriptions of the brain, but that is not the most important part of this book.

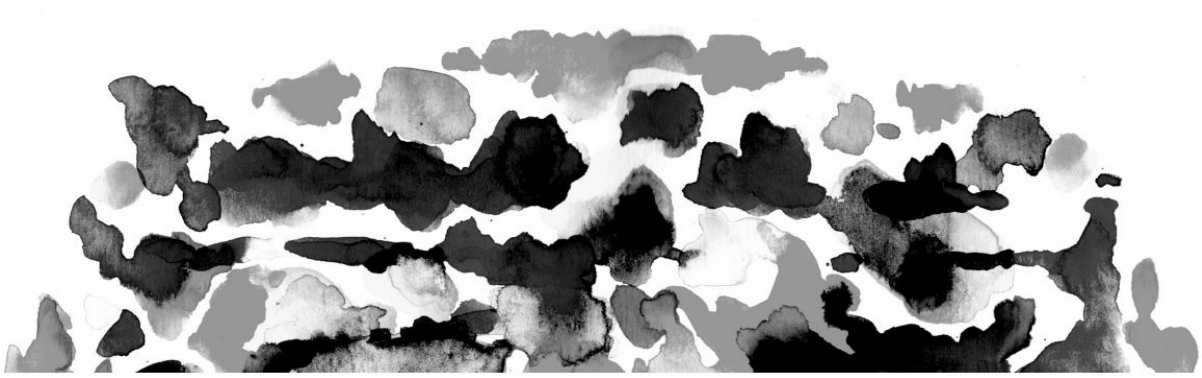
Just as our mind does not follow a linear path, it is not necessary for you to read this book in order. The chapters are designed so that you can look at them in any order you want, so I encourage you to look for those that have more to do with your current moment, with what matters or worries you the most.

Come back to them whenever you need to.

My mission is to make something easy for you that, at first, is quite complicated. I hope this book will become a guide that you can follow and even share with your loved ones.

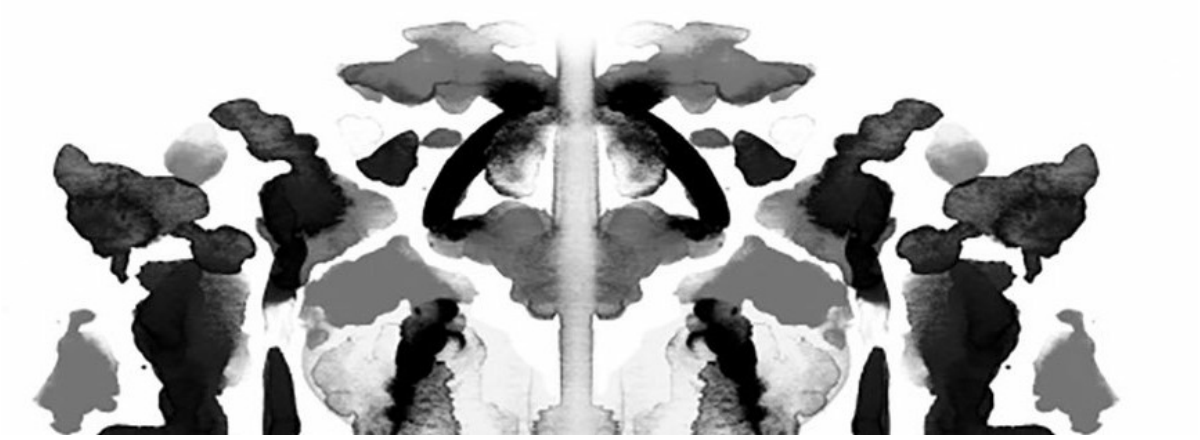
I hope you enjoy it and, above all, that it helps you to live better.

ANA



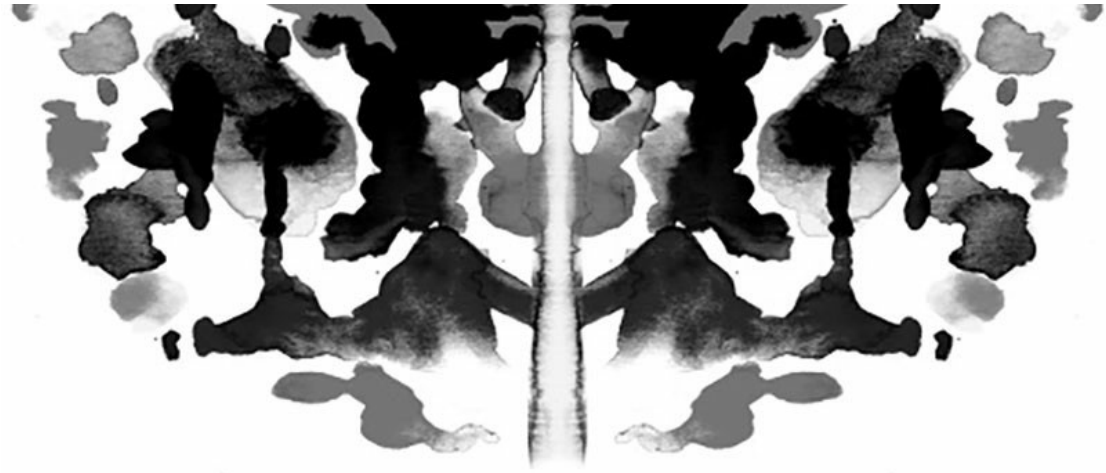
PART ONE

CHANGE STARTS TODAY



1

YOUR VITAL ENERGY: CHOOSE HOW TO VIBRATE



ENERGY: From Greek ἐνέργεια *enérgeia* ('activity', 'operation'); from ἐνεργός *energós.* ('action force' or 'labor force').

1. f. Capacity and strength to act physically or mentally.

2. f. The ability of bodies to perform transformations (by work or by heat) on themselves or on other bodies.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT VITAL ENERGY

Why do you feel good around certain people you don't even know and bad around others? Why is it that after being with certain people you experience well-being and, on the other hand, with other people you feel intoxicated? Why do you sometimes perceive that something is going to happen, even though you can't explain the cause?

The answer to all these questions **is energy.**

I am deeply fascinated by energy. And the first time I realized it was the day of my fifteenth birthday. I think the universe wanted to give me a gift on that date and decided to give it to me in the form of a chemistry class. What a strange gift, isn't it?

That day, just that March 24, a cool day in my native Burgos, my chemistry teacher told us about atoms, those so-called little balls that are the smallest things that exist, their energy levels and how they join together thanks to a dance of electrons to form everything we see. Well, everything we see and everything we are. Because you and I are nothing but atoms with dancing electrons, exactly about seven thousand quadrillion atoms (that is, a seven with twenty-seven zeros behind it). A lot of atoms.

This may not seem so interesting to many people, but for me it caused a kind of spark inside that changed my life. At fifteen years old, I felt like I was a new person.

I realized that a wooden table is a wooden table because the atoms that form it vibrate in a way that makes us see a table instead of a pear. Or that what we actually see is not something solid, but particles that spin so fast that our eye is not able to perceive them. Or that, even though you see yourself with your lines defined, in reality the

Atoms in your body merge with the atoms in the air around you, only they don't mix because their vibration is different. All this, when you think about it, is quite curious.

But I think what really amazed me that day was to be aware that energy is responsible for the fact that I am a woman instead of a tree, for example. Because notice that there is not so much difference between the elements that form us. A tree and me are basically oxygen, carbon, hydrogen and a pinch of minerals arranged by energy.

It is energy that changes everything.

I have an energy that makes my atoms arrange themselves and form molecules that make me a human being, specifically a woman, and a tree has tree energy, which makes its atoms and molecules tree energy.

Years later I studied Chemical Engineering. It was not something vocational, I was driven more by intuition. I knew that I would find something worthwhile there. That something came in the third year, a little late, of course, when a subject with a very strange and very long name transported me back to the magic of electrons, energy and chemical bonds. At last I could study all that at another level of depth. And then the energy blew my mind even more.

I will summarize everything I learned in one sentence:

We are stardust sculpted by energy.

I know it sounds a bit crazy, but it is not. It is science, and the most advanced science we have access to.

Stars were formed by the huge explosion of simple hydrogen atoms that generated the *big bang;* later these stars gave rise to the rest of the chemical elements by exploding, fusing or collapsing.

The great energy that generated that first explosion is the one that links atoms to atoms and is responsible for the existence of everything you see and also what you do not see. Air, rocks, planets, nebulae, entire galaxies, you and me. The whole universe is part of that energy and those atoms.

So, indeed, we are stardust and it has been our lot that energy has sculpted us as human beings. We were lucky, it could have been worse.

And what does this have to do with our vital energy?

Well, everything. Since we are basically air, water and energy, and it is energy that decides how we order ourselves, we can say that we are energetic beings. I also like to call us *vibrating beings,* because we are made up of atoms and electrons that do not stand still, they vibrate all the time.

So much so that this vibration of our electrons generates magnetic fields. That is to say, it produces waves of energy that come out of us. To give you an idea, it is as if the electrons dancing inside our body originate a breeze that comes out of us. This breeze is a magnetic field and can be felt up to three meters around us. In other words, if you pass near me, less than three meters away, I will be moving your bangs with my electron breeze. Figuratively speaking, of course.

That energy that each one of us has inside and that sculpts us is our vital energy.

HOW YOUR BRAIN MANUFACTURES VITAL ENERGY

It is quite possible that, even if you do not know its name, you are familiar with the law of conservation of energy:

> ***"Energy is neither created nor destroyed, it is only transformed."***

So the correct thing to say is that our brain *transforms* energy instead of *manufacturing* energy. Because the amount of energy is what there is, the one that came from the *big bang,* but there are many types of energy.

And now you know that one type of energy generates tables; another, pears; another, trees or people. It is the energy that molds this stardust to build the different realities.

And this is where something sublime happens, which I think was what I intuited when I was fifteen years old and that made me feel that love at first sight. If energy is transformable, it means that we can shape ourselves in different ways, in many ways. We just need to be able to transform our energy to live different realities.

And something else happens. My energy overlaps with yours when we are close. And your energy overlaps with mine. In other words, we transform each other, we shape each other in different ways just by being together.

That is the reason why there are people who transmit good energy to you and with whom, after being with them, you feel more recharged.

On the other hand, there are people with whom the opposite happens to you, it is as if they suck your energy. This happens because interacting with other people makes us exchange energy. When we are close to someone we perceive their energy and this gives us information.

And our brain, that central control of our organism, also receives energy and is capable of transforming it.

Can you imagine how your life would improve if, whatever energy you receive, your system was able to transform it into good energy? Imagine that, even if you have worries, you say something you do not like or feel insecure about something, your system would transform those thoughts and feelings into something positive. That is, it will transform the energy you receive into a positive energy, vitally active and motivating.

Well, imagine it, because you can do it. Science proves it to us. We can influence how our atoms vibrate and transform our energy levels.

Our brain is the generator of thoughts and thoughts are literally "packets of energy". So you could say that there are thoughts that come out of there, go down into the rest of our body and
"dirty" our energy.

When you have negative thoughts invading you, making you feel insecure or charging against yourself, what is your energy like?

On the other hand, after having motivating, happy, positive thoughts..., it is totally different, isn't it?

But we go further. Not only do our thoughts change our energy level, but our energy level also determines what kind of thoughts we have. And here's some not-so-good news. Generating a negative thought requires little energy compared to what it takes to generate a positive thought. In other words, if you're tired, it's much easier to experience negative thoughts. I'm sure you've noticed. When you wake up with little energy or after a long day that ends in exhaustion, what kind of things do you say to yourself? Probably something more negative than motivating. And there is a time of day when we see this very clearly. When you are in bed, when you already have less energy, don't the problems that later, in the light of the day, seem enormous to you?

of the day, they take on a smaller dimension? Well, it is simply a question of energy.

Remember: to generate positive thoughts you need more energy than to generate negative thoughts.

So I encourage you, when you see yourself immersed in a sequence of negative thoughts, to identify that what lies behind it is more fatigue than anything else. You are not seeing things as they are and it is better not to turn it around from that energetic place that is not able to build positively.

Positive thoughts are generated in our brain, in areas of the prefrontal cortex that are more sophisticated. They need more energy to become operational. If you don't have enough energy, you will only be able to turn on more primitive brain areas linked to our survival, which are already pessimistic and negative.

That said, it is clear that having good life energy is the key to connecting more brain areas, generating good thoughts and, ultimately, life satisfaction.

HOW DO WE GET OUR BRAINS TO GENERATE A GOOD LEVEL OF ENERGY?

What I am going to tell you below is part of some very recent discoveries, so I ask you to approach the subject with me with an open mind, willing to be surprised, because sometimes our skepticism is also an enemy, one that makes us wary of too many things.

Our brain does not generate energy on its own, but does so with the help of a central organ in our body: the heart. **Brain and heart work together to transform your vital energy.**

In fact, the energy emanating from your heart is fifty thousand times greater than that emanating from your brain. You can now measure these things. So it is quite accurate to say that:

You are the energy of your heart.

So much so that there are scientists who argue that the heart should be considered, along with the brain, as the great control center of our organism. I agree.

And now we know even more. Of all the emotions, the ones that mobilize the most energy in our heart are love and fear. In this order. Love is the emotion that moves more electromagnetic fields inside us. Which is the same as saying that:

Love is the emotion that generates the most energy around us.

You have to know that when you are feeling love, you are a love energy emitting machine. You give off good vibration, which affects your atoms and their bonds and also your environment.

Have you ever noticed that when you are very happy, joyful, with positive emotions, those around you are contagious? And the other way around too. When you have a bad day and you are filled with emotions of anger or annoyance with the world, don't you find that the people around you become even worse and you enter into a very uncomfortable dynamic?

This is due to the energy you are emitting. To the energy that your body is capable of generating.

And I'll tell you something I want you to remember forever:

Love transforms any type of energy into positive vital energy.

It does not matter that you receive negative, heavy, toxic, threatening energy from the outside. If your heart generates an electromagnetic field around you that vibrates in the frequencies of love, you and your atoms will vibrate in those frequencies of love, and you will be the one who impacts your environment and not your environment on you.

There is no greater electromagnetic field than that which love is capable of generating.

There is no greater vibration of our atoms than that generated by love.

There is no greater impact of energy on the exterior than that generated by love. There is no greater transformation of energy than that generated by love.

If we want to transform our internal energy into the best possible vital energy, we must do it from the maximum activation of our heart, that is, from love.

Okay, all right, but what exactly does all this mean?

It means that you must place love at the center of your life. As I have already mentioned, the two great forces that condition human behavior are precisely the two forces that most affect our hearts: fear and love. I ask you to choose love. I ask you that when you have doubts about which path to take, ask yourself what is moving you at that moment, fear or love. If what is driving you to do something is an attempt to defend yourself or, on the contrary, the motivation to reach a goal that will help you to reach your goal.

to grow. Always choose that which brings you closer to love. That brings you closer to motivation. That brings you closer to the illusion of vibrating for something.

I explain how to do this in your day-to-day life.

1. Love yourself first.
2. Love others.

HOW TO LOVE YOURSELF

If you are going to choose the path of love, you must make sure that path starts with you. We need our heart and brain to emit more vital energy, we need to "vibrate" in the love we feel for ourselves. You cannot expect to love others well if you do not love yourself.

After you, you can love others and you will do it well.

.....

Loving yourself is the most generous selfish act you can do for others.

.....

Self-love and self-esteem (which we will discuss later) alone could be the subject of several books. But right now I encourage you to get down to the practical: how can you increase your love for yourself? Let's look at it from common sense.

YOU LOVE YOURSELF MORE WHEN YOU LIKE YOURSELF MORE

The first thing to do is to look at what you like about yourself. Logical, isn't it? That will connect you directly with your talents. Yes, plural, you certainly have several.

Talents are those parts of your personality that you like and that feel natural to you. What you do well without effort, what you can immerse yourself in because you feel at ease. Talents often bring with them a sense of flow, of serenity, of joy, of ease. What are yours, do you know? If you want to love yourself well, you need to discover them and say them out loud. You need your brain and your heart to hear and vibrate with them.

•••

Discover your talents

If you are having trouble discovering your talents, I ask you to follow these steps:

1. Go mentally **to a moment you remember where you felt pride in yourself**. Close your eyes and connect with that emotion. Ask yourself what you did well in that moment. In your answer, your talents will emerge.
2. **Ask people close to you what three things they would highlight positively about you.** You will be surprised. Our talents are often blind spots for us, but they are often very visible to the people who love us.

> Once you identify some of your talents, congratulate yourself for them, be grateful for them and above all use them and enjoy them.

•••

I like to think that each of us is in this world for a reason. I don't know if you are aware that, at your conception, you won the race against fifty million other sperm, that is, you are one being among fifty million possible beings. And you won. I, at least, believe that there is a reason why we were chosen. I believe that in our talents we find the answer.

In our talents we find our meaning in life.

Find those reasons to display love for you, vibrate in that pride for you and you will be mobilizing a lot of vital energy within you.

YOU LOVE YOURSELF MORE WHEN YOU THINK WELL OF YOURSELF

If you have good thoughts about yourself, you are loving yourself well.

Do you remember that the basis for having positive thoughts is to have enough energy to generate them? When we are tired it is very difficult to do so. In fact, when we are tired we are more pessimistic, we take less care of ourselves and we love ourselves less.

If you want to fill yourself with positive thoughts that fill you with love, you must have the energy to generate them.

And, of course, our lives are full of responsibilities and activities where our energy is drained or tinged with dark color. How do you maintain a good level of positive energy? By making sure you keep your energy balance balanced.

Imagine that your energy is weighed on two pans of a scale. On one of the pans is written "duty" and on the other is written "pleasure".

All the energy that you put in the plate of duty, over time, will be tinged with negative energy, tired energy. In order for that plate not to weigh too much and upset the balance, you must also put energy into the pleasure plate. The energy of the pleasure plate is positive, expansive energy.

The good news is that, even if the energy of the duty saucer weighs a lot, a little weight you put on the pleasure saucer will be enough to balance them.

What I want to achieve is for you to be aware of your energy balance on a daily basis. It doesn't matter if you have days full of "duty" and effort: if you are able to isolate moments of "pleasure", you will be balancing and conserving your energy.

But, be careful, it must be really pleasure energy. That is achieved with activities that we feel like doing and that have no purpose in themselves other than to make us enjoy ourselves. These are what I call *guilty pleasures,* because as we are so used to doing things with a concrete objective, when we dedicate time to something that is only pleasurable without bringing us anything else we tend to feel guilty. Of course, I am not referring to illicit activities, addictive or anything like that. I am referring to those moments that you dedicate to yourself and that cost you effort because they are only intended to give you a good time. Be clear: if you feel guilt, it is

you may find yourself in front of one of those pleasures that do your energy good.

These essential moments of pleasure can come from anywhere: listening to music, playing a sport where you have fun, watching TV for a while, calling friends, lying in bed, listening to something or reading magazines. Whatever it is, as long as it is pleasurable for you and doesn't demand anything from you, just enjoyment.

However, it is important that when you dedicate that time to yourself, you are aware of it and say to yourself: "This is my moment and I allow myself to do it because it is good for me". Spending fifteen minutes watching TV is not the same as spending fifteen minutes enjoying the pleasure of having fifteen minutes for yourself watching TV. The difference is that in the second case you do it consciously and you tell yourself so. And if you say it to yourself, your brain and your heart hear it and know that you are taking care of them. They understand that you know how to give them a break once in a while from so much "duty". That makes your energy go up.

In short, if you like yourself more because you recognize and appreciate your talents and have positive thoughts because you maintain a good energetic level, you will be putting yourself in a place of loving energy vibration. That love for you will get that machine that transforms everything that comes to you into positive energy to start working. And it will do it from a loving place, so your atoms will vibrate in a positive energy that will expand.

And, as I have already said, once you are already loving yourself, it is time to be able to love others.

HOW TO LOVE OTHERS

Knowing how to love others well is not always easy. Sometimes we confuse it with trying to solve the other person's life, with overprotecting them or

with burdening us with their concerns or responsibilities.

If you want to have a good compass to love someone well, do for that person what you do for yourself:

1. **Help her see her talents.** Tell her what you like about her.
2. **Transmit positive thoughts,** transmit expansive energy.

If you do these two things, you will be helping her to increase her love for herself. You will be helping her energy transformation machine work better. And in turn, that person will love others better.

It is a chain, do you realize? An expansive chain that profoundly affects the improvement of vital energy, yours and that of all the people who hang on it.

And now I tell you something very curious that happens when we do this. When we love ourselves and extend this love to others, our heart and brain begin to create magnetic fields similar to those of these people. This is called *synchronization.*

When a group of people are feeling emotions of tenderness and love, an observable fact takes place: the electrocardiogram and the encephalogram of each one of them begin to resemble those of the other people. That is, they begin to match each other's rhythm and their graphs resemble each other. A very powerful positive energy is created.

Surely, if you have ever participated in a meditation group or been to a concert, you have noticed this synchronized collective energy. When many people together "vibrate" for the same thing, their energy is synchronized and very high energetic levels are reached. Why else would you listen to your favorite band at a concert, squeezed in a crowd, instead of listening to them quietly and with more quality at home with headphones? You want to see them up close and personal live, of course, but you also reach a higher level of energy when you listen to them live.

extraordinary energy level that is a consequence of the synchronization of common energies of that multitude.

That is why it is so powerful when groups of people, even if they are far from each other, unite around a common goal promoted by love. Mass prayers, group meditations, groupings of people united to support a good cause across the planet are examples of transforming energy into positive energy that affect us all. That sum of energies, that synchronization of energetic vibration, is very powerful.

Don't forget that we are all connected by atoms and energy. When energy changes, we all change.

Therefore, connecting with the best of ourselves is a very generous act towards others. What we radiate "colors" our environment and those around us.

Let's do ourselves a favor. Let each of us discover our talents, let's find the meaning of our life behind them and let's take care of our energy so that it expands. Let us love ourselves more and from there love others.

IF YOU WANT TO KNOW MORE ABOUT BRAIN AND ENERGY

Our brain is an electrochemical organ, that is, it functions with chemical energy and electrical energy. This energy is produced when our neurons talk to and connect with each other to form neural pathways.

You may have heard of chemical energy: neurotransmitters such as dopamine, serotonin or noradrenaline may be familiar to you, although they are only a few among many. The amount of these

neurotransmitters present in our brain varies constantly, either naturally or through chemical influence (with drugs that can inhibit or increase their production).

However, I think it is possible that you may not have heard of brain electricity or, if you have, it was only in passing. And that's despite it being the great current field of study in neuroscience. Brain electricity is what is produced when neurons *talk* to each other.

Neurons communicate through small electrical impulses that can be measured and that we call brain waves. These waves have different types of frequency, i.e. some are faster and others are slower. If they are separated through filters, we can observe them clearly. To do this, we need an electroencephalogram (EEG) that reads the brain's electrical activity through sensors placed on the scalp: these are the ones that allow us to see the electrical potentials in the form of waves.

These brain waves, or this way of *talking to each other* that neurons have, have a lot of weight in how we feel, what we think and how we act. **And now we know that it is much easier and faster to improve our brain function if we work with these waves than if we work with the chemical part of the brain.**

Brain electricity is moldable, so if we influence it, we can change our brain structures. It is a concept known as *brain plasticity:* the ability of our brain to change both the internal structure of neurons and the activation between them and the neural pathways they build.

We feel good when our brain produces the right electricity according to what we want to do.

There are brain waves that make it easier for us to concentrate; others help us to relax; and others allow us to sleep, for example. The greater or lesser ability of our brain to move between these levels of waves determines our well-being and our brain optimization.

If we want to concentrate, we need our brain to have the ability to leave a specific state, such as dispersion, and begin to generate the electrical waves necessary to obtain that concentration. If we want to sleep, we need our brain to be able to switch from the brain waves of wakefulness to those that allow us to close our eyes and fall asleep without paying attention to our surroundings.

There are five types of brain waves according to their frequency, which is measured in cycles per second or Hertz (Hz).

1. **Hybeta waves (above 30 Hz).** They correspond to a very intense neuronal activity and are related to **stress and emergency situations.** When the predominant frequencies in our brain are *hibeta*, we feel stressed and agitated.
2. **Beta waves (from 12 to 30 Hz).** These frequencies are present when we are attentive, solving daily tasks or problems, and when we are concentrated. They denote **intense mental activity.** In their lower hertz range, the body is still, but the mind remains focused.
3. **Alpha waves (8 to 12 Hz).** *Alpha* frequencies are related to **states of relaxation.** When these frequencies predominate, you feel calm, but not sleepy. You can experience this when you are watching TV or in bed, resting without falling asleep. We have bursts of *alpha* waves when we relax after intense exercise: this is why we tend to feel so good after sports. They are also present when we stop to

rest after having put a lot of effort into something. The *alpha* frequencies increase naturally when we take a walk in nature, when we are by the sea or when we listen to relaxing music.

4. **Theta waves (3.5 to 8 Hz).** *Theta* frequencies are related to **deep calm, relaxation and immersion in memories and fantasies.** Also in the REM sleep stage, during which we dream. When these frequencies predominate, we are in a kind of sleepy state in which we are not fully aware of whether we are awake or asleep. It is a state of great creativity where we receive information from our unconscious. These frequencies are associated with states of consciousness and superlearning. For most of us it is difficult to voluntarily enter *theta* frequency states. It is achieved through deep meditations and brain harmonization trainings especially directed to the production of these frequencies.
5. **Delta waves (from 1 to 3 Hz).** *Delta* frequencies are the frequencies of sleep. Those that allow us to pass beyond the waking state and fall asleep. They are the ones with the highest wave amplitude. It is the state we enter when we are experiencing deep, restful sleep, which allows the brain to recover, rejuvenate and balance the mood. Among other things, *delta* frequencies are associated with serotonin production.

We feel good, with balance, emotional well-being, good mood, ability to concentrate, good energy and quality of sleep **when our brain is flexible to switch from one type of frequency to another depending on what interests us at any given time.**

This is something you train. I know because I do it every day in my MindStudio centers, but you can start doing it yourself with what I tell you in the following chapters.

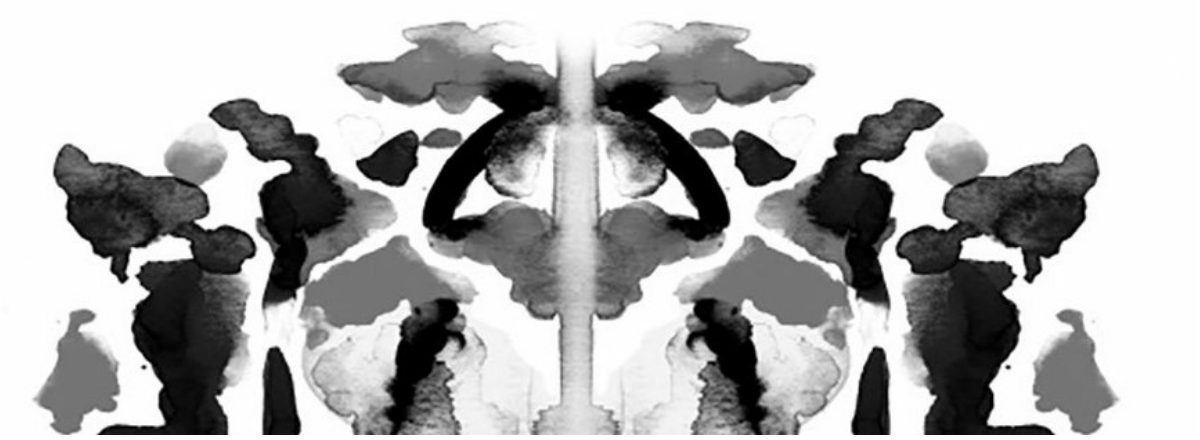
In our case, through an electroencephalogram and specific technology we make the brain work so that it learns to go to optimal states of brain frequencies and knows how to move by itself from one state to another. These are non-invasive and pleasant trainings that can be done with anyone, from children to adults, and are useful, in general, for anyone who wants to exercise their brain and develop their mental *muscles.*

Just as we train our body to be stronger and prevent injuries, we can train our brain to strengthen it and get the best out of it.

When your brain learns to move between wave frequencies at will, you experience very satisfying sensations of efficiency and mental agility, calm and serenity. If our brain is able to *surf* those waves and move from one to another with ease, we will be using our brain capacities very well. So let's get down to business.

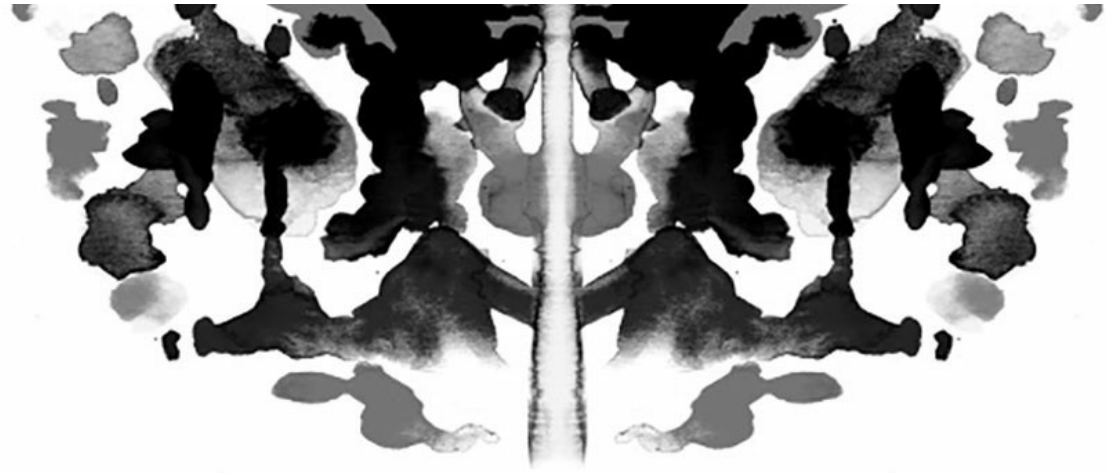
On a daily basis, we live under a mixture of all these waves, but we can teach our brain to make some of them predominate over others depending on what we need at any given moment. If we need to concentrate, we will want our brain to *surf beta* frequencies, but if what we want is to have good ideas and be creative we will need to move between *alpha* and *theta* frequencies. This ability to *surf* between the different wave frequencies is acquired, trained, and in the following pages you will discover it.

We are facing a new era of knowledge about our brain, and we are going to dive into it.



2

FEAR: TURN IT INTO IN YOUR TOOL



FEAR: From lat. *metus.*

1. m. An anxious emotion that is difficult to control caused by something that may cause physical, emotional, property, etc., harm. Both the object causing the fear and the possibility of harm can be real or imaginary.

2. m. A feeling of suspicion or concern that some adverse event will occur.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT FEAR

Martina came to see me in Madrid from Barcelona because she had heard me speak at an interview and, according to what she told me, she was very surprised by my lack of fear. She was facing a professional change that meant an important promotion in her career and it scared her a lot, to the point that she had started to self-boycott, getting sick and missing work, in order to delay the moment to talk about it directly with her boss. She wanted me to teach her how to be fearless and take on this new position. Martina was a top manager in a pharmaceutical company and this promotion would put her in charge of twelve hundred employees in Portugal and Latin America.

I am a helicopter pilot and there are emergency maneuvers that we pilots have to practice regularly to keep us used to them. This is what I was talking about in the interview that seemed to impress Martina so much. One of these maneuvers consists of testing how to make an emergency landing in case you run out of engine. To do this we have to turn off the engine and descend in free fall while the helicopter blades rotate on their own due to air resistance. This produces what is called an autorotation of the blades, which slows down the fall. At the last moment, just a few meters above the ground, you switch the engine back on and take flight.

The moment of free fall is very special: you feel adrenaline, a lot of concentration, you hear the air scraping the blades and a feeling of controlled vertigo. When I talked about these maneuvers in the interview, I did it for

explain that there are times when you don't have time to think, so you have no choice but to trust what you have learned, stay alert but calm, and trust yourself. In short, let go of rational control and let your mind and body replicate what they have practiced. Every time I turn off the engine in the helicopter, I take a deep breath and then let go.

But Martina was wrong about one thing: I do feel fear. Or at least I have felt it many times, especially in the beginning.

I had the same doubt Martina had about how not to be afraid some time ago. I will tell you how I learned to relate to him in a different way.

There was a time when my husband and I ran a remote hotel in Chilean Patagonia. The story of why we got there to run a hotel is a long one to tell, but it basically responded to a dream of living in a place of wild nature, enjoying a couple of sabbatical years away from our careers and doing something totally different from what we were used to. That, along with the coincidences of life, meant that we ended up running one of the top ten remote hotels in the world, with one hundred and fifty employees (who worked and lived in the hotel), twenty-five horses and ten gauchos in that corner of the world bordering Tierra del Fuego. A fantastic experience, but not without challenges, big challenges. After all, neither of us knew anything about hospitality, except what you see as a customer. We had to learn very quickly and not without many stumbles.

Among the best memories I have of that time are going horseback riding or taking long walks with "illustrious" travelers. Travelers from all over the world came to this hotel with a long waiting list, many of them very well known. We had movie directors and producers, film directors, directors of

museums, writers, famous businessmen and businesswomen, artists and various adventurers. Apart from my duties as hotel manager, which were numerous, I decided to go out as a guide with many of the travelers. I felt fortunate to be able to converse with people of the education, experiences and human qualities that came our way.

He would take them horseback riding in the pampas, fishing for salmon in the rivers of Torres del Paine or drinking mate with the gauchos of nearby ranches. And, by the way, I took the opportunity to have the best conversations I had ever had. Liking the human dimension of people as much as I do, I did not miss the opportunity to ask many questions. And I asked a lot about fear. It amazes me to know where people get their courage and drive from, people who go far, who take on huge responsibilities, who are leaders of ideas and who believe in them when no one else does. Being a leader means facing many fears of the unknown. Well, the answer was unanimous. **They all felt fear before launching into their projects, their work, taking on more responsibility or inventing something.** But, despite that fear, they took a step forward in their ideas. They did as I do when I turn off the engine of the helicopter: take a breath, trust in what they had learned, let themselves go, and many added something else: they were excited in advance about the result they could achieve. Well, in the helicopter I also put on the positive image that it is going to work out well, otherwise I would never turn off the engine!

One of the best lessons I learned from these illustrious travelers from Patagonia that I admired so much was to ratify that we are all the same. We suffer, we are scared, we enjoy, we are moved in the same way. But when it comes to overcoming fear, what makes the difference between some people and others is not not feeling it, but the ability to endure the discomfort that fear produces before launching into the unknown. The

Fear cannot be overcome, fear cannot be eliminated, fear must be lived, it is the gateway to do something new. You have to go through fear.

"I learned that courage was not the absence of fear, but the triumph over it. The brave one is not the one who feels no fear, but the one who overcomes that fear."

NELSON MANDELA.

Fear is a very uncomfortable feeling, let's not fool ourselves. Not for nothing is it our brain's way of telling us that something is dangerous, but you know that our brain is very exaggerated, it sees everything in terms of survival. And, of course, how can we not listen to this voice? What if it is right? It's not easy to disobey those kinds of warnings. In fact, there are times when we clearly have to heed what it tells us so as not to be reckless and put ourselves in danger. But we agree that accepting a job promotion, or starting a new project, or separating from your partner or moving to a new place to live is not life-threatening, and yet our brains can make us see it that way.

There is an image that helps me to see this uncomfortable leap from something known to something unknown. It's like going for a walk in the countryside and coming across a stream that you have to jump over. You have to jump from the stone on one bank to another stone on the other bank, because there is no other way to continue the journey.

There is a moment when you have to gather your courage, jump off the stone where you are and stay suspended in the air before putting your other foot on the new stone.

That moment is very scary. You're no longer touching the familiar and you haven't reached the other situation yet, you're literally in the air. That's what it feels like when you make a change: a feeling of not being anywhere familiar. And it's true, you're in the air, you're jumping from one place to another and that emptiness is uncomfortable.

But, notice: there is something wrong with the intensity with which we feel fear. I like to play down the idea that our brain is a perfect machine. Here it is not. It still lacks evolution. We will be mere primates in the eyes of the human beings of thousands or millions of years from now (if we have not become extinct before, let's be optimistic).

These more evolved humans will not be under the constant threat that a tiger may come and eat them as it still happens to us. With few exceptions, the truth is that the vast majority of the population no longer lives exposed to predators, the advanced society in which we find ourselves left behind the danger of the tiger chasing you centuries ago, but our brain has not yet realized it. We have to give it more time to understand: as I say, it is not perfect. In a few hundred thousand more years it will know. In the meantime, we still have to put up with the exaggerated fear produced by changes that may be important, but that do not threaten our lives.

HOW OUR BRAIN MANUFACTURES FEAR

So let's start from the fact that our brain makes us see dangerous situations where there are none. It produces fear as soon as it gets scared. And when does it get scared?

Well, when we are faced with something new. Novelty is always a source of cerebral restlessness. You don't like it at all.

Whenever you are about to do something new, your limbic brain system scans the situation and searches its hard drive to see if you have done it before, if there are any references. When there are none, the amygdala "lights up" and sends a warning message. Its message is: "You must be prevented from doing that at all costs". How? By making you feel fear. Fear is nothing but a way of telling you that what you intend to do is not known, you cannot foresee the outcome and, therefore, it is better to avoid it.

Putting yourself at risk means launching into something that you don't know if it will turn out well. If it goes wrong, the initial risk will no longer be a risk, but will have become a fact. That's why you have **to weigh beforehand whether that risk has great consequences or not, whether it's worth it.** In my experience, the negative consequences of doing something, as long as they do not endanger your physical integrity, are usually not as great as what you imagine before doing it.

You don't always win, it's true, but daring to do something and living that experience is a benefit in itself.

Also, we often underestimate the ability we have to back out when something doesn't work. You can try something and if it doesn't go as expected, go back. **Life is not usually black and white: there is a range of very interesting grays to move through, but our brain doesn't know it, or doesn't know it *a priori*.** We have to educate it to be able to see it.

The brain's fear mechanism is so ingrained in us that it works in a lightning-fast manner. Our amygdala (actually, our amygdaloid nuclei, located in the parietal lobes, just above our

our ears), at any warning signal, reduces the blood flow to our frontal lobe, that is, to the control center of reflection, awareness, creation of solutions, perspective taking. **When we feel fear, our ability to think clearly goes away.** We get into a tunnel of thought and we only see what is in front of us, we do not find alternatives.

It happens, therefore, that your brain, instead of having the time to say to itself:

"This is new, but let's reflect on whether you have skills that will serve you well to do this successfully" (something your left frontal lobe would say), it is said:

"This he hasn't done before and I don't know how it's going to come out, it may kill him, don't let him do it" (something your amygdala and its nuclei say). And, unfortunately, the amygdala usually wins.

There are people who have a damaged amygdalin system and do not feel fear even in reckless situations where it is okay to feel fear. This is the case of people who take excessive risks and endanger their lives because they do not connect their fear brain circuit correctly.

And then there are ranges within this generation of fear. If during your upbringing and your experiences you have fed your brain to be frightened by novelty and not to resist fear, you will be a person who is much more easily frightened and has less tolerance for the discomfort of fear. And your brain will continue to feed this back to you, generating more and more fear.

It is good, therefore, to resist fear. If you don't, your world starts to get smaller and smaller. Your brain becomes more intolerant of novelty and will prevent you from developing in new ways.

THE TWO GREAT FEARS WE BRING WITH US

FACTORY

Let's go back to the case of Martina, our manager who was about to lose the job she had worked so hard for because she could not cope with the fear of change.

At this point, having treated hundreds of people, I have no doubt that our fear is directly proportional to how important something is to us. I'll make it easier for you: the more important it is for you to do something new, the more fear you will feel.

In this way, I identify the fear I feel in front of something as a sign that it matters a lot to me. That it will develop me and take me to a place worth exploring. Even regardless of whether it succeeds or not. Attempting breakthroughs always makes you grow.

Fear is the signal that announces that something will take you to a new place.

But then, why would a woman like Martina, tremendously talented and with proven experience, be afraid to take a step in her career that she knows will mean achieving what she has always strived for?

Well, because, just like you and me, she has two innate fears inside her. They are lodged in her unconscious brain, hidden:

1. The fear of not being enough, of not measuring up.
2. The fear of not being loved.

These fears respond once again to our primitive brain's need to protect us. This part of our brain watches over our

survival. I will explain how they work.

FEAR OF NOT BEING ENOUGH

The fear of not being enough, of not measuring up, is an innate fear in all of us. In you, in me and in my "illustrious" travelers in Patagonia. In all of us without exception. In the origins of the wanderings of human beings, whoever did not show a sufficiently valuable skill for the group was pushed aside and died. Human beings have an innate need to measure up to the peers we relate to. We are programmed that way.

Moreover, in our society, from our childhood we are accustomed to comparing ourselves with others. School grades are an example of this. Rankings are a way of positioning ourselves in relation to others. We adopt from our first years of life the comparison with our peers as something habitual that reflects the image of how good and apt we are. It is no wonder that the fear of not measuring up and not being good enough is so ingrained in us.

We worked on this fear with Martina. Indeed, this was a big fear that paralyzed her. What if she didn't do this job well? What if she had been a very good manager with Spanish teams, but not with international teams? What if she wasn't really that good and everything had happened by luck? What if she wasn't up to it? What if...? What if...? What if...? When your brain is afraid, your amygdala (the fear coordinator) is going to bombard you with hundreds of "what ifs". It's always going to do it, so we have to stop it in its tracks and take control.

As we talked about all these issues, she herself was dismantling these fears. Rationally, it didn't take long for her to realize

that they were, in fact, unfounded. He had already proved his worth many times and also his ability to cope with adversity and find solutions. However, he still felt that uncomfortable feeling inside him, in a physical way. And that is normal. We can dismantle our fears rationally, but because they are so ingrained in our system, we have a harder time overcoming the physical consequences such as stomach pain, blockage, sleeping badly or feeling distress. These are very deep fears in the human being.

That is the reason why you can talk to someone and "overcome" that fear in a rational way and, however, go to sleep and see how it comes back to you and you are again a sea of doubts. Remember: you don't overcome fear, you go through it. It is important that you know where it comes from, but it will not go away. If you go ahead, you will have to do what scares you while feeling fear. Only in this way will you overcome it, going through its door and getting to the other side. Do it with the fear of not being enough, of not measuring up. Remind yourself that rationally you have already overcome it, now you need your body to realize it. Breathe, trust what you know and flow, see what happens. I'm sorry to tell you the end of the movie, but I already tell you that when you throw yourself into your fear, it becomes smaller. You dismantle it.

FEAR OF NOT BEING LOVED

This is an innate fear in human beings that makes us need each other and establish bonds of love and protection.

If we did not need the love of others, we would not establish attachment relationships. What a shame, isn't it? But of course, this fear of not being loved does not have to be pathological. Sometimes we are not loved and nothing happens. Not everyone can love us. However, at the basis of the psychology of

We all have a need for protection and love. From the moment we are born we depend on it. If we had no one to take care of us from birth until we could fend for ourselves, we would die.

This is not lost on our amygdala. It deploys its radar to to evaluate whether we are loved. And it does so from the moment we are born. During our childhood, we adopt attitudes and forge our personality based on what we see pleases our parents or caregivers. Our brain identifies that if we do what our caregivers like, they will love us and therefore take care of us, something indispensable for our survival. Sometimes, not being sure that we are liked, what we demand is to get their attention, to be seen, lest they forget that they have to take care of us. In some cases, in childhood we adopt the role of responsible son or daughter because that is how we see the adults who take care of us happy, and other times, especially when there are several children, we take on the role of rebels, so that we will be seen. If we are seen, we are taken care of; if not, we may be forgotten, or at least that is what our amygdala thinks.

We do many more things than we think we do to be loved. Fortunately, this fear tends to diminish as we get older. When our brain realizes over the years that we don't die even though not everyone likes us and not everyone loves us, it relaxes. This is a liberation.

Let's see how Martina's fear of not being liked affected her. What does it have to do with whether or not to accept this promotion? Well, it has a very direct relationship.

We get used to being accepted, to being loved for the way we are. When that is altered, for example, by changing jobs, we are no longer sure that we are worthy of love. Deep down, Martina had a

She was unconsciously afraid of no longer being loved by her loved ones if she changed, if her identity changed. Added to this is the uncertainty of whether she will be wanted in the new place: will her employees in Portugal and Latin America want her? For her amygdala this is too great a risk and, therefore, she will do everything in her power to avoid taking it.

In view of this, we did an exercise with Martina to identify her affective world outside her professional sphere. She was able to connect with the existence of her constant emotional core that was not endangered by this change. She was able to put measures in place so that, despite the new travel and workload, her relationships would remain safe. It was obvious to her, but it wasn't until she identified it concretely that she could calm her brain.

Our brain needs us to remind it of things, to take the trouble to show it the concrete aspects that can reassure it.

Once he acquired this security, he also learned to separate his actions from the reactions of others. We cannot control whether others approve of what we do. We expect the people we care about around us to approve of what we do, but it's not always possible, and that's okay. Being able to free ourselves from the burden of always being liked and liked by everyone is a powerful conquest.

It does not mean that we do not care about others, it does not mean that we should not strive to do good around us. It means that, if we make sure that we act according to our values and with good intentions towards others, that is where our responsibility ends. How others accept it and whether they understand it or not is no longer up to us, it depends on how they are.

When you understand this, especially when you feel it within yourself, your fear of being unloved becomes much healthier.

Martina was in great need of overcoming this fear. Like many people, especially many women, there is a desire, or rather a need, to do things in a way that is good for everyone around us. And this is simply not possible.

The last thing we did with Martina was an exercise that will also help you to overcome your fears and calm your amygdala. Let me explain it to you. Its action on your brain to reduce fears is very powerful.

•••

Trick your brain

Remember that fear is a product of your brain identifying that something you are about to do may put you in danger. It is the unknown and the possible fatal outcome that causes your system to go into alert mode and "disconnect" the areas of reflection, the search for solutions, creativity and perspective-taking of the prefrontal lobe.

So, if we could assure your brain that nothing will happen to you, in fact, that you will be happy with that step,

Would his attitude change and not scare you? Well, absolutely yes. If we are able to make your brain stay calm,

you will feel uneasy about change, but not paralyzing fear.

So, let's show him that he is safe and that he will have a happy ending. How do we do it? The technique that has given me the best results over the years is the following.

Visualize that what scares you will have a happy ending.

Here is an example of how Martina did this exercise. From a comfortable seated position, in a calm atmosphere, I asked her to close her eyes and to visualize herself first in a work situation that she had already experienced and in which she felt especially proud of herself, satisfied with something she had done well. Perhaps a successfully completed project, an extraordinary achievement by her team, the first thing that came to mind. I asked her to become sensorially immersed in that situation. To try to see the details of that moment through his senses, what he saw, how he moved, what the light was like, the temperature, what kind of energy he had inside him. I asked her to stay there for a few minutes, breathing calmly and deeply, enjoying the sensation.

Then I told her, with that same energy, to visualize herself as the new director of Spain, Portugal and Latin America. I asked her to imagine herself in an environment surrounded by people from her work, to visualize new faces and to see herself in a confident, happy, empowered attitude. In that environment, I asked her to recognize herself having conversations with different people, pleasant conversations, with her smiling and serene. She also visualized taking planes to Portugal and Chile (places she already knew) and imagined herself having a good time, enjoying the places. I asked her to stay taking a few deep breaths while she wrapped herself in those situations that she was building in her mind in detail. I asked him to

I saw him smiling, with an upright, confident posture. After a few minutes I told him to open his eyes slowly.

As is very common after doing this exercise, when Martina opened her eyes her features had changed, she was more relaxed, her gaze was brighter and the room was charged with a more serene energy. This happens because, as we visualize ourselves doing things well, enjoying ourselves and with confidence, our system relaxes.

What has been discovered with neuroimaging, through functional magnetic resonance imaging, is that when we imagine something very clearly, using all our senses, we deceive our brain and it believes that this situation is really happening. What is seen is that the mind activates the brain areas associated with what it is visualizing, even though it is not really happening.

Our brain is able to activate its motor areas when we imagine in detail that we are playing an instrument or performing a sport, for example. This is widely used in high-performance sports. Elite athletes and sportsmen and women now work with visualizations of movements to reduce physical wear and tear while perfecting technique. Your brain simply does not know whether the arm movement in a tennis serve that you are visualizing is actually happening or not.

It is the same with feeling safe. If you mentally move yourself to a situation in which you felt safe and recreate those feelings in yourself, your brain calms the activity of the amygdala and "manufactures" safety.

When Martina opened her eyes, her brain believed that she had already been in the situation of being an international manager, of having done it successfully, of getting along well with her new colleagues and of having gone on trips where she had a good time. All this from an emotion of pride and security, which is the first she visualized and which she already had inside her because she had experienced it before.

What we are doing with this exercise is not just telling our brain "Everything is going to be fine", but showing it that everything has already been fine. We have created a new emotional memory that is stored in our hippocampus. Suddenly, we have moved our brain from a state of alertness to functioning more optimally and fully. By relaxing our brain's alertness system, the hippocampus allows our prefrontal and frontal lobes, the areas of our brain that allow us to reflect, analyze, search for solutions, gain perspective and take action, to connect.

That is why, after doing this type of exercise, the feeling that comes over you is one of empowerment. Of having perspective and control over the situation.

But there is a fundamental key to this exercise and that is that it is a sensory exercise. You are leading your organism to experience what it feels like when that situation that scares you has a happy ending. It is important to record those sensations in you and appeal to them when you need them. Just close your eyes and go back to those images you have already created.

In the "dark night" of fears that often haunt us, especially when the day is over, it is quite possible that your head,

directed by your amygdala, bombard you again with "What if...". The way to cope with it is to tell it, "No, wait, if it's going to be okay, look," close your eyes and go again to this visualization.

Don't forget to see yourself enjoying yourself in it, smiling and positive emotions are the best impulse for your brain to record that memory and want to take you to it.

So, if you want to overcome the fear of doing something, imagine how it feels to have already done it successfully.

•••

OUR BRAIN AND FEAR

Fear in our brain is activated on the axis of the amygdaloid nuclei, the hippocampus and the prefrontal lobes. When we are afraid, what happens there is that our normal functioning is altered: the amygdaloid nuclei block the hippocampus and the prefrontal lobes. In a way, we could say that we "forget" about them. And this is terrible, because it is precisely these structures that can bring us out of the paralysis of fear.

The hippocampus could combat this feeling of fear by providing us with memories and stored emotions that can give us security; the prefrontal lobes, giving us the necessary wisdom for reflection, analysis of the situation and the actions to be taken to face it.

Fear, by blocking a large part of our brain function, generates alterations at a psychological level, but also at a physiological level.

This speeds up our heart and the blood flow that irrigates some areas of our body (those most necessary for survival), which inevitably slows down the irrigation of other organs that the brain considers to be the most important.

"less essential". This affects, for example, our digestive tract. **The connection of the brain with the intestine via the vagus nerve is clearly affected in situations of fear. This is** why people who suffer from sustained fear often present alterations in their digestive functions, which materialize in the form of allergies, intolerances, poor digestion, inflammation, irritable colon, etc.

Fear also causes the neurochemistry that our system releases to be dominated by stress; as you know, cortisol is the hormone that predominates in stressful situations, and high levels of cortisol over time are very harmful to us physically.

But what I want you to know is that we can prevent our amygdala from "turning off" other brain areas, the relevant ones at that moment, when we feel fear. It doesn't have to, but if we want it not to turn them off, we have to make an effort on our part.

We have to fight to keep the prefrontal lobes active, because they are the part of our brain that reflects, takes perspective and gives us solutions. If the prefrontal lobes are working, you will feel restlessness and fear in the face of novelty, which is healthy and normal, but it will not block you. You will find the strength to take a deep breath, trust yourself and move forward to overcome this fear.

The most recent discoveries in neuroscience show us that a good activation of the left prefrontal (brain area above the left eyebrow) allows you to face fear with resources, more security and determination. It makes you think more positive and optimistic thoughts and you are able to recognize in yourself the tools and talents you have already used in the past to cope with unsettling situations. In short, instead of scaring you, it pats you on the back and says, "Trust you, you can do it." It's the way to feel comfortable in the discomfort of fear.

In our brain frequency trainings at MindStudio we activate this left prefrontal to function in *alpha* and *beta* frequencies responsible for optimistic, rational, goal-oriented, serene, organized and task-prioritized thinking. When your left prefrontal functions harmoniously in these frequencies, challenges become easier. You notice how fear does not invade you, but a serene alert that you must pay attention, but from an emotion of security and confidence in you. From all the people I have treated, I can say that left prefrontal training reduces the innate fear of not being enough, of not measuring up.

In recent months we have also discovered the importance of training not only the left prefrontal area, but also the right prefrontal area in fearful situations. The work in this area proves to us that people are able to ask for more help, relate better to their environment and learn from it, as well as lean on others to face their fears. My experience shows me that this prefrontal helps us to overcome our second innate fear of not being loved.

Everything I have explained here shows that neuroscience presents us with shortcuts to prepare our brain for fear.

We can teach him that, regardless of our amygdala wanting to "unplug" our more sophisticated brain areas, we are able to help him through visualizations and prefrontal brain training so as not to get blocked.

The visualization exercise we did with Martina also activates both the right and left prefrontal cortex.

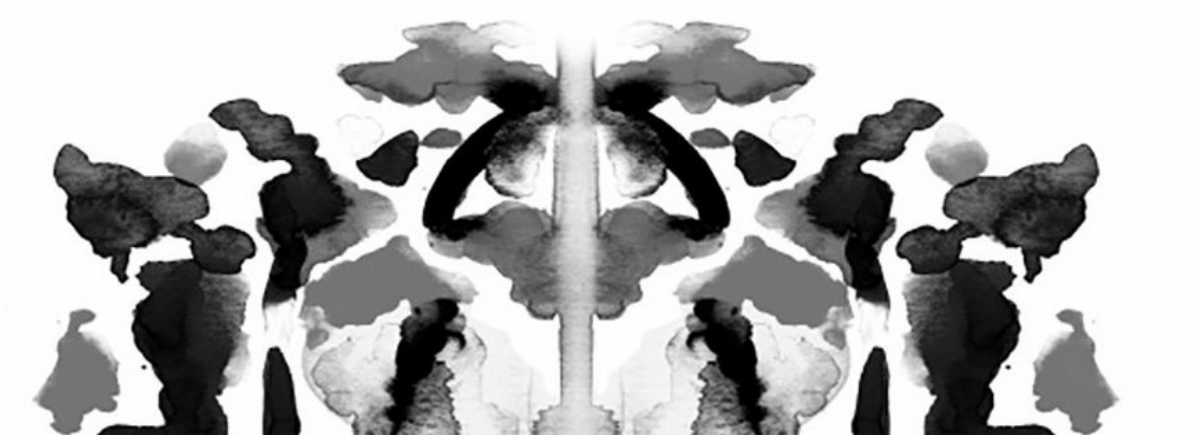
We also gave Martina five frequency harmonization training sessions and with great joy I can say that upon her return to Barcelona she took on her new job with determination and has now been in charge of Portugal and Latin America for four successful years in what will surely not be her last promotion. When she feels doubts or restlessness creep in again (which happens to all of us), she continues to do visualization exercises or reinforcement sessions at MindStudio.

With the passage of several hundred or thousands of years, the human brain will become more perfect and will activate these brain mechanisms on its own in the face of fear, I have no doubt.

But in the meantime, don't panic, fear is part of our life and you can calm your brain.

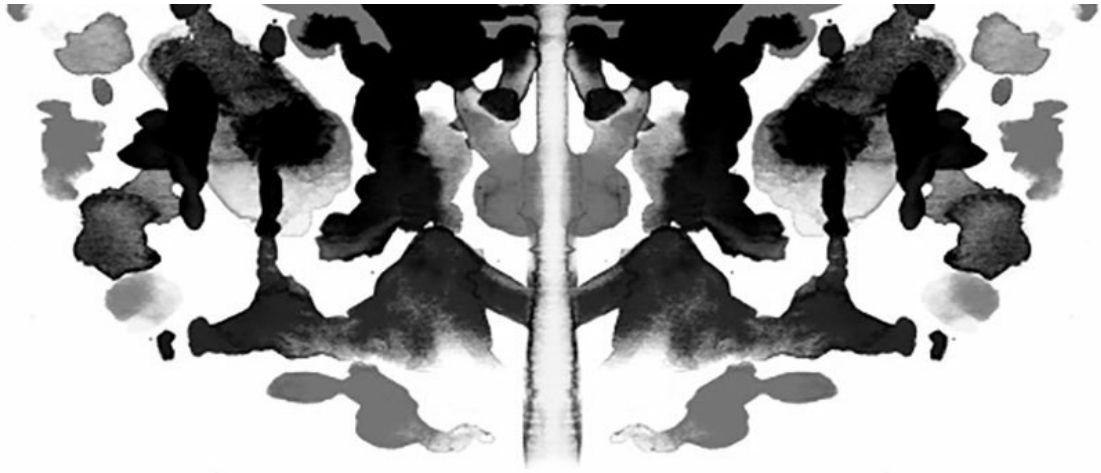
Fight for your comfort within the discomfort of fear and move on.

The life that develops you begins by challenging and stretching your comfort zone. Let fear be the signal that tells you you're on the right path and discover what's on the other side of it.



3

ANXIETY: THE FEARFUL CHILD IN YOUR BRAIN



ANXIETY: From lat. *anxietas, anxietatis.*

1. f. Quality or state of the Latin adjective *anxius,* 'anxious', 'anxious'.

It is related to the verb *angere* ('to constrict', 'to oppress'), from whose root come *anguia, angina, angosto, angustia* and *congoja.*

WHAT WE TALK ABOUT WHEN WE TALK ABOUT ANXIETY

After asking myself many times what would be the best way to approach this subject, I came to the conclusion that there is nothing that illustrates a general reality as much as the small particular realities that make it up. Therefore, it seems to me that the first step in understanding what anxiety is is to take a look at the ways in which it can present itself, at many of the profiles of those who suffer from it.

So, first of all, let's look at some examples:

Paula came to our MindStudio office on the recommendation of a friend. Her words spoke clearly about the difficult situation she was going through:

-I don't know what your treatment consists of, but I have nothing to lose," she said. I have done all kinds of therapies and I am desperate. I can't stop thinking: my head is like an engine that generates worrying thoughts continuously, it doesn't let me rest, I have anxiety all the time. I only feel calm when I get into the sea with my surfboard, because when I have to be aware of the waves, everything else shuts down. I would give anything to be able to live with a sense of calm.

Paula is a young woman in her late twenties. She has been a bright and determined student who has completed her studies between Spain and the United States. After graduating, she quickly joined a large international company with offices around the world.

That is, objectively, everything is going well for Paula. She herself is unable to identify compelling reasons why her mind continually bombards her with thoughts that worry and distress her. After talking to her, we discover that she has been this way since she was a child.

•••••••••

Sara is a woman in her sixties who is going through empty nest grief because her daughters have gone abroad to study. To make herself feel better, she has taken up watercolor painting again, a great hobby she had abandoned during the years of raising her daughters.

Sara is a very vital, cheerful and enthusiastic woman. However, for more than a year she has been suffering from recurrent episodes of high anxiety when she is in enclosed spaces. Her heart races and she finds it difficult to breathe. She decides to come to see us because she has reached a point where she cannot get into an elevator and has had to stop traveling because she can't stand being cooped up in an airplane: the last time she had a panic attack in mid-flight. She also sleeps badly and admits that she constantly has an anxious feeling in her stomach.

She feels that everything has been increasing in the last few months and she doesn't know why. She can't complain about anything in her life, yet she doesn't feel well and lives in worry that she might have another panic attack. She has started taking anxiolytics to help her sleep, but does not want to rely on them, so she is very hopeful that we can help her.

• • • • • • • • •

Martin is a nine-year-old boy. He is the eldest of three brothers. Responsible, very polite, he surprises us with how mature he is when he comes to MindStudio for the first time. From an early age he has bitten his nails, sleeps badly and can't stand to stay in the dark. A year ago he developed atopic dermatitis. When the dermatologist explained to them that this condition is related to stress and anxiety, his parents decided to bring him to MindStudio so we could help him.

Martin is a very good student, but he suffers a lot when his grades are not the best. He constantly compares himself with the rest of the children and lives in constant worry about being the best in everything.

• • • • • • • • •

Santiago is the CFO of a large Ibex company. It took us about two months to coordinate with his secretary a free slot in his schedule so he could come to his first appointment at MindStudio.

When we succeeded, we found a man in his fifties, affable, funny, very energetic and in great need of reducing his anxiety levels. Despite playing sports and having started practicing *mindfulness on the* recommendation of his doctor, Santiago is unable to feel calm inside. He finds it hard to relax and, according to his words:

-I don't live, I work. I never disconnect.

Lately he has been drinking more alcohol and that's what has set off the alarm bells: he knows he has to do something. He can't sleep more than five hours, he has been diagnosed with irritable bowel syndrome and he recognizes that he has a lot of mood swings.

• • • • • • • • •

Although the pictures of these four people look very different, the reality is that Paula, Sara, Martin and Santiago suffer from anxiety. All of them. Only that **each one lives it and somatizes it in a different way.**

It may sound strange, but think of it this way: it is popularly said that Eskimos have up to thirty different ways of calling snow. When referring to it by one name or another, they are influenced by many variables ranging from the moisture load to the shade of white. Depending on all these parameters, it is classified as one type or another. For us, who look at it without paying the slightest attention to any of that, it is simply snow.

The same thing happens with anxiety. Under the same name there are as many types of anxiety as there are combinations of its symptoms. The only thing that we can assure that it is common to all the cases is this: **it passes badly.** You are subjected to physical and mental sensations of **oppression, restlessness, worry and anguish.**

These are all common symptoms of anxiety that anyone can experience, but the point is that you experience it and suffer from it in your own way. It is important for you to know that.

Your anxiety doesn't have to resemble mine or anyone else's around you.

However, if we want to get an idea of what a person with anxiety feels, we can establish a series of **more common symptoms,** more referred and that can serve as an alarm signal to detect if you are also going through it.

Some people notice a **constant internal nervousness,** such as a feeling of agitation and continuous tension, which often takes the form of

form of looping thoughts that they can't get out of their heads. Other people feel that anxiety takes the form of **genuine fear: they** live in worry and fear day in and day out, always putting themselves in the worst-case scenario, whatever the situation, and even though they know that what they are experiencing or facing does not justify that level of worry. They simply can't help it.

For many other people, **anxiety manifests itself physically:** their heart beats fast, their breathing becomes too fast or is held without even being aware of it, and even their stomach feels tight, as if it were burning.

But perhaps one of the most common forms of anxiety today is **insomnia,** which translates into both difficulty in falling asleep and interruptions of sleep throughout the night, and which today some scholars elevate to the category of public health problem, as it is becoming more and more widespread.

You wake up, your head fills with anxious thoughts and you can't go back to sleep. The problem is that this is not solved just by falling asleep, because when we do get to sleep, we sometimes **unconsciously clench our teeth,** which is also a sign of anxiety.

Anxiety is not being able to slow down and realizing that you are eating too fast or that you can't stop moving your leg when you are sitting down. Many of the reactions that occur in the skin and even hair loss are consequences of our body being permanently subjected to a too high level of anxiety.

Finally, we must keep in mind that **anxiety and depression often go hand in hand,** alternating one and the other on a constant basis. This is because sustained anxiety exhausts our system. When our brain runs out of energy, as a result of that anxiety, it loses the capacity of

connecting brain areas necessary for good mood and motivation, reduces the activity of the hippocampus. Over time, this leads to depressive states. When the coexistence with depression is prolonged, our system rebels against this deactivation by generating worrying thoughts and agitation, which contributes to create new anxiety symptoms. In other words, anxiety and depression alternate in a vicious circle from which it is very difficult to escape.

A definition that summarizes all of the above could be the following: anxiety is that **unpleasant feeling of being constantly alert, of not being serene, with inner calm, an exhausting feeling that after a while makes your mood and energy decline.**

Anxiety is not you, it is something that runs through you. It can go out the same door it came in.

HOW YOUR BRAIN PRODUCES ANXIETY

In a simple and summarized way, we could state that **if you feel anxiety it is because your brain is experiencing fear.**

Fear of what? Well, actually, a multitude of things. Fear of something happening, fear of something not happening, fear of something that happened once, fear of not achieving something, fear of getting hurt, fear of not being good enough, fear of not being loved, fear of losing, fear of winning... Fear of any kind, but fear, at the end of the day.

Anxiety is, plain and simple, fear.

You feel anxiety when your brain gets scared. Fear is a perfectly natural defensive mechanism that we actually need:

saves our lives. Our body is wise and knows that it needs to alert us to that which puts our life at risk, because what matters most to it is our survival. But after the brain is frightened by a danger and once that danger has been averted, once it has been put at a distance and we are aware that we are safe, we should be able to get out of that fear. When this does not happen, we encounter the unpleasant symptoms of anxiety.

Teaching your brain to lose fear is the key to stop feeling anxious.

But what is the brain afraid of?

A curious thing about anxiety is that we **often don't know what it is that scares our brain so much. We** do not understand why we are feeling this way, especially when we have the impression that there is nothing that, at least apparently, is affecting us so much. In other cases, even if there is cause for concern, we tend to convince ourselves that we have it under control and that it is no big deal.

It is important for you to know that **our brain functions on two levels: a conscious level and an unconscious level.** And this second level is not just anything: it has been shown that our brain is ninety-five percent dominated by this unconscious level. That is, we do not realize why we do what we do, feel what we feel or think what we think ninety-five percent of the time. It is worth reading it again: the unconscious, outside our will, controls most of what we do and think. Isn't it incredible? The controls of our brain are run by the part that works automatically, without us even being aware of it.

Whether you are frightened by a dog coming down the street, enjoy listening to jazz or prefer the sea to the mountains is not decided by you, at least not by your conscious part. It is decided by the unconscious part of your brain.

I am going to explain to you why this is happening. I think you will like to know what is going on inside you.

The brain mechanism of our unconscious is amazing.

Let's think that the information stored in our unconscious is similar to the stars. During the day we can't see them, we think that
They "come out" at night, when, in fact, they are always there; we simply need darkness for our eye to perceive them. We also underestimate the number of stars that exist. On a beautiful starry night in the countryside we discover that there are many more stars than we see in the city. What's more, many points of light are actually entire galaxies containing millions of stars.

That is, we know that there are many more stars than we are able to perceive, they are always there, day and night, but we are not aware of it. The same thing happens with our unconscious.

Our thoughts and actions are determined by an enormous amount of information that, although we do not see it in the light of day, is always there, just like the stars. This material stored in our unconscious is very abundant and always present, even if we do not realize it: we have been storing it over the years, from the moment our brain began to form. And it is much larger than we are able to understand. As I was saying, this "library

decides, without our conscious intervention, no more and no less than ninety-five percent of what we think and do.

Let's see how the brain generates this inner world of thoughts and reactions that you are not aware of. To explain it **I'm going to ask you to imagine your brain as if it were an onion.** No complexities, just a simple onion (stars were more romantic, weren't they?).

Let's think of this onion as having three layers. To describe each of these layers, I am going to rely on neuroscientist Paul McLean's brain model:

1. Reptilian brain.
2. Limbic system.
3. Cerebral cortex.

The innermost layer, the little heart of this onion, is what is known as the **reptilian brain. It** is called reptilian because it is **a part of the brain that all vertebrate animals,** from reptiles to humans**, have. It is in charge of automatic vital functions,** from ensuring blood circulation, breathing without having to think about it, sleeping, contracting muscles in the face of a threat or the instinct to reproduce, something basic for us to be here today and that we now understand, but it is clear that nobody explained anything to the first humans. Luckily, they knew innately what they had to do.

The next layer lining the heart of the onion is our **limbic system.** This is **the emotional layer of the brain.** The first layer allowed us to breathe and live, but this is the one that gives us emotional content, sensations and memories.

If it were not for this layer, we would feel nothing at all, no joy, no sorrow, no anger and no desire to do anything. Can you imagine? **Neither would**

We would remember what we have lived. We would be beings without content.

We need this layer to work very well, because it determines how we feel, how we react to what we feel, and it also generates our memories of what we have experienced. When it is damaged, we have exaggerated and incoherent emotional reactions.

In this system is the famous amygdala, that small almond-shaped organ (*amygdala* in Greek means 'almond') located under the temporal lobes of the brain, on both sides of the head, in the area surrounding our ears.

Let's say that the amygdala is like a bodyguard that warns us if there are any changes around us that imply danger. To do this, it is constantly alert, scanning the environment for potential dangers.

I am going to call these first two layers, the reptilian and the limbic, **the old brain.** This ancient brain allows us to be alive and to be beings that feel and remember things. But, importantly, it does it without being conscious of it, it does it automatically. It does not have the ability to "think" and the choices are spontaneous.

The third layer of this "onion brain" is **the cerebral cortex** and covers the previous ones. This is the last one that has formed in our brain and is the most evolved and sophisticated. It is the one that makes us *Homo sapiens:* the one **responsible for our ability to think, observe, plan, anticipate, respond, organize information and create ideas.** It is what makes us unique, what makes you "you". It allows you to relate to the world and others in a conscious way. Let's call it our **new brain.**

We already have the three layers of the brain. The deepest one, the reptilian system, responsible for the automatic physical functions for living; the

second, the limbic system, responsible for emotions and memories, and the third, the new brain, responsible for all conscious activity.

I will now explain what happens with anxiety from the brain's point of view.

While we are aware of what our new brain is doing, this planning, analytical and thinking part, we have no idea what our old brain is up to. But what all neuroscientists do agree on is that our old brain's mission is our survival, there is no doubt about that. We do not know most of the complex unconscious mechanisms of this old brain, but we know what its mission is: to keep us alive.

Remember that what matters most to your brain is your survival? Whether you feel good or happy is secondary, that doesn't threaten your life, so it's not its priority. But now that you know your old brain and your new brain, I can explain it better. **Your old brain wants your survival, let's say that its only mission is to keep you alive no matter what,** without thinking about how best to do it. On the other hand, **your new brain does care about your well-being and happiness, it is more evolved and has realized that feeling good is important.**

Your old brain is your bodyguard, it is always alert and when faced with any stimulus or novelty, it asks, "Is it safe?". This is where anxiety originates; I'll explain how it operates.

Your old brain and your new brain have different ways of protecting you.

A very important difference lies in the information that each of them gathers to take care of you. Your old brain has very little vision of the

The onion is blind to the outside world (remember that these are the two inner layers of the onion, where it is difficult for light to reach). So to speak, it is blind to what is happening on the outside except for the information transmitted to it by your new brain, which it does.
It "has eyes" directly on the outside. So, unlike your new brain, which has perception of what is going on around you, what your old brain does is to interpret the images, symbols and thoughts produced by the new brain and reduce them to general categories.

So watch what happens: while your new brain easily distinguishes between Gonzalo, Marta and Susana, your old brain, "blind" to external attributes, only perceives essential characteristics that are important for your survival:

1. If he takes care of you.
2. If you have to take care of that person.
3. If it helps you to reproduce.
4. If you have to protect yourself from it.
5. If you have to incorporate it into your group.
6. If you have to attack it.

Sophisticated classifications such as whether Gonzalo is your neighbor, Marta, your mother and Susana, your sister do not matter at all to your old brain. It lets that information pass, because it is not the most relevant.

So, in **order to receive complete information about these people, you need these two brains, so different from each other, to be all the time passing and interpreting information.**

I will explain with an example how these two brains work together when interpreting reality.

•••

Imagine you **are taking a walk down the street and suddenly a person approaches you.** Your new brain automatically
It "takes a picture" of this creature, creates an image and sends it to your old brain for analysis to deliver the emotional and survival information. Your old brain receives the image, compares it with other images it has on file and produces its first analysis: "This humanoid **is not a stranger**". Apparently there have been previous encounters with this creature.

A millisecond later there is a second observation, "**There are no dangerous episodes associated** with this image." It seems that, of all the interactions before with this mysterious individual, none of them have been life-threatening.

Then the third observation: "There have been **numerous pleasurable episodes associated** with this image". In fact, the memories as memories stored with this individual seem to indicate that **he is someone who takes care of you.** And then, having come to this conclusion, your limbic (emotional) system sends a green light to the reptilian (movement) system and you find yourself opening your arms to greet this individual while your new brain makes you say, "Hi, honey," because this person is your partner.

All of this happens outside of your consciousness in just a split second. **To your conscious mind, all that has happened is that you have met your partner on the street.** But to accomplish that your unconscious brain has had to

process a few categories from an emotional and survival point of view.

Now suppose that instead of your partner you meet Carolina on the street. Carolina is your godmother and your mother's great friend and instead of greeting her with open arms you feel a little bit of displeasure at this encounter without knowing why. Carolina **makes you feel uncomfortable** even though she has always been a very kind and affectionate person with you. It's something you can't avoid, **even if you have no conscious explanation.**

Let's think, for example, that when you were a year and a half old you spent a week with Carolina while your mother was in the hospital having another baby. Your parents, trying to prepare you in advance for those days with Carolina, explained to you that Mom was going to leave home for a few days to bring a baby brother. *Little brother* didn't mean anything to you, but the words *mom* and *leaving* together certainly did. So, hearing these two words together, you felt anxious and sucked your thumb. Weeks later, when your mother went to the hospital, you were taken out of your crib while you were sleeping and taken to Carolina's house. When you woke up you were in a strange room and the person who came with you while you were crying was no longer your mother, but Carolina, and you felt anxious again.

Even though Carolina was very affectionate with you, **you felt abandoned.** This primitive fear came in association with Carolina and for years the image of her or the smell of her perfume made you feel bad even though you were in situations where you felt you were in a bad situation.

objectively pleasant and that she was affectionate. And twenty years later, when you meet her on the street, you **still feel that awkwardness** and notice resistance to greeting her in a natural and cheerful way.

Your brain has stored the emotional memory that Carolina **appeared when your survival was threatened** because your mother left. Unconsciously, Carolina has been engraved in your old brain as a person who caused you emotional suffering. It is not surprising that you do not innately embrace her effusively.

•••

Your old, unconscious brain has stored in its hard disk the memory of all the situations that throughout your life have had an emotional impact on you. Good situations and bad situations, good memories and bad memories. But let's not forget that **for your brain the most important thing is your survival and that is why it is not surprising that it gives much more weight to negative emotions than to positive ones.** It cares more about defending itself from threats than having a good time.

For that reason, even if you get twenty compliments for something you've done well, if you receive a negative review your mind is going to fixate more on that negative review than on the good words. Simply put, your brain wants to miss anything that might be negative to you.

Our unconscious brain is a kind of drawer where traumas, fears or stressful situations that we have lived through and that our mind does not want to be repeated have been accumulating. You may have

forgotten about it all, but your brain hasn't. It remembers perfectly well those situations that were threatening. It remembers perfectly well those situations that were threatening and from which, therefore, it wants to protect you.

In short, when our brain is reminded of circumstances that once frightened it, it reacts sharply and needs to warn you that it is very afraid. So much fear that it invades you and stays with you, although objectively the dangerous situation has passed or does not really pose a danger. How does it do it? Well, by generating a range of different symptoms associated with anxiety. To some people it warns them in the form of palpitations; to others, with insomnia; to others, with skin problems, and so on.

Anxiety is your brain's way of communicating to you that it is scared to death, remember that.

DIFFERENCE BETWEEN ANXIETY AND STRESS

Sometimes we confuse anxiety and stress. It is logical, both make us feel bad, accelerate us and invade us with fear.

However, there is a big difference. Here is an example.

Before an exam you feel stress: your hands sweat and your stomach clenches. However, anxiety is being at home, in a calm and theoretically safe environment, and having your head full of worries with negative thoughts constantly haunting you.

While **stress occurs in a limited time, when we are facing something that stresses us, anxiety does not need any stressor to be present at that moment.** When we talk about anxiety, it is as if our brain is seeing "visions" of a situation.

stressful, even if there is no real stress or danger now. That is, it is a product of our mind, of our imagination, and it can last for a long time, years even.

But now we can be more precise: we know that it is a product of our non-conscious mind. From that drawer where we have stored many memories of situations where our brain felt fear in the past. Now, in your daily life, when something makes your brain remember one of these stored situations, you feel anxiety, even though you are not aware that you registered that information.

That's what happened to you when you met Carolina on the street, remember?

Let's see then how we can do so that our brain does not get carried away by these stored negative memories and is able to look at the present reality instead of provoking uncomfortable mental visions.

HOW TO DEAL WITH ANXIETY

We have said that our brain manufactures anxiety to tell us that it is scared. Now you know that it gets scared when something in the present makes it connect with a situation it experienced in the past that made it feel afraid. In fact, you even know that it operates on an unconscious level, so you don't realize how it does it or what the situation is that triggers this fear. Moreover, you have found that it is not even necessary that this past situation endangered your survival.

Clearly Carolina did not endanger the survival of that baby, but the important thing is how the brain experiences it. For our ancient brain, threats are life or death, it doesn't mess around.

Here comes the crux of the matter:

……

In order for your brain to stop manufacturing anxiety, you need it to stop connecting with those fears it has stored in the unconscious.

Okay, and how do you do that? Remember that *anxiety* is defined as 'anguish, oppression, tightness'? The key to turning off our unconscious fears is to get the brain out of there.

•••

The frightened child in your brain

The first thing I ask is that, when it **comes to anxiety, think of your brain as a child.** Forget about the onion, the layers and the complex systems. Just think that you can see yourself from the outside and that your brain is a child. Nothing more tender and pure than a child.

There is a particularity of this child that I want you to remember well: he is a fearful child, he gets scared very easily. He does not like new things, he is afraid of them. He **won't want to do anything that he hasn't done before, that he** already knows beforehand is safe. And he also has a very good memory, so **if something scared him in the past, he will always remember it.** Those images will come to your mind very often and will awaken the same uncomfortable feelings again. In short, he is fearful, so what can we do?

And what does a child do when he is afraid? Usually he cries or reacts in a way that, as a responsible adult, you see that

is frightened. He turns away or runs away, gets stuck, maybe. Maybe he even screams. In other words, he shows you loud and clear that he is not comfortable.

In the same way, our brain, this other "fearful child", also reacts when it is scared. How does it do it? **By not letting you sleep, causing insomnia, accelerating your heart so that you are short of breath, oppressing your chest, generating anguish** and a long list of symptoms that make you feel bad, that make you realize that something is happening.

To learn how to manage this myriad of reactions, let's use common sense. What does an adult do when faced with a child who is afraid?

For - assuming the adult is a mentally stable and healthy person - he will try to calm him, protect him and, if there is a situation of real danger, bring him to safety.

There you have the answer: **when you feel anxious, you are the adult who calms your "child brain",** this brain that kicks and causes you various uncomfortable symptoms. You are the adult capable of calming it down by showing it that it has nothing to fear.

Connect with what you would say to a frightened child to calm them down.

Nothing works better for you than what comes directly from you, from your intuition, from your inner wisdom. You will find

I provide some guidelines that I work with and that may help you, but they are not the only ones, add your own.

As an adult, you appease a child when:

1. **You remain calm and do not show fear in your eyes.** This way, the child sees that you are not worried. That gives him security and confidence.

   Now let's move it to your brain. In order for it to see you calmly, **you can take a deep breath, calmly.** Also tell yourself that "it's all right". What you accomplish by doing this is not letting your brain drag you on the side of unconscious fear. You are consciously taking charge and staying in control. You will still feel uncomfortable, because **the anxiety is still there, but you don't let it control you and drag you down.** You decide, and you decide to show calm.

   Remember that anxiety is a mental mechanism. By not letting yourself be dragged in and scared, you begin to disarm this mechanism. In the face of looping thoughts, a racing heart or a feeling of overwhelm, you **face your fear with confidence.** If you take a deep breath and say calm words to yourself, your brain identifies that you are not afraid and reduces the bombardment of negative thoughts.

   It's about keeping your composure, looking at **the situation** and, despite feeling uncomfortable, deciding to stay in control and not get carried away. That moment is key: an adult makes the decision to stand firm and not panic.

2. **You empathize with what the child is feeling.** As an adult you understand why a frightened child cries, screams or hides.

   The same thing happens with our brain. It is good for it if you let it be and don't object or deny what it is feeling. You can say to yourself, "I can see that you are very uncomfortable and frightened." **Don't fight those symptoms, but don't buy into them.** You already know that it is a
   "tantrum" product of fear. It is not real.

   Empathize with what you feel out of curiosity, without being scared. You can say to yourself, "Look at the things my brain is doing to make him understand that he is afraid. He is having a tantrum and you feel uncomfortable, but nothing more. **It is a mental mechanism that you can alter.**

   If you are able to see yourself from the outside without being frightened by your physical reactions, your brain will lower its intensity. If it sees that you are not worried, it will understand that what is happening is not really that serious and will reduce the symptoms.

3. **You throw him off with something else.** When a child takes his focus away from the situation that frightens him and sees something else that motivates him, he instantly calms down.

   And that's exactly what you're going to do. After accepting the symptoms that your brain provokes in you, you are going to distract it with something else. You are **going to put on a song you like, you are going to pick up the phone and call someone, you are going to go**

for a walk, you are going to do something manual, you are going to do some sport... The important thing is to do anything except stay longer watching the

"kicking" your symptoms. **If you stop paying attention to those symptoms and move your attention elsewhere, very interesting things start to happen. It's not about ignoring a feeling, it's about moving your focus to another, much more pleasant place.**

When in a moment of anxiety you put on a song you like and dance a little, when you smile, even if you don't feel like it, when you talk to someone about something else, your brain is perplexed. It wonders: how can I be scared if I'm dancing, if I'm talking about other things? And it starts to relax its fear.

Here I want you to realize one thing. How many times, when you feel anxiety, do you start talking to yourself out of despair? How many times do you say to yourself:
"Here it is again", "This is going to happen to me every time" "I feel terrible," "This is beyond me," and so on and so forth? **Every time you get scared by what you are feeling, you are giving your brain reasons to keep succumbing to fear.** It sees the fear in you and then gets even more scared. Break that chain. Accept that what is happening to you is uncomfortable, the result of a system that wants to protect you, but don't listen to it. Be sure that if you manage to talk to and reassure the child, the discomfort will subside.

4. **You give him security by reminding him of all the times he has been strong and brave.** It is very logical to recall bad experiences more vividly than good ones. Simply because bad situations are

and our brain is programmed to defend itself against dangers. What matters most to it is survival and it gives much more space on the hard disk of memory to moments of threat than to happy endings.

Just like a child who needs to be reminded of all the times he or she was scared and nothing bad happened, **your brain needs a refresher.** Mentally go back to moments that were initially uncomfortable and that you overcame. **Remind yourself of times when you were afraid or felt anxious and yet nothing bad happened.** Visualize yourself in moments of pride after overcoming a challenge.

Your brain needs to realize that it has already overcome moments that it felt threatening and that had a happy ending. Just by visualizing those situations, those personal challenges, it starts to "manufacture" security and lowers its frequencies: as a result, you manage to calm down.

5. **You make him see that challenges are the gateway to our greatest achievements.** The sense of pride when you have successfully overcome something that initially scared you is very intense. Children's eyes sparkle and they run to show their parents what they have accomplished. It's the reward for owning your fear and facing it. So just as you say to a child, "Remember how scared you were when you jumped in the water and how well you did?" you can use the same strategy with your brain.

Have him mentally walk through those feelings of pride and overcoming that he has already experienced sometime after facing his fears. We all have moments in our memory when we have felt pride after facing a fear. To savor victories, you have to walk the path of prior effort.

When you calm your brain as you would a child, you cause its inner workings to change. You cause the electricity and chemistry of your brain to change.

•••

THE ELECTRICITY OF ANXIETY

Remember I explained that our brain *surfs* on different wave frequencies? And also that the height and speed of these waves determine how we feel and how we act.

As I anticipated in chapter one, **when you feel anxiety it is because your brain is surfing hibeta waves, which are** responsible for making us feel alert and worried. These **are the waves of brain frequencies that appear when your old brain gets scared.** That alarm activation of our old brain causes neurons to communicate with each other in a way that makes us feel alert and worried.

"more nervous", emitting electrical impulses at the hibeta frequency level.

That is the trigger for all those uncomfortable symptoms linked to anxiety. The cause of restlessness, racing heart, anxiousness, worrying thoughts. It's all caused by the hibeta frequencies your brain makes. If it didn't make them, you wouldn't feel anxiety.

But as we already know, the good news is that your brain is malleable, it can change and flex to do things differently. With the right actions and thoughts, it is possible to modify these waves. It is possible to get the brain to calm down and manufacture less fast frequencies.

When you perform the above steps to calm your "child brain", you are producing a change in its functioning. You increase the amount of *beta* and *alpha* brain waves. These waves make it possible for us to remember good moments from other experiences and, therefore, increase our calmness.

That is, **through the conscious effort of not despairing in the face of anxiety, staying in control and forcing your brain to remember past moments that ended successfully, you are altering your frequency waves,** causing your brain to shift from the frequencies of anxiety to the frequencies of calmness and control over your body.

This training is the one that Paula, Sara, Martín and Santiago. Do you want to know what happened?

A HAPPY END

Paula, our student and brilliant professional who could not stop her obsessive thoughts, greatly reduced her anxiety levels in two months. She began treatment by training her brain frequencies, without us talking directly about her suffering and personal situation. She had spent so much time in therapy that the mere fact of talking about it more made her "child brain" become

even more frightened. So it wasn't until she had greatly reduced the hibeta wave levels, which made her feel peace and reduced her looping thoughts, that we talked about how she could calm herself down this "scared child" that was her brain.

In the process she discovered not only that she had successfully faced many fears, but that she herself continuously sought challenges. She recurrently approached new, uncomfortable situations to feel alive. She soon discovered that what lay behind this behavior was a continuous rebelliousness to mitigate a dissatisfaction she had carried since she was a child for not having devoted herself t o her artistic talents. She had always wanted to please her father's will more than h e r own and had given up studying Fine Arts because her father did not consider it a "serious" career. Since she was a child, she had hidden her artistic talents because she did not feel that they were valued within her family, so she never accepted her identity and her talents as something worthy of being loved.

One of the main human fears is the fear of not being loved. In Paula, it was walking around unconsciously and she still suffers from it today. By unmasking it, she not only lifted a weight off her shoulders, but was surprised to see how her life suddenly took on a new meaning. Her anxiety began to reduce at a rapid rate. Today she is very successfully immersed in her own company, which is dedicated to the international art business and thanks to which she has integrated her studies in Business Administration with her passion for art.

• • • • • • • • •

Sara, this energetic and vital lady in deep mourning for the "empty nest" after her daughters left to study abroad, did sessions at MindStudio for three weeks. She began to apply the five steps to calm her frightened brain while exercising her frequencies in the sessions. Within a few days she was able to realize that the basis of all her anxiety was that, without her daughters, she had lost her identity as a caregiver and felt she didn't know who she was in this new stage.

Her unconscious fear lay in the thought that without her daughters nearby she was no longer part of a structure that needed her. Once again, a primitive fear of human beings appeared: the fear of not belonging. To survive we need to belong to a group, to a tribe. If our brain thinks we don't belong, it gets very scared. As soon as Sara connected with her adult capable of calming this frightened brain, she could see that in the last few years she had left her outings with friends a bit aside and that it was time to strengthen those bonds. She signed up for dance classes with friends, which, along with the *alpha* wave reinforcement we conducted at the clinic, brought about the rapid change Sara experienced.

• • • • • • • • •

Martin, the nine-year-old boy with atopic dermatitis, started directly by doing frequency sessions to calm his hibeta waves. Only with that he started to sleep better and his parents noticed how he became more open to talk to them. The first few days they were surprised because he burst into tears several times and told them about episodes where he felt very frustrated. As soon as he increased the level of *alpha* frequencies in his brain, he felt calmer, happier and more communicative. That's when we started talking to him about how to calm his frightened brain.

Martin's unconscious fear that made him suffer so much was that if he was not the best student, brilliant in everything he did, his parents would stop loving him. Nonsense, right? But that's what his brain had assimilated after repeatedly experiencing great celebrations when he did something right. His brain made up the story that that was the reason his parents loved him: to always do things right. That was the origin of so much maturity and responsibility at such a young age.

We worked with him and his parents on various aspects of introducing failure and doing things wrong as something natural, logical and sometimes even fun to calm his frightened brain. As usual in these cases, Martin felt completely different within a few weeks.

• • • • • • • • •

And finally, **Santiago,** the CFO who was suffering from high anxiety and had picked up worrying habits, such as drinking too much alcohol, because he could not disconnect from work. Santiago, who is used to taking challenges very seriously, underwent intensive hibeta frequency lowering training. The treatment lasted four weeks in a row with two sessions a week. Over the course of those weeks, he taught his brain to drastically reduce his hibeta levels and greatly increase his *alpha*, *beta* and *theta* frequencies, associated with calm, concentration and creativity, respectively.

The changes she experienced were extraordinary. Not only did her sleep quality improve in the second week, as she was able to sleep eight hours straight (instead of five), but she was filled with renewed energy and optimism. At work, he realized that he was not listening well to his team and that he was getting too caught up in his own way of seeing things. Deep down, he realized that he was being too inflexible.

He set up meetings where the whole team could talk and initiated them by apologizing for not having done so earlier. Everything that followed surprised him greatly: within two weeks, a much more relaxed and fruitful atmosphere was created. He was amazed by the talent and good ideas of his staff and was relieved of the burden of having to make all the important decisions himself.

He also changed at the gym: he realized that he was linking sport with demand instead of enjoyment and health. He abandoned the very intense training sessions, kept the healthier ones and joined a cycling group to go out on Saturdays.

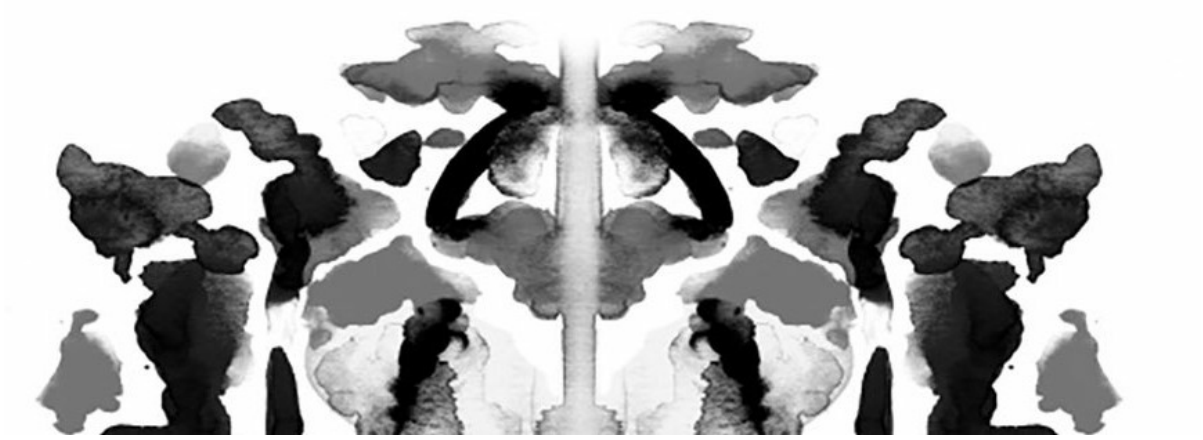
Two months after starting her brain training, she felt much better physically and mentally. As a result of all this change in his levels of well-being and satisfaction, he eliminated alcohol consumption and started healthier eating and drinking habits. At the end of the training, he himself was surprised at how different his life had been until so recently as to lead him to say that phrase with which he introduced himself: "I don't live, I work. I never disconnect.

-I must have been blind when I said that," he told us when he finished.

Well, in a way yes, his brain was "blind" and didn't see a way to function more optimally. Now, instead of manufacturing anxiety, his brain was manufacturing health and wellness.

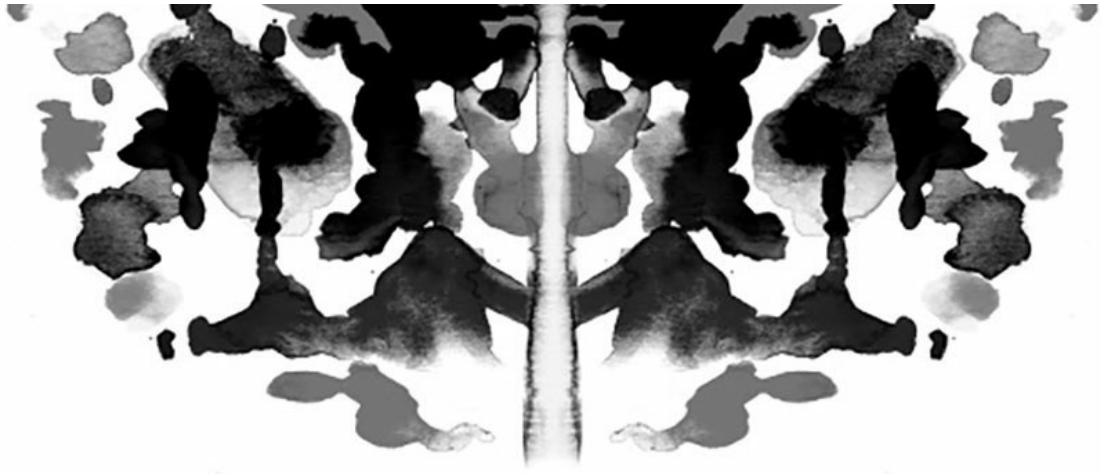
His brain had lost its fear.

•••••••••



4

STRESS, ONLY IF IT IS THE GOOD KIND



STRESS: From Late Latin *districtia* ('restriction', 'impediment'), from *stringō* ('to squeeze', 'to compress'). From *stress* ('tension'), *destresse* ('affliction', 'distress', 'oppression').

1. m. A state of mental fatigue caused by the demand for performance far in excess of normal; usually resulting in various physical and mental disorders.

2. pl. Set of alterations that occur in the organism as a physical response to certain repeated stimuli, such as cold and fear.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT STRESS

Do you have trouble sleeping, wake up during the night and don't rest well, have a lot of worrying thoughts, feel irritable or in a bad mood, forget little things and feel you don't get everything done?
Do you feel a lot of responsibility, a lot of loneliness? Don't worry. We've all been there. What you're probably feeling is simply stress.

Before I go into the subject in more depth, I'm going to eliminate a false belief: **we tend to think that stress is always negative.** Well, let me disabuse you of this misconception: no, it's not.

There is a type of stress that is not only good, but also very healthy.

Have you ever heard this before? I assure you I didn't make it up to make you feel better. There is a type of stress that is healthy, that rejuvenates your body and mind and makes you stronger. **This positive stress is known as** eustress.

And, yes, of course, there is another stress that is unhealthy, that damages you physically and mentally and makes you sick. It is this that we usually refer to as *stress,* without more, although it is actually *a type* of stress. Specifically, one that we call distress.

Stress is what allows your body to produce an **extra burst of energy or concentration** when faced with an "out of the ordinary" situation. Imagine, for example, an athlete in a competition. That your body has the capacity to stress is the reason your heart can pump more blood, your lungs process air faster and your muscles function at a higher capacity than they normally do so that you can win a medal. This stress is good. It is timely and has a specific goal, with a beginning and an end.

However, if this athlete were to remain in this state of stress continuously after the competition is over, his heart and muscles would begin to overload and he would fall into negative stress.

Good and timely stress allows you to speak in public, concentrate when you are in an exam or react quickly to dodge an object coming towards you. As we have already said, the correct term for this type is *eustress*. Distraught, however, works in another way. It is, for example, that which is repeated in your day-to-day life, such as having too much work or arguments at home, and which affects you negatively and blocks areas of your brain.

And the truth is that you don't function at your best when you are under continuous stress. Our brain has evolved over the millennia to release cortisol (which we will talk about in detail later) in stressful situations and, at the same time, shut down your rational and logical thinking so as not to waste time. Your brain under stress understands that it is in survival mode and that it has to react fast, without time to think. That is why, **under permanent stress over time, we do not make the best decisions: we just make them faster.**

So, remember: there are two types of stress. A good one, eustress; and a bad one, distress.

So, the question is: how can we make sure that, if we feel stress, it is positive? And how do we turn negative stress into positive stress? To make it simpler, I'll try to explain it with an example:

Federico and **Lucia** are two doctors, both forty-seven years old, surgeons, with many patients. Their good work in the operating room determines the life or death of their patients. They both work the same hours, which are many, have the same salary and both have two teenage children. Both live fifteen minutes from the hospital where they work.

Federico has been in the profession for many years and, although he likes his work, he feels that lately it has become monotonous. For some time now he has been feeling apathetic, waking up many times at night, sometimes with the feeling that he has been operating in his sleep. He also notices that food does not agree with him and he has a difficult digestion.

But, perhaps, what bothers him most in recent times is that he feels tired, without illusion, he has the feeling that one day is the same as another. He has stopped doing sports, he simply does not have time, work fills his days and he does not enjoy his family as he would like. He feels stressed and tired.

Lucia has also been in the profession for many years and enjoys her knowledge and extensive experience. She recognizes herself as a great surgeon and is eager to continue learning about new technology for her procedures. She keeps in a file cabinet the messages that her patients send her to thank her. She works long hours, sometimes her schedule gets so long that she cannot go to the gym, so she decided to cycle to the hospital to ensure her daily dose of sport.

In fact, she resented how little time she had for her family, so she decided, in consensus with them, that on Wednesday evenings and Sunday afternoons they would make plans together, to enjoy quality time in each other's company. She feels under a tremendous level of demand, but she is motivated. She enjoys her work and is happy to be able to devote herself to it.

•••••••••

What makes two people experience similar situations so differently? How can negative stress be turned into positive stress?

Once again, the answer lies in how our brains work.

HOW YOUR BRAIN MAKES GOOD STRESS AND BAD STRESS

Remember this phrase that I am going to tell you, because it is a recent discovery that will change your relationship with stress:

Stress is only bad if you think it is.

If your brain determines that the stress you are under is negative and you feel victimized by it, you are suffering from bad stress or distress. On the other hand, if your brain analyzes the stress you are experiencing and determines that it has a positive meaning, you will be experiencing good stress or eustress. **By changing your mind about stress, you can change the response your body generates to it.**

So how can you get your brain to "manufacture" positive stress?

First of all, make no mistake: you have to give him a hand. You have to reassure him that the stress he is suffering is not bad. To achieve this, there are two very effective strategies:

1. **Make it clear what the prize behind that stress is.** That's the beginning of all positive stress. No matter how uncomfortable and hard what you're experiencing, if your brain knows there's a prize at the end of the road, a

benefit associated with that stress, you will be generating good stress. Your system will feel demanded, yes, but it will do so from a healthier position. It knows that the discomfort it is experiencing now is a necessary step to achieve a reward. The reward can be monetary, of improvement in personal development, of work evolution or even, simply, of being able to perform more efficiently that activity you like. The benefit can be any, because you define it: the important thing is that you know what it is.

2. **Limit the time you subject it to that stress.** For stress to stay on the positive side, it needs to be contained in a period of time. As we said before, if the stress, even if it is good, is too long in time, it will end up becoming stress, because at a certain point your body will be exhausted and will not be able to regenerate.

Let's see what happens with these two doctors. Why Federico is experiencing stress while Lucía has good, healthy stress. Let's see how they are helping their brains to experience stress in a positive way.

1. ARE THEY CLEAR ABOUT THE BENEFIT BEHIND THAT STRESS?

It seems that Federico not so much. He is not connected to the benefit or the meaning behind his work. He sees it as a burden and does not clearly feel the positive aspects for himself, his patients and his family. He has become accustomed to intervening on his patients and does not value or enjoy the positive outcomes.

Your brain is getting the message that the stress you are under is not leading you anywhere positive. In other words, **your brain *is suffering from* that stress.** This is very common. We get into our day-to-day lives, with all the responsibilities and the pace involved, and we forget to lift our heads to remind ourselves why we do what we do. What the reward is.

In contrast, Lucia is connected to the importance of her work. She saves the thank you letters from her patients and is aware of the positive impact of her work on the lives of others. **Her brain understands that the stress she is under has a reward: the** great satisfaction she feels when she sees her patients progress thanks to her intervention. It has a positive reward on an emotional level.

This point makes the difference between experiencing healthy or harmful stress. As long as you are certain that the stress you experience leads to a benefit, that you gain something or generate something good because of that stress, you are experiencing positive stress.

2. HAVE THEY PUT A LIMIT TO THAT STRESS?

Federico has not set specific times to disconnect. He has no activity that allows him to unburden himself from the pressure of work. He is under continuous stress.

Lucia, on the other hand, has set aside two moments a week to spend with her family. They are immovable and she always respects them. During that time she knows she does not have to think about her work, she forces herself to disconnect. With this small gesture, she has established routines that limit the time she is under stress.

The time factor is a determining factor. If we let the stressful situation fill our whole day, we feel trapped. It is necessary to set limits.

Sometimes it is not possible to work less or spend fewer hours under a certain stress, as happens to the doctors in our example, but **we can always make sure to enjoy moments of pleasure** during which we connect with other aspects that are important to us. It is essential to isolate in the agenda these bubbles of quality time with our family, with friends, to do sports, listen to music or have a massage. These are all basic elements to reduce exposure to the stressful situation.

We all go through times - days, weeks or months - that are more stressful than usual. You may have a project in hand, you may be experiencing changes on a personal level, or you may have to deal with a difficult and tense situation that you can't avoid. That's okay. You know that these situations are going to stress your system and therefore your heart, lungs and body are going to work harder to cope with the demand.

You don't have to give up on that project or run away from that stressful situation, but give it an end date. If you don't know it, be sure to mark days off during the time the project is in progress.

Your brain needs to know that it is not stuck in that stressful situation indefinitely.

Our brain doesn't like abstract things. It needs concrete information. **Put dates on it. Reduce stress.**

And, of course, give him a compelling reason to take it to those high-demand levels. Your brain has the capacity to withstand a fair amount of

stress, but he needs to know that there is some reward for it. Don't forget to tell him.

In short, don't be afraid of stress. It is part of our life. It is the impulse that allows you to develop and evolve, to bring out from within you something more than the obvious. Under positive stress, your body generates resources that it would otherwise be unable to bring to light. Think of all those times when you thought you were not capable of achieving something. When you reached the goal, after you did it, you felt a tremendous sense of pride for having achieved it.

So, the million dollar question: **are you clear about the prize you earn for the stressful situations you experience? Do you have compelling reasons to subject yourself to that stress?**

•••

Exercises to reduce stress

Whether it is negative or positive stress, whether we want to relieve it because we consider it excessive or simply because we need it to be well, we have within our reach several tools that will help us to reduce its intensity.

Here are two exercises that I work with regularly in my MindStudio consultations and that, when it comes to reducing stress, I can assure you that they give excellent results.
Go for it!

Exercise 1

This first exercise was generated thanks to the results of a study conducted at Harvard University within the framework of a

extensive research program on the **types of stress and their effects on the organism.**

We know that in stressful situations,

1. the heart beats faster,
2. breathing accelerates,
3. we perspire and,
4. often, we feel a sense of overwhelm.

We usually interpret these physical changes as a sign that we are not coping well with pressure. But what if, instead, we saw these signs as **signs that our body is getting stronger, recharged with energy and ready to face the challenge ahead**?

This is exactly what this study attempted to demonstrate.

Eight hundred people were summoned and, before being subjected to a stressful situation, they were taught to appreciate the stress symptoms defined above as positive signs.

1. It is a good thing that the heart beats faster, because it **prepares for action.**
2. It is positive that breathing is accelerated, because this **brings more energy to the body.**
3. It is good for us to perspire, as this **dissipates the extra heat generated by the body in the** face of stress.

The fourth positive point was drawn from the study experience: participants who were able to see these three cues as helping their performance (who saw a prize

The great finding of the study was that not only did they experience the stress better, but they also changed their physical response to the stress. The great discovery of the study was that not only did they experience stress better, but they also changed their physical response to stress. Their bodies responded differently than those who failed to see the physical effects of stress as something positive.

In a typical response to stress, the heart rate increases and blood vessels constrict. And this is one reason why **chronic stress is sometimes associated with cardiovascular disease.** But in the study, when participants saw their stress response as helpful, their blood vessels remained relaxed. Their hearts were still pounding, but with a much healthier cardiovascular profile.

In our lives we will always be subjected to stressful situations. Whether we are able to change our physiological response can be the difference between having heart problems in our fifties or living well into our nineties.

The new science of stress tells us that how we view stress is one of the most important elements to consider when it comes to managing it successfully. I told you: stress is bad only if you think it's bad. If, when you are feeling the symptoms of stress - rapid heartbeat, tension, fear, shortness of breath - you say to yourself, "This is my body helping me meet this challenge and bringing me to a state where I'm in a state of stress, I'm in a state of fear, I'm in a state of fear, I'm in a state of fear.

supernatural", your body will believe you and your response to stress will be healthier.

Having explained all this, let's move on to the exercise that you can put into action when you have physical symptoms of stress.

1. Observe your heartbeat, your sweaty hands, your fear, your faster and shallower breathing, your blocked thoughts, whatever.
2. Momentarily close your eyes making a movement of power, which can be from clenching your fist to extending your arms, raising your hands above your head..., whatever you feel makes you feel strong and empowered.
3. If you want, you can even say these words out loud: **"This is my body working to overcome a challenge".**
4. Your brain will register that movement, those words and that conviction and will make your stress positive and not harm you. You will be transmitting the message that your stress is not bad and, therefore, your body will experience it in a healthier way.

Exercise 2

This exercise stems from research carried out at the Princeton Biofeedback Center, where they studied how to increase the *alpha* brain frequencies characteristic of states of physical and mental calm.

In this case, it is a visualization exercise for which **you need a quiet space where you know you will not be disturbed** while doing it.

1. Adopt a comfortable posture; it can be sitting or standing, as you feel best.
2. Close your eyes and imagine that you are inside a large transparent plastic bubble that has a lot of air inside it at a very pleasant temperature. Just touch the wall of the bubble and it disappears and you are out of the bubble.

This bubble protects you. It is a quiet, safe place. Now I'm going to show you how to fill this bubble with a color and scent that you like.

1. Breathe normally and, with each exhalation, imagine that the air coming out of you has a color, any color you want. Breathe calmly and keep filling that bubble of colored air with each exhalation.
2. Take eight exhalations of color. Mentally visualize this bubble getting fuller and fuller of color.
3. Then breathe normally and this time fill your bubble with each exhalation with a smell you like. It can be the smell of the suntan lotion you put on at the beach, the smell of clean sheets, the smell of cut grass. Any smell that you find pleasant and transports you to good sensations.
4. Make eight exhalations filling your bubble with this scent.

Enjoy for a few moments the sensation of being inside this bubble of pleasant color and smell. Once you are at ease in this bubble, mentally answer these questions without effort:

- Can you imagine the space between your eyes?
- Can you imagine the space inside your nose as you inhale and exhale comfortably?
- Can you imagine your breath flowing behind your eyes as you inhale comfortably?
- Can you imagine the space between your nose and your eyes?• Can you imagine the space inside your throat?
- Can you imagine the space inside your mouth?• Can you imagine the volume of your lips?
- Can you imagine the space inside your ears?
- Can you imagine the space you occupy inside your color bubble?

Stay for a few moments with your eyes still closed. You can exhale some more colored and smelling air into your bubble. Stay there as long as you want.

Then open your eyes and notice how you feel. You will probably feel much calmer than when you started. This is **due to the brain frequencies you have generated during the exercise.**

To repeat it without following this script, you just need to feel good inside the bubble you have created for yourself, with the color and smell you choose, and imagine the space between the bubble and the bubble.

different parts of your face, inside your nose, in your throat..., just as you have done now.

This simple exercise **activates the three-dimensional perception of our brain, which causes an increase in alpha frequencies, the frequencies of calm.** Studies have observed that the capacity to produce these *alpha* frequencies when practicing this exercise is enormous.

Do this exercise whenever you need to calm your mind. It will become easier and easier and there will be a time when your brain will ask you to do it when it feels stressed. It will be enough to practice it for a few minutes to feel calmer.

•••

THE ELECTRICITY OF STRESS

As I explained, stress does not have to be bad. In fact, it is very good for giving us **that push that our organism needs to develop beyond its comfort zone.**

Acquiring new capabilities is always associated with a previous stress that encourages our system to achieve this new, more advanced state.

However, as you know by now, when stress settles in permanently, with no concrete benefit and no time horizon for it to end, it becomes chronic stress. And that is really bad. Mainly because **we now know that chronic stress modifies structures of our brain and deteriorates them.**

You have probably heard of cortisol, which we have already introduced above. **Cortisol is the stress hormone,** which is released by activation of endocrine glands in the brain and kidney when the brain detects a dangerous situation.

The green light for cortisol release is given by our brain. When it gets stressed, it gets scared. And what happens to the neurons then? At those moments, they communicate with each other by emitting very fast and disordered electrical signals, at hibeta frequency levels, which we already know. These firings between neurons are rapid and shallow. They trigger **the amygdala, which, as we saw in the chapter on fear, is the brain's fear center.**

We know, then, that at that moment the amygdala takes control of the brain and decreases the activity of the hippocampus, that seahorse-shaped part of our brain that allows us to learn, fix memories and control stress. As the hippocampus works less, it shrinks in size. And by reducing its size, it impairs its communication with **the prefrontal cortex, the part of our brain that regulates behaviors such as concentration, decision-making, judgment and social interaction.**

The prefrontal cortex is the part of our brain that allows us to view situations with distance, analyze them and make decisions after reflection. It is the most advanced part of our brain, the one that makes us reflective and intelligent human beings, not mere organisms driven by emotional and survival impulses beyond our control. Good,

for **this part of our brain shuts down** when the amygdala takes over.

Chronic stress causes us to lose much of our ability to reflect, to learn, to memorize and to manage our emotions.

And it generates a vicious circle because, by losing this ability, we see everything as much more threatening than it really is.

You may have noticed that when you are under stress for a sustained period of time, you find it harder to concentrate, you forget things or it is difficult to make decisions. **You are also more pessimistic.**

This is where the hibeta waves come into play again. Yes, I have news for you: these waves that your neurons generate to communicate with each other are the same whether we are talking about stress or anxiety.

So, if we reduce the amount of these hibeta frequencies, would we also suffer less stress? Absolutely yes. Major advances in neuroscience point to the importance of reducing these hibeta frequencies to the benefit of *alpha* frequencies (calm frequencies) for proper brain functioning.

Our brain has the capacity to cope with stress, but to do so it needs to work at slower and more orderly frequencies - alpha frequencies - that allow it to use all its capacity, especially that of the prefrontal cortex.

So, how to reduce these frequencies? Well, with adequate brain "gymnastics" that increases again the size of our hippocampus.

The two exercises I showed you above are gymnastics for your hippocampus to do its job as stress coordinator. The hippocampus is the one that decides whether to call the amygdala to generate a red alert situation in front of a threat or if on the contrary it contacts the prefrontal cortex so that it can reflect and decide what to do from the calm. We need our hippocampus to function well and keep our nerves. That is the same as saying that we need our hippocampus to function with adequate electrical signals.

The first exercise I showed you earlier (see p. 116) helps the hippocampus in its stress management by normalizing stress symptoms and relating them to your body's work to cope with a challenge. The message you give your brain when you don't freak out about the symptoms, but give them meaning, is one of calm, is one of power, is one of control. That makes the hippocampus decide to communicate with the prefrontal cortex instead of the amygdala and we can reflect: **instead of activating the fear signal and calling the amygdala, it activates the signal of reflection and action to connect with the prefrontal cortex, which is the one that evaluates and issues the verdict that the situation is uncomfortable but not serious.** You have been in stressful situations in the past and came out of it alive. So you connect with the resources and ideas you have available to get through it.

In the second exercise we work with an aspect that Les Fehmi discovered by chance in the seventies at the Princeton Biofeedback Center and with which we work daily at MindStudio.

It is about the great ability of our brain to produce *alpha* frequencies of calm when we subject it to exercises of spatial, three-dimensional perception.

The multisensory experience of space or "nothingness" generates an increase in brain synchronization in frequency *alpha* waves. What is the

The same to say that it provokes calm frequencies in many parts of our brain at the same time.

This can be seen by doing an electroencephalogram (EEG) while a person performs this exercise. Almost invariably, when visualizing the three-dimensionality in our organism, we increase the amount of *alpha* frequency waves.

In fact, three-dimensionality exercises were already being done to acquire calmness in ancient cultures, even if they did not know that what they were doing was activating the *alpha* brain frequencies responsible for that calmness.

Hakuin Ekaku, one of the most influential figures of Zen Buddhism in Japan, said, **"Attain a state of mind whereby, although you are surrounded by crowds, you feel as if you are alone in a field that stretches tens of thousands of kilometers.**

The Japanese often practice the philosophy of *ma,* which is the ability to see the space between objects as well as to see the objects themselves. These practices undoubtedly help to raise the amount of brain *alpha* frequencies, lowering the hibeta frequencies and thus relaxing our system. The reduction of cortisol release is a consequence of this.

THE LAST WORD ON STRESS IS YOURS

I have no doubt that life puts you in many situations that can stress you out. After all, stress is what pushes your system to function outside of normality to accomplish something new that is outside of what you experience in your day-to-day life.

The human being has an innate need for evolution, for development, and that means leaving his known routines and evolving to a new state.

If our body did not have the capacity to stress, we would not be able to change the way we do things.

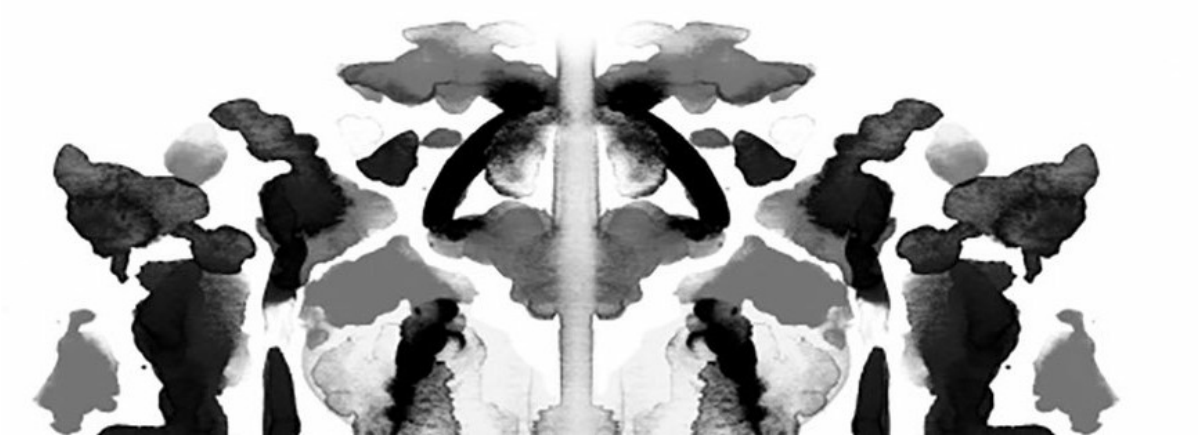
We need the stress to stretch us a little to be able to touch a new situation with our fingertips, and stretch a little more to be able to grasp it and even a little more to grasp it with our hands and have control over it.

But the decision as to whether that stress is good or bad is yours. Remember, stress is only bad if you think it is bad.

If you think that it is the tool that can take you to a better place, that it has a benefit and that the discomfort of this stress is for a limited time, you will be turning it into positive stress. In a stress that makes you evolve.

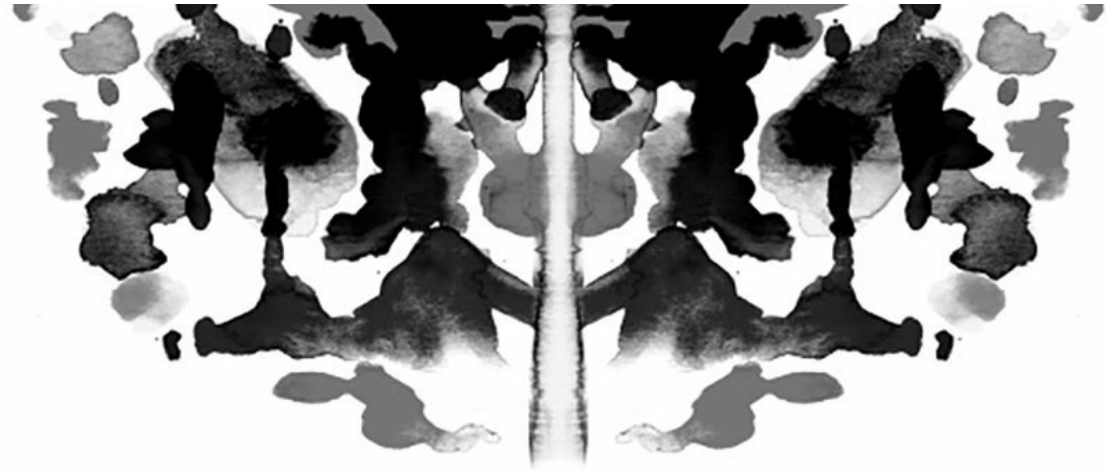
Don't be afraid to face situations that take you out of your equilibrium, that push you into an uncomfortable situation to open yourself to something new. Take a step forward, face it and allow yourself to evolve. Along the way you will find the tools to be able to manage this novelty and adapt.

Give a new meaning to stress and you will see how your life changes.



5

EMOTIONS VS. STATES OF MIND



EMOTION: From Latin *emotio, emotionis,* noun derived from the verb *emovere*. This verb is formed on *movere* ('to move', 'to transfer', 'to impress'), with the prefix *e-/-ex-* ('of', 'from') and means 'to remove', 'to dislodge from a place', 'to make move'. That is why an emotion is something that takes one out of one's usual state.

> **1. f.** Intense and transient alteration of mood, pleasant or painful, accompanied by a certain somatic commotion.
> **2. f.** Interest, usually expectant, with which one participates in something that is happening.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT EMOTIONS

Before I get into the subject, I would like to share a personal story with you.

There was a time when every Monday morning, as soon as I opened my eyes, I felt a pang of anguish in my stomach. It was the first thing that happened every start of the week. Even before I had time to think of anything else, that uncomfortable, internal burning sensation was already there. Only after getting up and taking a hot shower did I notice that, in a way, the anguish was contained so that I could handle it for the rest of the day.

This feeling was repeated so often, every Monday, without fail, that I had to take measures to make the situation at least a little more bearable. I decided that on Mondays I would arrive a little later to work (fortunately, and I emphasize this because I am aware that many do not have this possibility, my job offered me freedom of schedule). That way, in the morning I could dedicate myself to a good breakfast, with time and music, before leaving the house.

One thing I can assure you: my Mondays started to be better.

In fact, my dreaded Sunday nights, when I had a hard time falling asleep and relaxing, also improved. On Sundays I went to bed with the "illusion" of having something more appealing to do the next morning than the

I was just automatically getting dressed as a half-zombie and running to work. That change, *a priori* so simple, made me sleep better.

I still couldn't control the anguish when I opened my eyes each morning, but I was able to reduce that feeling by pampering myself as much as circumstances allowed.

If I had been asked if I had any reason to feel that anguish, I would have said no. Certainly nothing consciously caused me that discomfort. Certainly nothing I was conscious of caused me that discomfort.

At that time, I was living in Santiago, Chile, and I was taking a course on the Ontology of Language by Rafael Echeverría, a Chilean sociologist and Doctor of Philosophy. I would summarize that he is a sage of our time from whom I learned and still learn a lot.

For one of the assignments we had to do, I was asked to write down how I felt every hour for two days in a row. I had to describe my feelings from the time I got up to the time I went to bed. In a simple way. My notebook went something like this: "Monday, 7 a.m., wake up, feel anguish in my stomach. Eight a.m., already in the shower, feel calmer and stronger. Nine o'clock in the morning, after reading the newspaper, I feel motivated. Ten o'clock, answering *e-mails, I* feel bored. Noon, after having coffee with a friend who came to the office, I feel energized...".

After doing this exercise, I came to two very clear and surprising conclusions:

- **First conclusion:** it was an emotional roller coaster and I didn't know it!

  How could I feel so many different things in such a short time? I hadn't realized it. All day, I didn't write down the same emotion for two hours in a row.

- **Second conclusion:** my emotions changed depending on what I did and with whom I interacted. Without a doubt, pleasant social interaction was a driving force for feeling good. My energy, motivation and confidence increased. However, anything that had to do with numbers, invoices and spreadsheet work brought more negative emotions afterwards. Funny, because in my job I had to do a lot of that. Here I began to get a sense of why Monday mornings generated angst for me and that there needed to be less spreadsheets in my life if I wanted to feel better.

When we shared this exercise with the rest of the students, the same thing had happened to all of us. We were a stream of emotions that changed throughout the day, that didn't last long and that we couldn't control. Or so we thought at the time.

Emotions "assaulted" us approximately every forty minutes. Not that they changed radically, but in that period of time we were not writing the same word. Clearly I was just as the etymology of the word emotion states: "continually moving from one habitual state to another".

I encourage you to do the same exercise; the information it provides is very interesting.

It is very likely that as you read this you identify with these changes of emotions. With that which "pushes" you and makes you change your state.

And it is curious. In all my years of mentally training hundreds of people, I have no doubt that the quality of our life is given to us by the quality of our emotional feeling, and yet we are so lost when it comes to understanding what we feel, what emotions invade us, why they invade us and what we can do to influence them.

In fact, **the ability to recognize our own emotions and those of others is a type of intelligence, the so-called *emotional intelligence*,** popularized by Daniel Goleman, although the term existed before.

In other words, the ability to know what emotion we are feeling or what we are

The feeling we have for the person next to us is not something innate or the same for everyone. It is part of our personal intelligence. The more emotional intelligence we have, the more easily we will be able to perceive our emotions and those of others.

Not so with temperature, for example. We don't need something like "thermostatic intelligence," the ability to recognize whether we are hot or cold. It comes innate, from the factory. If you feel cold, you can clearly determine that you are cold, locate the source of the cold, and you are also able to do something to combat it, such as put on a jacket.

Emotions move us, affect us, but in many cases we do not even know what we are feeling, where that feeling comes from or how to change it.

That is, whether we are able to identify and act on what we are feeling depends on our degree of emotional intelligence.

I have evolved a lot since I did that exercise of writing down my emotions. I recognize that I was very shocked by this continuous "emotional kidnapping" and I decided that I had to learn to have more control or, at least, knowledge about it. I am going to share with you what I have learned that has helped me a lot.

My goal with this chapter is that your emotional intelligence will be strengthened by the simple fact of seeing yourself reflected in the situations that you are facing.

I explain in it. I want to empower you with concrete aspects that will help you to interpret what is happening to you and also to be able to act on it.

If you do not know more about your emotional world, it is because you have not been taught to recognize it in a simple and practical way. Until very recently, little importance has been given to our emotional education. Quite the opposite, in fact. Emotion was identified with lack of control, with being less professional, with being weak, with not knowing how to behave. This has marked us a lot. We have generations behind us who have silenced their emotions as something to be ashamed of.

It is up to all of us, you and me, to reconquer the place that corresponds to our emotional feeling.

I have the impression that this revolution is already progressing at a good pace and that the new generations have already integrated the importance of emotions. And that is very good.

I am absolutely certain that our "best self", our maximum deployment of capabilities and talents, as well as our health and well-being, are a direct consequence of accepting and flowing in our emotions.

So let's look at them a little closer so we can do this better.

To begin with, I am going to explain the difference between emotions and emotional states: they are similar, but they are not the same.

DIFFERENCE BETWEEN EMOTIONS AND EMOTIONAL STATES

Emotions and emotional state are two different things and we tend to confuse them. In fact, many of the messages we receive in the media and in much literature do not make this distinction and this misleads us.

Look, it is easy to differentiate them. Let's look at emotions first:

- They are an instantaneous feeling.
- They are superficial and ephemeral.
- They follow in quick succession.
- They invade us and we can't do anything about it.
- We cannot control them.

In a single day we can experience many different emotions. As it happened to me while I was writing my emotional diary, emotions follow each other, we change emotions many times in a day. Sometimes we know where they come from because they are born as a response to something that has happened to us before, but many other times we do not know why they are there. They simply come to us and invade us.

That is why it is possible to open your eyes in the morning and feel discouraged, then inspired while taking a shower, drink your first coffee of the day and feel stress, and feel joy while talking to a friend on the phone. In one day you feel many different emotions that follow each other.

Numerous studies identify four basic emotions: **joy, anger, sadness and fear.** However, I do not follow this classification. I understand emotions as something much more sophisticated that is generated by combinations of these four basic emotions. I will refer to emotions as **everything we feel that impresses us positively or negatively.** In that sense, there are emotions that cause us pleasant sensations and emotions that cause us uncomfortable or unpleasant sensations. There are emotions that are productive because they help us to

We need to develop ourselves and get the best out of ourselves and there are emotions that are limiting, that impede our expansion.

Now let's see what emotional states are.

- Emotional states are no longer superficial and ephemeral as emotions were, but are deep and recurrent, returning again and again.
- When an emotion is lodged for a long time, it becomes an emotional state.
- You may feel sadness for a while, but it is not until the sadness becomes lodged in you that it turns into an emotional state of hopelessness.
- In that sense, we can say that, when sadness stays for a while, it stops being emotion and you start "making sadness". You enter a state of hopelessness. That's when it becomes a state of mind.

Examples of emotional states are sadness, optimism, resignation, resentment, depression, confidence, tenderness, low self-esteem, jealousy or envy.

The big difference between emotional states and emotions is that we can influence and alter the former, while we cannot change the emotions that invade us.

That is, **we cannot control feeling sadness or anguish, but we can prevent them from becoming lodged in us and turning into an emotional state that leads us to depression or hopelessness.** That is why it is very important to make the distinction.

When we say that you cannot fight an emotion, or avoid it, we mean that you cannot avoid feeling an emotion. However, you can prevent it from becoming lodged and "embodied" in you. You can observe them from a distance and marvel at the sheer number you get to feel in a day, as happened to me when I did the journaling exercise, but that doesn't mean that your emotional state should be governed by any of them.

You can feel an emotion such as joy at specific moments of your day and yet, if you are asked how you are in general, how you are this month, answer that you are quite down and unmotivated. One thing is the flashes that trigger emotions and another thing is the general emotional state that invades you.

It is not the same to feel joy occasionally while you are in an emotional state of generalized depression as it is to feel sadness or low mood at a time when you feel generally full of illusion and zest for life. Do you realize this? We have to make the distinction. If we look at emotions and emotional states in the same way, it is very complicated to understand.

For a long time, after reading and studying books on the subject of emotions, I was left with a feeling of frustration, of difficulty. No matter how much theory I read, the feeling was that I did not know where to begin to open this melon of the emotional world. There are many lists of do's and don'ts that, frankly, I forget and are of little use to me.

My approach has always been much more sensory and less rational.

What has worked for me is to be able to flow between emotions, to let them come, to let them happen and to know how to "attract" better emotions to replace the ones I don't like. I don't fight against limiting or uncomfortable emotions, I replace them with better ones.

I will explain how.

HOW YOUR BRAIN PRODUCES EMOTIONS

As I said, emotions come to us involuntarily. It is as if we were kidnapped. I was very surprised by the roller coaster of emotions that I experienced during the course of a day, considering that I recognized myself as an emotionally stable person. Look at me, I saw myself as emotionally stable and I was not able to stay for two hours in a row in the same emotion!

That is to say, emotions (not emotional states) are like "nudges" that pull us out of one previous state and into another, constantly.

Where do these emotional "pushes" come from?

Well, once again our brain is behind it. The brain is a factory of emotions that works all the time. But, notice, in this case it does not work alone. It works hand in hand with the other great factory of emotions that is your body.

This was not known before and there are still many voices that do not include the body as the great generator of emotions that it really is. This is a mistake. Our body, with its posture, with its functioning, actively generates emotions. It is not something exclusive to our mind, as was thought until a few years ago.

Not only your mind: your body is also a great producer of emotions.

So your brain and your body work many times together, but also separately in this process of creating emotions within you. And they do it

constantly, they do not rest. Even when you sleep and dream you are feeling emotions.

But how do they do it? How can we be quietly reading a book at home and suddenly feel a sense of sadness come over us?

How is this sadness generated, where does it come from?

Hold on: emotions come, to a large extent, from memories. Emotions come from the memories you have stored in your mind and body. And when your mind and body bring these memories back to the present, they generate the same emotions they generated in the past.

Everything you remember has an emotional content for you.

Let me explain how. To do this I am going to introduce you to the three emotion factories you have in you working day and night:

- Your unconscious brain.
- Your conscious brain.
- Your body.

HOW YOUR UNCONSCIOUS BRAIN MANUFACTURES EMOTIONS

We have already talked about our unconscious brain and we know that it is a mystery to us. We simply do not have access to it. Everything happens on a plane where we are not aware of anything. Our consciousness cannot enter it.

And it's a huge part of our brain functioning: as you know, it's said to be around ninety-five percent. It is not easy to establish

very rigorous figures when we talk about the brain, but we certainly know that it is almost the totality of its functioning.

The same is true for emotions. Emotions
come from memories stored in the brain. So, imagine, if ninety-five percent of our emotions come from memories lodged in our unconscious, it is very logical that they catch us by surprise! We cannot make a *rational* connection between what we feel and where it comes from. That "where it comes from" is opaque to us.

This is one of the main reasons for our emotional absent-mindedness. We do not know why we are suddenly overcome by an emotion of sadness when we enter a place, or by an emotion of anger during a conversation that is of no great importance, or by a loving emotion when we hear a voice. As far as emotions are concerned, there are elements that trigger in us the access to an unconscious emotional memory and we surprise ourselves invaded by these sensations without being able to explain where they come from.

Our senses are powerful captors of emotional memories. A smell, a certain light, the tone of voice or touch take us to memories already lived that come back to us in the form of emotion. We do not know their origin, but our brain does.

When you write an emotional diary like the one I did, you realize that many of the emotions you feel come from a place like this, unknown to us.

HOW YOUR CONSCIOUS BRAIN PRODUCES EMOTIONS

Our conscious brain is in charge of the remaining five percent of our brain functioning. And this is the part in which we

we can perceive and reason. So five percent of us can associate conscious memories with emotions. It seems little, but there is a lot we can do with it.

When our conscious brain remembers something, it automatically generates an emotion associated with that memory. For example, if I ask you: do you remember that time when you were extremely embarrassed about something you did and you thought that you had done something wrong? "Earth, swallow me"? Just by and recreating that situation in your mind, you may well feel a twinge of shame.

Your brain stores in its conscious memory much of what you have experienced that has provoked a remarkable emotion. Recalling that situation will bring back to you an echo of the emotion you felt then.

Everything you remember has an emotional content for you.

All our conscious memories are still stored in us because they generated an emotion in us. Every time you relive those memories in your thoughts, your brain generates the emotions associated with them.

Think of a situation of loss of someone or something very important to you. You will automatically get a "movement" of grief or sadness. Think of a moment when you enjoyed very much something you had achieved. You will automatically get a more positive "movement".

Depending on what you think about, you can "move" between one emotion and another. More positive memories will lead you to more expansive and pleasant emotions and more uncomfortable memories will lead you to more limiting and negative emotions.

Through your thoughts, your brain is able to manufacture emotions of one kind or another.

With your thoughts you control the emotions generated by your brain.

And you already know this intuitively. You know that if you guide your conscious thoughts towards positive situations lived, your emotions are more cheerful and positive and if, on the other hand, you think about bad moments lived, losses, suffering, or project negativity towards your future, the emotions you feel are much more negative and uncomfortable.

Your emotions are tinged with the color of your thoughts.

That is why when you read or hear about emotions, one of the main guidelines they give you is to control the quality of your thoughts, because they define the quality of your life. And it is that, indeed:

Thoughts "call" to concrete emotions.

Your brain listens to you all the time. What you say to yourself matters a lot. Depending on what you say to yourself, your brain decides to bring you one emotional memory or another. But, remember, only five percent of the time. Your unconscious does the rest. So don't be surprised if this roller coaster of emotions gets out of your control and you're not always the one consciously manufacturing emotions. The good news is that your unconscious also stores a lot of good emotions, so it will also surprise you with positive feelings even if you don't know where they come from.

Don't feel bad if positive psychology, talking yourself up, looking at your strengths and good moments doesn't prevent uncomfortable emotions that you would like to avoid from surfacing in you. We only control a small part of the emotions that come up. The rest are in charge of our unconscious and there it is much more complicated to access.

Even so, do not underestimate all that you can do for your emotional well-being by remembering situations you have experienced that bring you good emotions, as well as by generating good thoughts. Although it is a small part of your emotional functioning, it does have an impact, and a big one, on your emotional world.

HOW YOUR BODY PRODUCES EMOTIONS

Something that surely does not surprise you is that your body reacts physically to emotions. That is to say, that when you are angry you clench your jaw or when you are anxious you move your leg nervously up and down. That when you feel fear your breaths are short and shallow or that when you listen to that music you feel like dancing and you feel good. In all these cases, a type of emotion makes your body react in a certain way: clenching your jaw, moving your leg, breathing shallowly or dancing.

In fact, your body has a very good memory, a very good memory. It remembers perfectly how it works when you are feeling a certain emotion.

And here something very curious happens. Your body is so used to how it works in front of every emotion that, when this emotion comes to you, when it comes to you unexpectedly, your body is able to react to it physically before your mind is aware of it. That is, you clench your jaw before your brain is aware that it feels angry. Your body gets ahead of you. In fact, when emotions come from the unconscious part of the brain, you may be feeling many physical symptoms and have no idea what emotion is behind them.

As António Damásio, a magnificent neuroscientist, researcher and neurologist, used to say:

"The body already knows what the mind has not yet realized."

And what does this mean in your day to day life? That your body reacts and makes you feel things that you don't know where they come from. You may be feeling distress in your stomach or low mood for no apparent reason. But that's just it, just for no apparent reason. In reality, your body has sensed something with your senses that has reminded it of a past situation and it reacts just as it has at other times. Long before you have noticed it.

Our body remembers everything and replicates in it the sensations before you have been conscious.

Our body "speaks" of things that our mind has not yet perceived.

But now I am going to tell you something even more surprising. Our body not only reacts to emotions, but also manufactures emotions. That is, it is not only that the emotion of anger makes you clench your jaw, but if you clench your jaw, you can "manufacture" anger. Or that anxiety makes you move your leg, but that if you suddenly start moving your leg when you are calm, you "fabricate" anxiety; or that if you take short, shallow breaths,
You "fabricate" fear, or that if you dance and listen to music, you "fabricate" feeling joyful.

That is, you can use your body to manufacture one or the other emotions. And this is a great tool for you.

We now know that if we do something with our body that is stored in memory and associated with an emotion, we can manufacture that emotion.

- You can manufacture joy.
- You can manufacture sadness.

- You can manufacture motivation.
- You can manufacture fatigue.
- You can manufacture energy.
- You can manufacture tenderness.
- You can manufacture strength.
- You can manufacture security.

And the way to manufacture it is by doing corporeally something that you have done in the past when you have felt that emotion. That is, the best way to manufacture joy is to replicate on a physical level what you have done in the past when you felt joy. If when you have felt joy in the past it was dancing, listening to a certain music and laughing, if you force your body in another situation in which you do not feel joy to dance, listen to music and laugh, even if you do not feel like it, you will produce joy. Simply because your body is replicating that situation that it has stored in its memory.

Body postures generate emotions.

Just as you can manufacture positive emotions, you can manufacture uncomfortable and limiting emotions. You can manufacture sadness by doing what you have physically done in a situation that was sad in the past. For example, by adopting the body posture of sadness (slumped shoulders and eyes, lowered head, sad grimace) and moving with sad energy (slow movements, slow speech, muffled voice). If you replicate these characteristics bodily, you will be manufacturing sadness.

If you add to this the negative and sad thoughts that you access from your conscious brain, you will be building the best factory for the production of

sadness you can imagine.

How are you doing? How do you see yourself? What factories do you work in? Do you produce more positive or negative emotions?

Now you know the three factories of emotions you have: your unconscious brain, your conscious brain and your body. Of these three factories, the only one you don't have access to is your unconscious brain, so, if you want to decide about your emotions, you have to focus on the other two: your conscious brain generates emotions when you make it go to concrete memories and thoughts and your body does it through the change of posture, the breathing pattern and the information you give it through the senses.

But I want you to understand this very well: emotions, to a large extent, we manufacture them. You manufacture them and you can do it from your brain, from your body or using both at the same time. And this is something extraordinary, because it means that we can influence our emotional world and stand up to these emotional "kidnappings".

Although emotions come to us involuntarily, we can make them evolve into other emotions. We can transform some emotions into others. That is to say, we can manufacture those that come to replace others that we want to get out of. If I want to stop feeling insecure, I can do something with my brain or my body to exchange the emotion of insecurity for one of security. This gives us enormous power if we know how to use it.

Having explained all this, let's go one step further: I will show you how we manufacture moods.

HOW TO MANUFACTURE MOODS

As we have seen, moods are the consequence of a predominant emotion that has been lodged in you for some time. When your main mood is one of overwhelm and stress it is because for a long time the predominant emotions in your system have been anguish, stress, fear or insecurity. You can feel fear several times a day in this emotional roller coaster that we each are due to the emotions that invade us, but it only becomes an emotional state when it stays in you longer than usual and stands out from the rest of the emotions. No one feels fear all the time, but if this emotion is the predominant one, you will be unable to perceive the other emotions you feel during the day.

Positive and optimistic moods respond to your ability to fix positive emotions in you for a longer period of time. It does not mean that there are no negative or uncomfortable emotions in your daily life. It means that the one that predominates and, therefore, overshadows the others is positive.

The basis of our health and happiness lies in our ability to be able to flow between emotions, to manufacture positive emotions to counteract the negative ones that come to us from our unconscious brain and to fix in us positive emotions in the long term that generate good emotional states. If you know how to do this, your life will improve exponentially.

Now that you know your emotion and mood factories, I'm going to give you two exercises that show you how to use them to your advantage.

•••

Exercise to get out of negative emotions

The most powerful thing you can do to get out of an emotion you don't like and manufacture one that pleases you more is to remind your conscious brain and body how that positive emotion makes you feel.

Example: imagine that, as it happened to me, you wake up with anguish and you have a burning in your stomach. You cannot avoid feeling it, that emotion comes to you (through your unconscious brain), but you can make it evolve to another emotion.

If you want to change anguish to carefree, for example, you**'re going to have to remind your brain and your body how that carefree feeling makes you feel** so that both can manufacture it.

How your brain produces carefree thinking: mentally relive a situation in which you did not feel worry, but on the contrary, you felt calm, serene and secure. You can use any situation that comes to your mind. Mentally go through that situation with as many details as you can. Try to see yourself from the outside. As if you were a spectator. Allow yourself to live it mentally with as many visual, auditory, light, temperature details as possible. Take advantage of the ability we have to be able to relive something in such detail that it feels like you are really there.

Now add the thoughts in accordance with that emotion of carefree. Those that are born from you. They can be of the type "Everything will be fine", "I am capable", "Nothing is so serious",

"Everything happens", you can say to yourself whatever you would say to yourself from that carefree situation.

Then you can finish by saying to yourself: "Be calm, calm, calm, I've done it before" (and it's true, you know how to do it, or, rather, your brain knows how to do it: you just have to give it a little reminder).

How your body manufactures nonchalance: the best way is to replicate what you did when you felt nonchalance in the past. If you are able to close your eyes and visualize yourself in that situation in the past, you will notice the type of body posture, tension in your muscles, speed at which you moved, and so on. If this information does not come to you in a clear way, let your intuition work, listen to yourself and search in yourself what it means to be carefree: if, for example, there is music, movements or actions that help you.

I'll give you a hand: laughing will help. Interestingly, the brain will hardly be able to perceive whether you do it with or without desire. While an eager laugh sends a brain information of satisfaction, when you do it unwillingly and move the same muscles as when you really laugh, your brain understands this: "He is moving the laughter muscles, he is happy, I will produce joy then", and gradually your level of joy rises. Laughing is a great antidote to worry.

You can also help yourself with everything that in a sensory way makes you carefree. That is, what can you listen to, look at, taste, touch, smell that makes you let go of worry? Listen to that music that calms you down, look at something

Let your skin feel calm through hot water (it worked very well for me to relax my anguish) or give yourself a massage oil, put a candle or a smell that comforts you: in short, introduce information through your senses that will help you reach that state of nonchalance. I could give you a list of things that work, but believe me, what will give you the best results is what comes from you, what you already know is good for you.

All this can be done with any other emotion. Look for its opposite and put your body and mind to work.

If you feel sorrow, take your brain to happy moments, create positive thoughts, nothing happens because you force yourself and do not really feel them, just by making the effort you are already mobilizing your unconscious brain. Move your body as when you feel joy, listen to music, feed your senses with something pleasant, move the muscles of your face forming a smile. If you are sad, you will find it hard to do this, it seems a bit silly to smile or dance when you don't feel like it, but I assure you it works. In a few minutes your emotion factories will be working in your favor to generate joy or, at least, more emotional comfort and optimism.

If you feel anger, do the same, seek the opposite, seek the calm and satisfaction of feeling good, flowing with the world. And move your mental memories, your thoughts and your body as when you are in that other emotion you seek.

We often stay in an emotion, however uncomfortable it may be, because it is easier for us to stay in it than to turn the nuts and bolts necessary to manufacture another emotion. This

resistance and this laziness to change are totally normal. Realize that when you are in an emotion it is because your emotion factories are producing that emotion. Turning the wheels to generate others takes extra energy. But it is worth it. Remember this: the initial effort it takes to change an emotion is not a sign that you can't do it; it just takes work to get your machinery going in the opposite direction, but once you get it right and start turning in the direction that suits you, you will have the reward of being in a more positive emotion for you.

The more times you do it, the easier it gets. After all, you are exercising your brain and your body to do it.

•••

Exercise to improve your mood

As I was saying, our moods are the result of an emotion that has lodged in us and that predominates over all the others that we also feel. Our mood may be low, our main emotion may be sadness, but we still feel joy, motivation or anger at other times.

How can you prevent annoying emotions that lead to uncomfortable and unconstructive moods from prevailing in you? By being more aware of when this emotion is beginning to nest in you. It**'s okay to be sad for a day, a month, or a year if you have**

You have suffered a painful event, such as the loss of a loved one. What you do have to avoid is that this emotion does not let any other emotion in and "hijack" you.

You can be very sad, but at the same time feel grateful and happy for other facets of your life. That is why it is important to explain to your brain and body that, although they generate sadness, they can also produce other emotions.

Again, I don't want to just throw out theory that you will forget. I prefer to give you a practical method that you will retain in you. At the end of the day, we remember what produces an emotion in us and the emotions that we continue to generate depend on this. It is a two-way street.

When you are in a certain state of mind, your body is vibrating in a very specific energy. Remember what I told you in the chapter on vital energy about the electromagnetic fields we generate?

Well, emotions are related to energy levels, specifically to the electromagnetic fields that we produce in our brain and in our body, especially in our heart.

Disordered and non-harmonic energy levels are associated with uncomfortable emotions, and coherent and high energy levels are related to emotions that we perceive as positive because they make us feel good.

The energy level at which we vibrate our body determines the emotions we feel.

Therefore, to change from one state of mind to another I am going to ask you to look at the energy you feel. Forget about the

name the emotions, why they come, the complexity you think is behind them. Just notice the energy you feel. See if it's heavy, if it's light, if it's slow, if it's cold, if it's hot. Sounds a little strange, doesn't it? Well, I assure you that it is the most direct way for you to understand and change your type of energy and, with it, your state of mind.

It is very intuitive. If you feel sad, you will be immersed in a slow, heavy, dark energy. If your brain and your body generate faster, lighter, more colorful energy, you will feel better. But at first they don't generate it: you have to generate it. They are busy producing sad energy. You have to surprise them and remind them that they can also generate other, happier energy, the energy of more positive emotions.

In short, and excuse the redundancy, to get out of a state of mind the first thing is to want to get out of that state of mind. I know it is hard, but I also know that you are capable of achieving it.

To get out of slow energy you have to generate more dynamic energy. How do you do it? Well, any way you can. Move, jump, dance, wave your arms. Accelerate your breathing with whatever method is easiest for you. You can force yourself to take faster breaths with your abdomen. Keep in mind that your mission is to accelerate your energy: you will intuitively decide how.

If your energy is cold, as happens when we are apathetic or feel little emotion, you need to warm it up. How? By exposing yourself to warm light (it is not a mystery that in

with more sunshine people tend to be more passionate), taking a hot bath, being near a fire, lighting a candle, giving yourself a massage with oils, whatever you can think of. Again, inside you know how to warm up energy.

If your energy is dark, pessimistic, look for colorful energy. Get color into your senses in some way: again, use any tool that works for you. Dress with color, look at colorful things, remember your moments in the sun or in a cheerful landscape of sea or mountain with beautiful colors, recreate the color in you.

Finally, a great way to change our energy is through our body posture. When our posture is open, with our shoulders wide open, legs straight and head high, we generate more energy than when we are hunched over, shoulders slumped and head low.

•••

If you are going through an emotionally difficult time, I want you to know that these changes are possible, but they will require effort, because **your brain has the inertia to stay in the emotional state it is already in, even if it is an emotional state that makes you suffer.** The initial expenditure of energy to change the emotional pattern is great. It is normal that you do not feel like adopting different body postures, taking your mind to moments where you were well or listening to music. You will have to force yourself to do it and you will do it unwillingly at first.

It is easier to achieve this if you have an accomplice. You can share what is happening to you with someone and explain that you need to "call" better states.

emotional. You can meet to talk about times that were good for you or to do a certain physical activity. Find a way to make yourself do it. That step, at first complicated, is the door to changing how you feel.

IF YOU WANT TO KNOW MORE ABOUT EMOTIONS AND THE BRAIN

We know that our brain has extraordinary capacities. From learning a new language to solving a complicated problem, to displaying extraordinary love and tenderness for another being or allowing us to make very specific movements in a sport, remembering something that happened a long time ago or intuiting something that we do not know where it comes from, but that is accurate..., it never ceases to amaze us. Our brain works on many parallel planes simultaneously.

The problem is that, when we are not emotionally well, the wonderful structure capable of all this is destabilized. Emotional discomfort affects all our facets because our brain is very aware of our emotional state.

When it is good, it grants us "superpowers". Have you noticed that when you feel good, joyful, confident, with love, with good energy, everything comes to you? You feel expanded, more capable, and things around you tend to flow effortlessly. You probably come up with many more ideas and feel more efficient as well. On the other hand, when your mood is low or you experience anger or frustration, it is very possible that you find yourself blocked, with little mental clarity, you tend to procrastinate, everything seems difficult, you forget things and you don't flow much.

It's as if your brain is taking away "your powers". And, in a way, it does. I'll explain why.

Our brain scans the information it receives all the time, especially emotional information. When you are emotionally uncomfortable, your brain panics and activates the amygdala to trigger the mental emergency mechanism. Being in mental emergency means, as Daniel Goleman has described it, entering into a "hijacking of the amygdala". That is, the amygdala takes over, decides which part of your brain activates and, above all, which parts it deactivates.

We have already talked about the amygdala and other areas of the brain, so it won't surprise you if I tell you now that they also, of course, have to do with emotional regulation. We've already looked at some of these concepts, but let's dig a little deeper.

The direct communication of the amygdala, which coordinates our emotional brain, with the hippocampus, our memory and learning center, has been confirmed by functional magnetic resonance imaging (fMRI).

The hippocampus, then, connects our emotional brain (where the thalamus, hypothalamus, hippocampus and amygdala are located) with our higher cognitive brain, our prefrontal cortex, which, as you know, is the one that allows us to reason, reflect, adopt perspective and make decisions.

When our amygdala becomes highly activated and does so with limiting emotions such as grief and anger, it decides to take over and decrease communication with the hippocampus, thus breaking the fluid connection with these sophisticated and reflective areas of our brain located in our frontal and prefrontal cortex. Remember that the hippocampus even shrinks in size in these sustained states of "amygdalar hijacking".

The hippocampus is responsible for remembering events in our life because they have produced an emotion in us. For example, it can link the smell of your grandmother's freshly baked cookies with the emotion of joy, so that every time you encounter that smell you will feel a pang of joy again.

Therefore, if in the face of uncomfortable emotions your amygdala panics and communicates less with your hippocampus, you are going to lose the following powers:

1. **First:** your memory will be worse, you will have a harder time remembering moments where you felt other, more positive emotions and you will have a harder time learning things. Simply put, the powers that your hippocampus confers on you when it works well are diminished.
2. **Second,** as the functioning of your hippocampus decreases, the communication with your prefrontal cortex is also reduced, so you stop reflecting, having ideas, taking perspective, creating positive thoughts.

That is why, **when you are under emotions such as grief, anger or frustration, you feel that blockage and lack of mental clarity.** But not only that happens to you, but you feel that you lose memory, you forget things. It is normal, your amygdala has disconnected part of these brain areas.

The emotional blockage caused by the amygdala goes far beyond what we are able to recognize at first.

Limiting emotions have an enormous impact on the functioning of our brain. It is normal that, after a loss, bereavement, episodes of anger or depression, your mental capacities are diminished. Simply put, your system is not fully functioning, the more sophisticated parts of your brain are at a minimum.

The opposite is also true. The expansive emotions known as positive emotions give a lot of security to our amygdala and make it communicate very well with our hypothalamus, our hippocampus and our prefrontal cortex.

That's why, if you are able to feel joy and optimism before a challenge, your brain will function better. Positive emotions cause more brain areas to be activated, from memory to all the more sophisticated cognitive functions.

If you want to get the best out of yourself on an exam, at work or in your daily life, getting your conscious brain and body to generate positive emotions first will be the best of engines to better utilize your brain capacity.

The visualization exercises that I have shown you above manage to give a good boost to the functioning of your hippocampus despite the fact that the amygdala wants to reduce its activity. Every time you bring a good memory to your mind, even if at that moment you are feeling very sad, you are calming your amygdala and, above all, activating your hippocampus, rescuing it from its hijacking. When you bring it out of its blockage, your hippocampus brings more positive memories to the forefront and begins to turn the screws to communicate with your prefrontal cortex and activate cognitive powers such as reflection and perspective taking.

Nowadays it is possible to "silence" the amygdala and activate the hippocampus and the prefrontal cortex with brain frequency harmonization sessions. In MindStudio we do specific trainings so that the amygdala has more resistance and does not scare so easily. In this way we avoid amygdalar sequestration and allow the brain to use its capacities much better.

What we have also discovered is that **people with greater resistance to adversity and negative emotions, i.e., who recover sooner from emotionally difficult events, are those who have greater activity in their left prefrontal cortex.** It has been shown that, by training this prefrontal, it becomes capable of sending inhibitory signals to the amygdala that order it to "shut up". We also see how, after left prefrontal activation training, more positive thoughts and optimistic feelings arise.

THE RELATIONSHIP BETWEEN EMOTIONS AND FACIAL MOVEMENTS

Paul Ekman is a psychologist who pioneered the study of emotions and their relationship with facial expression. Never before had the link between emotions, gestures and their impact on brain behavior been analyzed.

Together with Wally Friesen, Ekman developed a technique to measure facial movements and learn how the facial muscles associated with different expressions move.

The surprising thing is that, after recording hundreds of sequences practicing the different facial expressions themselves, they realized that, when adopting certain expressions, they were flooded with intense emotional sensations.

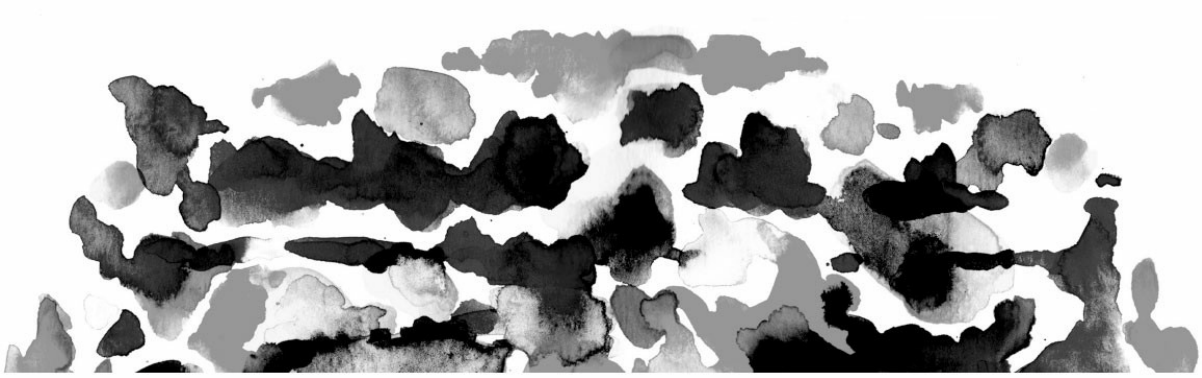
They found that the simple adoption of a certain expression produced changes in the autonomic system of people and generated emotions without any other external information beyond the changes in gesticulation.

In another study focused solely on smiling, Richard Davidson, a psychologist who studies the brain and emotions, found that smiling produced many of the brain changes that occur when there is pleasure.

We have already seen all this: the memory of emotional episodes, of those that we choose to bring to memory, causes us to re-experience the emotions experienced in the original situation and gives us the opportunity to reinterpret what is happening now in our life, so that we have the possibility of changing what is making us react emotionally, our gestures, our postures. In the mind we can rehearse and test other interpretations of what is happening in a way that does not fit our most sensitive and habitual triggers.

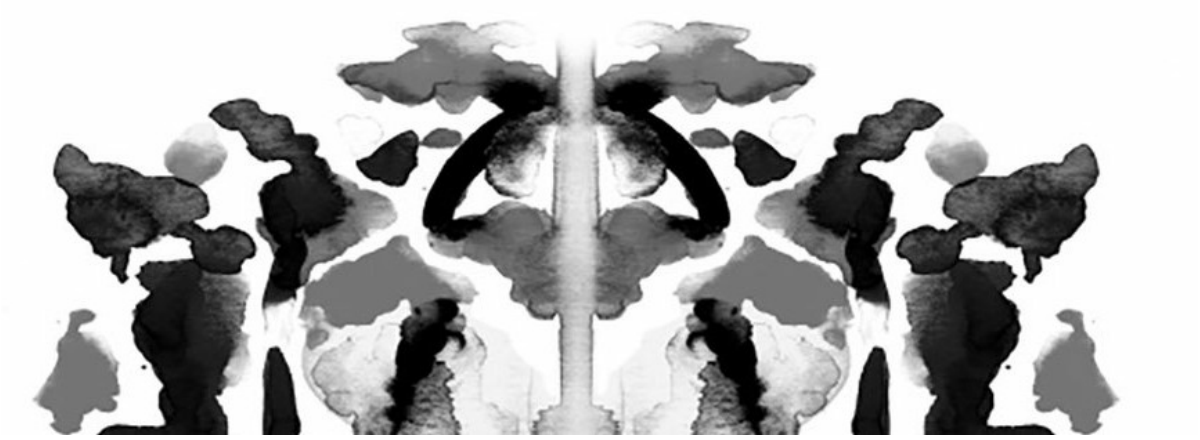
I hope that after reading this chapter you will feel more empowered to deal with the emotions that assail you and will assail you throughout your day. While your emotional diary will be a roller coaster, as it is for all of us, you have the power to manufacture emotions more in line with how you want to feel.

Use your conscious brain through your memories and your body to adopt postures that call for positive emotions. With that alone, your emotional intelligence will have gone up many notches. Put it into practice and enjoy it.



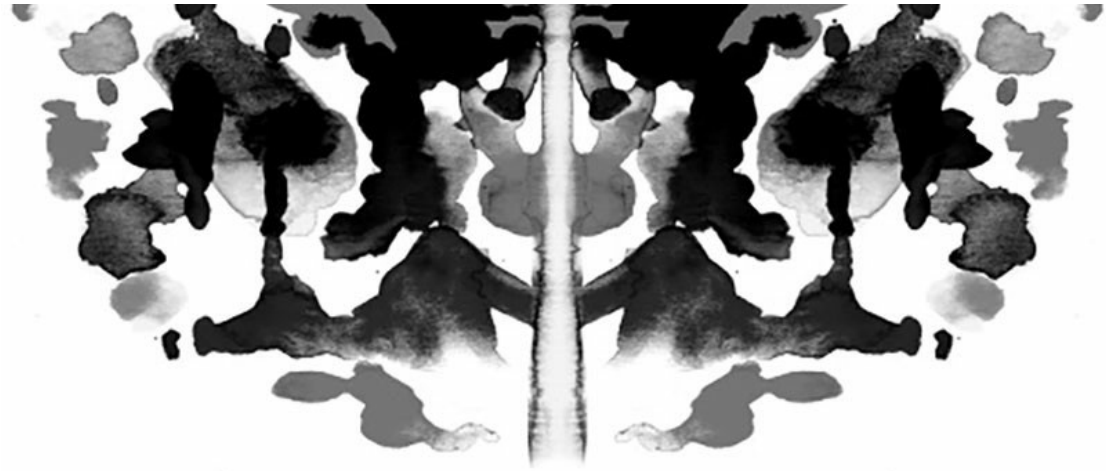
PART TWO

YOUR POTENTIAL IS GREATER THAN YOU CAN IMAGINE



6

ATTENTION: IT'S YOURS, USE IT WELL



ATTENTION

1. f. The application of mental or sense activity to a given mental or sensible stimulus or object.

CONCENTRATION

1. f. The action or effect of concentrating, accumulating in the same point a great quantity of something.

> **2. f. The** action or effect of concentrating, focusing mentally with the objective of having better results.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT ATTENTION AND CONCENTRATION

Lift your eyes for a moment from this page and look for a few seconds at what is behind this book you are holding.

During the period of time that you have not been looking at this page, it has simply ceased to exist for you and has given way to the reality behind the book.

Now think about your class at school when you were five years old, what the walls looked like, if there was anything on them, how the tables were arranged,

Remember how long it's been since you've thought about it? Your school class from when you were five years old didn't exist for you until you've put your memory on it.

Listen now to the sound around you. Sharpen your hearing, concentrate on any sound, listen deeply. Have sounds appeared that you were not hearing before? These sounds have come to life because you have been able to perceive them: they did not exist for you before.

Once you fix your attention on something with any of your senses or with your thought, you are making that something exist. It is enough to stop putting your attention on it for it to disappear. Maybe it disappears for a few moments, a few minutes, days, hours, years or maybe even forever. It all depends on when you bring your attention back to it.

Your attention determines what exists for you.

It is as if your life is a stage with a black background where there is nothing. Your attention makes that black background come alive. You, with your senses and with your thoughts, "furnish" that stage where nothing exists until you bring it into it.

Everything you are perceiving and seeing out of the corner of your eye at this moment exists because your senses are picking it up. The room next to where you are now does not exist for you unless you bring your thoughts to it. Then it will come alive, because you will be able to recreate it in your thoughts thanks to your memory.

What you are able to perceive and think about is what makes up your world. Everything that is outside of your senses and thoughts "shuts down" and ceases to exist.

Our attention is that flashlight that illuminates everything where it places its beam of light. If it does not illuminate it, it does not exist, it is a black background.

A priori, this has two major consequences:

1. **It empowers us. It gives us the possibility to choose to fixate on something.** Obviously, if we choose to fixate on events, things, memories, pleasant thoughts, our world will be furnished in a quite pleasant way. We have the opportunity to illuminate with this flashlight that is attention that which we want to exist for us. This gives us enormous power, don't you think?
2. **We don't have absolute control over it. We can't always choose where we put our attention.** It would be great if we could, but we c a n 't. We would rather not give up our attention. We would rather not let our attention

> We may not notice someone who says something insulting to us on the street or not notice that part of our body that we dislike so much, but it happens, we can't avoid it. Our senses pick it up whether we want them to or not. And our thoughts do the same. Our dominion over our senses is not so great that we can prevent them from going to places we don't like.

That is what attention is all about. How our senses and our thoughts lead us to capture some or other realities, sometimes voluntarily and many times involuntarily.

Depending on what you grasp, your reality will be one way or another.

The quality of your life depends on where you put your attention.

When you look in the mirror, where do you direct your gaze? Maybe you don't pay much attention and it's a general look, without paying much attention to yourself, or maybe you focus on that thing you don't like and that, look how angry it is, is still there, or maybe you observe something that you really like about yourself. In any of these cases, depending on how your attention acts, you will create one image or another of you. You will create the reality of who you are in front of a mirror. What you say to yourself becomes what you believe yourself to be in front of that mirror. And the emotions that are created according to what you say to yourself are very different.

Notice how important mindfulness is. It literally defines ourselves. It illuminates some aspects of us and leaves others in the dark.

There is one very important aspect of care that we should not overlook:

If you decide to put your attention in one place, you are taking it away from another.

THE FIGHT FOR YOUR ATTENTION

Deciding well what you want to become part of your world and what you give up and leave in the dark is an important act worth looking at closely.

Almost as soon as we open our eyes, we enter a world created by and for human beings. When interacting with others, whether in person, digitally or via cell phone, we enter into a struggle to capture our attention. In other words, to design our world.

Our cell phones are powerful attention-grabbing machines. What your phone throws at you is designed to influence your senses and make you forget about everything else. I don't want to dwell on this subject, because there is a lot of literature written about it that you can consult, but I want to make you aware of something. Every message, every alarm, every wake-up call from your phone is like a rope that pulls your gaze, your senses and your thoughts so that you only illuminate that reality and forget about others. Looking at your phone if that's what you want is a possibility, a choice, but it must be *your* choice.

There are many ways to gain more control over the attention your phone captures from you:

1. First, **you can decide when your phone is with you or not.** Not having it with you allows you to avoid those wake-up calls that your senses will otherwise lead you to.

2. Second, **you can lower the intensity of that wake-up call.** Silence alarms, turn off immediate alerts for messages and apps. You can choose to look at your phone's activity when you decide, not every time he wants you to.
3. Third, **you can choose which pages and what kind of information interests you.** Don't let your attention creep wherever the algorithms see fit. Decide in advance what you want to see. Shine a light on the information that interests you. Our phones are experts at shining a light on what they decide and leaving in the dark what we are interested in.

In addition to your phone, **the events and people you interact with in your day-to-day life are powerful machines for dragging your gaze to one place or another.** Not that it's wrong that they are, but it's good to be aware of this and that you don't have as much freedom over your attention as you think you do.

Let's take an example. You may have woken up on a Saturday and, as soon as you open your eyes, you think: "Today is going to be a great day, and I'm going to start it by going to the gym". You imagine that healthy breakfast with fruit and muesli that you're going to prepare and the workout clothes you're going to wear. But a few minutes later your phone rings and someone tells you that your car, which was parked on the street, has been hit by a passing truck. Your rear-view mirror and the side of your car are smashed. At that moment, only your car exists for you. Your breakfast, gym and workout clothes have gone out and into *the darkness.* Another event has caught your attention and what you had decided to look at has been replaced by what external events have forced you to attend to.

The struggle for your attention is constant. Not just in simple day-to-day situations, but in the course of your life. What you feel, what you think, what you do depends on where you put your attention; the tug-of-war is a constant tug-of-war.

between where you voluntarily want to place it and where events force you to place it never ceases.

It is important that you know this so that you do not deviate from the destination you want to reach, even if your attention, instead of taking you in a straight line, zigzags a little. The important thing is to be aware of this, because in this way you will force yourself to illuminate what is important to you, even if the events of everyday life insist on extinguishing it. Lest life directs you and you forget to illuminate what is important to you.

DIFFERENCE BETWEEN ATTENTION AND CONCENTRATION

We often confuse attention and concentration. We may say "You are not attentive" when we really mean "You are not focused."

We are attentive whenever we are awake. We attend to something all the time, whether it is something external or our own thoughts.

Another thing is that we are not attending to what we should be attending to or what others want us to attend to. They could tell us in that case: "Attend to this" and that would be correct. They would be asking us to focus our senses and thoughts on something concrete, to create a particular reality. In other words: "Concentrate on this".

Concentration is the ability to voluntarily and purposefully focus our attention on a particular thing, shutting out everything else. And this requires an effort to make our senses and mind focus on one particular thing rather than wandering freely through the stimuli around us.

Concentration requires sustained attention on only a parcel of everything we are able to grasp. And I have some not-so-good news for you: concentration is not innate.

To concentrate on something is to force oneself to see only the reality of that something.

Concentrating is an act that takes effort for all of us. Choosing only one thing among all that our senses perceive and focusing our attention on it is not in the nature of human beings. It is natural to be alert to everything around us. Our survival system is made for it. It is afraid to stop seeing a danger that can appear anywhere.

From this we can deduce something very important for our power of concentration. **We are able to ignore our surroundings only if we feel safe, if we are safe.** Our system tends to be attentive, unconsciously looking for potential dangers.

If you are surrounded by rabid dogs that want to come after you and ask you to concentrate on the explanation of those beautiful flowers in the field, you are hardly going to be able to put your attention on the flowers. Your senses and your thoughts are going to "illuminate" those dogs with all their strength because not doing so would be very dangerous for you. The flowers are not going to hurt you, but the dogs can and your brain knows it. So it's your brain that decides what you concentrate on or not.

This has great repercussions. Concentration is an act that our brain allows us to perform if it believes it is good for us. In other words, if you want to concentrate, you are going to have to make sure that your brain believes that it is going to be good for you and that it is not putting you in danger.

This is one of the bases of concentration.

Your brain concentrates if it feels safe.

Let's see how our brain does this. How it manages to abstract itself from all the information it receives to concentrate only on a part of it.

How your brain manufactures concentration

In order for our brain to manufacture concentration, it has to make an important effort. Concentration is not an automatic act, it is not a natural gift. It may cost you more or less to concentrate, but every time you want to do it, your brain has to break an initial resistance to achieve it. Your brain naturally wants to wander among different information, not select only a part of it and *concentrate* on it. It prefers to have a broad attention span that encompasses as much as possible.

Why do you prefer to have a broad focus?

Because once again your brain's priority is your survival, that you stay alive. It is as if it were your bodyguard. It has to be alert to everything that happens, both the information you receive through your senses and what's going on inside you. It's a real multitasking job.

To concentrate is to ask you to focus your attention on only part of the information you receive. This is difficult for a bodyguard. Not seeing everything around him could be dangerous. So how can we make him feel safe and agree to concentrate?

Giving you the peace of mind that that part of reality that you stop looking at is not a threat. Look carefully, because here lie two essential pillars of concentration. For your brain to be able to concentrate, two indispensable conditions must be met:

1. **Calm:** you must be calm and collected, knowing that you will not be attacked from behind.

2. **Energy:** must have the necessary energy to be able to make the effort required for concentration.

If only one of them is met, your brain will be willing to concentrate and it will cost you more or less. If both conditions are met at the same time, concentrating will not be a problem for you; on the contrary, you will have a good predisposition to do so.

Let's look at each of them in more detail.

•••

How to keep your brain calm

First of all, we have to get him to lose his fear of being attacked if he stops being attentive to everything around him.

The "attacks" to our survival on a daily basis do not come from wild beasts that will appear from behind a tree (well, be careful if you are in the middle of Africa, it can be literal); in our daily lives these attacks are those tasks that you do not get to on time, changes, new challenges, work stress, wanting to do everything perfect, insecurity, feeling emotionally bad and a long etcetera.

Anything that has the ability to activate your brain's emergency system is considered a potential attack.

If you want to be able to concentrate, you have to get your brain to forget all of this during that period of concentration. What you need is to create a "bubble" of concentration that contains only that which is necessary to

concentrate and where no other threat from the outside can enter.

How can you build this concentration bubble? By creating an imaginary bubble. A bubble that protects you from the outside and has the energy you want to give it to feel that calmness for your senses. Surely you can think of different ways. Once again, you are the one who knows best what places, what environments make you feel better, calmer, sheltered. All of this will help you.

I give you some ideas that are very effective for designing a good concentration bubble:

First: your concentration bubble is a place and also a specific time. Think of the concentration bubble as Cinderella's carriage. It is a carriage with a beautiful space, but it lasts only for a while and then it falls apart. It's the same with your bubble. You can choose a specific space and also the time that the bubble you create will last, because concentration is not infinite.

- You can say to yourself, "I'm going to concentrate for twenty-five minutes in this space."
- Choose a place where you know you will not be disturbed for a certain period of time.
- If you are with other people, it is helpful to let them know that you need to concentrate so that they respect your calm and do not interrupt you.
- Eliminate distractions around you; anything that doesn't serve your concentration bubble is best left out.

with you.

- Never invite your cell phone into your bubble, it has enormous power to burst it.
- In short, isolate yourself in a safe, quiet place with little stimuli so that your brain is not tempted to get distracted by its radar scanning for potential dangers.

Second: the bubble of protection should include only those thoughts that help you to concentrate. Get used to the idea that in that specific space and time that you have chosen as a bubble, no thoughts from outside enter. Only what you want to concentrate on enters.

To do this, you can encourage your brain to leave all thoughts out, *telling it* that it's okay to forget about everything else and that you will come back later to the rest of the thoughts you are leaving out. And this can be done and it works. You can consciously block thoughts about anything other than what you want to focus on. Be firm: in your bubble, in that space and time that you have defined, enter the thoughts and topics that you want. You will have time later for everything else.

Third: make your bubble a pleasant place so that you like to stay in it. You can play a background music that accompanies you and creates a calm atmosphere, or you can put a special smell, or a warm light that accompanies what you are concentrating on. Use your creativity and connect with your senses to make this space cozy and pleasant. I'll tell you what

I do to write this book you are reading: I have a "bubble" that I carry with me wherever I want to write. An important element that makes it up is a crystal candle with a scent that I love and that, when lit, gives off a very warm light through the amber glass. When I light it, my bubble is created almost instantly. My brain already identifies that light and smell with concentration and creates that protected space for writing. In my case, the lit candle causes my brain to recognize the signals and begin to manufacture concentration.

I encourage you to build your bubble. Spend some time thinking about what it should look like so that it allows you to isolate yourself from the rest of the world. And, remember, the bubble is like Cinderella's carriage, it has a limited time. Respect it, go into your bubble of concentration knowing that it is for a certain amount of time; then it will break and you will need to rest before creating it again.

•••

To concentrate we have to be vibrating at a very specific energy. Neither too high, because then it is difficult for us to remain still and centered, nor too low, because then it is not enough to overcome the initial effort we need to concentrate. It has to be just the right energy. It is a serene level of activation, a balance between calm and activity.

We all have two main sources of energy, one internal and one external. The internal one is the one that comes from **our biorhythm.** We each have

one. It is about the flow of energies throughout the day. You may find it hard to wake up in the morning and gain energy throughout the day, or you may wake up with a lot of energy and lose it as the hours go by. And it is normal that you experience ups and downs of energy during the day. Most likely twelve o'clock noon is a time of activation, but three-thirty in the afternoon, after lunch, is not.

Your second source of energy **is motivation.** If you want your brain to give you energy to focus, you have to make sure it has enough motivation to put it into that goal and take it away from somewhere else.

The energy to concentrate comes from your biorhythm and your motivation.

HOW TO HARNESS THE ENERGY OF YOUR BIORHYTHM

When is it best to seek concentration according to your internal processes? Ideally, it should be neither at a time of high energy nor at a time of low energy, but at intermediate points.

Surely if you stop to think about what your days are like, you will recognize that there are times when you find it less difficult to concentrate than at other times. This is related to your energy level.

If you are one of those who wake up with a lot of energy, your time to concentrate will be after about two hours. You can take advantage of the first hours to do more operative activities, which require you to solve aspects or make decisions, and look for the moment of concentration once you have removed the "noise" of pending things to do. **If, on the other hand, you wake up with little energy, you** can use the first hours of the day to recharge your energy by doing some sport, having breakfast, etc., and then you can take a break.

well or doing activities that require little effort, which you do automatically. Then you will have more energy to concentrate. The ideal moment to concentrate will come when your organism is recharged with energy and remains in a middle point.

HOW TO HARNESS THE ENERGY OF YOUR MOTIVATION

If you are going to ask your brain to make the effort to concentrate, you have to motivate it with some reward. What does it get in return for making this effort? Your brain must know. And it does if you are clear about it and make it clear to it.

There are two rewards that you must ensure: the short term reward, the one he receives right after concentrating, and the long term reward, the one he receives as a result of concentration. Let me explain.

The short-term reward involves giving yourself a "pat on the back," for example, with a rest period after a period of concentration. Move around, listen to something you feel like, go for a walk, stretch, close your eyes, listen to music, call someone on the phone, take a hot bath. Do something that is pleasing to your senses; you will be rewarding your brain for its effort and it will also establish the relationship:
"I make an effort and then I'm taken care of," so the next time you ask him to make an effort it will cost him a little less, because he'll know there's a reward afterward. Rewarding your brain with something sensory pleasing has a big impact on it, it doesn't forget. But, be careful, don't reward yourself with food or substances: we don't want you to become dependent on it to feel good.

The long-term reward consists of the brain keeping in mind what it is going to gain in the future for this effort that you are asking it to make in the present.

If concentrating allows you to pass an exam and thus move forward in your studies and feel pride in a job well done, you need to tell them so. Stop for a moment before you start and make sure you are clear about why it is important for you to concentrate. If you're concentrating to finish a paper, write a book, do math or write an email, you need to know what's in it for you. Your brain needs reasons to get its blood flow and energy to the areas of the left prefrontal cortex, where it is
"finds" the concentration; if not, he takes them elsewhere. Give him compelling reasons to send his energetic reinforcements to these areas.

We have seen then that calmness and motivation are indispensable for you to be able to concentrate. What happens inside your brain when both are present? Well, waves of brain frequencies called *beta* are generated. The *beta* are the frequencies of concentration. If your brain has enough *beta* frequencies, you will be able to concentrate.

The easier it is to produce these frequencies, the easier it will be for you to concentrate.

The good news is that every time you create this bubble of concentration and consciously connect with the reward for concentrating, you are training it. We have the ability to improve and extend our sustained attention. Concentration is a muscle that develops.

Another good news is that your brain has a good memory. When it has been able to concentrate well under certain conditions, it remembers it. If you repeat those conditions, it will be much more willing to concentrate again. This is something we should take advantage of. I recommend that you establish specific places to concentrate. If it is at home, choose a space to which you want to give the use of concentration and do not mix it with other uses. Reserve that place for your states of concentrated attention. It is as if you were endowing that place with the power to generate the energy you need to

concentrate. Your brain gets used to the fact that in that space it has to illuminate only a part of reality and dim the light on everything else.

There was a time when I could concentrate very well in a corner of my living room, sitting on the carpet with my back against the sofa. The circumstances of light, posture and sounds converged in a way that was very comfortable for me to keep my attention focused. It remained my "concentration corner" for a long time. When I sat there, my brain began to slow down.

Sometimes we cannot choose a place, but we can choose a body posture or even a sound.

You can then establish that this place of concentration is not a physical space, but what you do in it. You can listen to something specific (it may help to listen with headphones to soft music to eliminate other background sound or put yourself in noise cancellation mode), you can sit so that you place your hands resting on your head to isolate yourself from the outside or with your back to a source of distraction. Open yourself to the creativity of designing your concentration space. After all, it is your sensory refuge, where you soothe and focus your mind. No one knows better than you what works for you.

It works for me to travel with my candle to write, it allows me to generate this bubble in spite of being in different places. The lit candle means concentration for my brain and it takes care of generating the necessary *beta* frequencies.

And there is a third piece of good news, there is no two without three! There are specific exercises to develop this "muscle" of concentration and make your left prefrontal cortex produce *beta* frequencies.

I will explain the two that I like the most and with which I often work.

•••

Breathing to increase brain frequencies of concentration

This is alternate nostril breathing. First plug the right nostril with your thumb and take a deep breath in through the left nostril. When you can't take any more, plug the left nostril and expel the air through the right nostril. Now repeat this process in reverse and take twenty breaths in total. Take in air through one nostril and release it through the other, alternating left and right.

This exercise has the ability to balance our two brain hemispheres. It causes our right hemisphere to calm down and feel secure (first pillar of concentration, calmness, remember?); secondly, it activates our left hemisphere, energizing the areas of concentration (second pillar of concentration, energy).

•••

Focusing attention

Sweep your eyes around you. Mentally name the objects you come across. If you see a lamp, for example, mentally say "lamp" and so on with everything that appears around you. You can also

Do this by naming the color of the object instead of the name. Go in a relaxed and flowing manner, looking at your surroundings. Breathe deeply and calmly as you do so.

If you want, you can accompany yourself with soft, pleasant music that you leave on when you finish this exercise and start doing what you need to concentrate on.

•••

IF YOU WANT TO KNOW MORE ABOUT CONCENTRATION AND BRAIN

Our brain lives in an ocean of constant stimuli. It is estimated that the human brain receives eleven million bits of information per second in the form of sensory experiences. It is almost miraculous that it can fix its attention on anything in particular and ignore the great flood of information that it receives from the outside continuously and to which are added the thoughts that jump to the consciousness without stopping.

To be able to do this, it must have the ability to modulate the signals it receives, i.e.: increase the intensity of the signals it wants to attend to and lower the intensity of those it wants to ignore.

Here is an example.

If you are with a friend in a crowded restaurant eating, your brain has to play with the information it receives from the outside so that you can hear your friend among the bustle of the rest of the tables. To do this, on the one hand, it boosts the signals that you want to pay attention to, such as

are the sounds your friend makes and the articulation of his lips to form words, so that you can understand what he is saying among the rest of the voices; on the other hand, and simultaneously, he attenuates the signals he needs to ignore, such as the conversations of others.

How does your brain do this?

The most recent neuroscientific research reveals that the prefrontal cortex plays a very important role in allowing us to selectively and sustainably attend to something, that is, to concentrate.

To do this, this prefrontal cortex must be functioning in a certain way, at a very specific frequency wave level. It is as if it needs to tune into a particular radio channel that allows it to concentrate and bypass the rest of the channels. Or, to use an example I gave you earlier, you need to shine the bright, narrow beam of a flashlight so that only the part of reality you want to concentrate on appears and leave the rest in the dark.

Our brain contains on the order of one hundred billion neurons. These neurons, when they communicate with each other, emit electrical impulses which, when added together, form waves of frequency. Every thought, feeling and behavior corresponds to a type of these waves. It is our brain electricity and it is responsible for our brain to function in one way or another.

Depending on what this level of electricity is like, your brain manufactures sleep and you can sleep, or it manufactures joy, or it manufactures calmness or it manufactures concentration.

These electrical levels, these waves of brain frequencies can be read with an electroencephalogram (EEG) in the same way that the heart rhythm can be measured by means of an electrocardiogram.

We have several brain rhythms and depending on these rhythms we feel and behave in a certain way.

When we want to concentrate, we need our brain and, in particular, our left prefrontal to have a *beta* wave rhythm. If we have an electroencephalogram done when we are in a situation of deep concentration, it can be seen that the brain frequency waves that predominate are *beta frequencies*.

The ability of our brain to produce *beta* waves in these areas and exercise concentration can be increased with specific brain trainings. In these trainings, brain frequency harmonization exercises are performed while watching a screen where different visual exercises of changing light and size of images appear, causing your brain to learn to produce more *beta* frequencies. This is the basis of many of the trainings we do at MindStudio, whose objective is to teach patients' brains to produce more *beta* frequencies.

In addition to all this, something has recently been discovered that is surprising.

Different people who stood out for their lucidity and ability to concentrate were subjected to a study. It was discovered that not only did they activate their left prefrontal very quickly, generating *beta* waves, but they also had an extraordinary capacity to, after a while, stop producing these waves and produce another type of wave called *alpha* (here they are again!), which allowed them to defocus. When they produced these *alpha waves*, their left prefrontal reduced its activity and increased the activity of the so-called *default neural network* (or DNN, the brain circuitry associated with learned activities that have been automated and are performed effortlessly). This ability to switch from focused to diffuse and relaxed attention has been shown to be key to generating good concentration.

This achieves a balance between concentration and blurring. Between effort and rest.

What is known is that our brain needs deep rests in order to perform deep concentration. That is why we need to change activity after a period of concentration effort in order to rest and let our brain reduce the production of *beta* frequencies. And this highlights the reason why sleeping and resting well is a powerful engine to be able to produce concentration.

The ability to focus and unfocus seems to be the key to being able to produce *beta* frequencies of concentration when we need it.

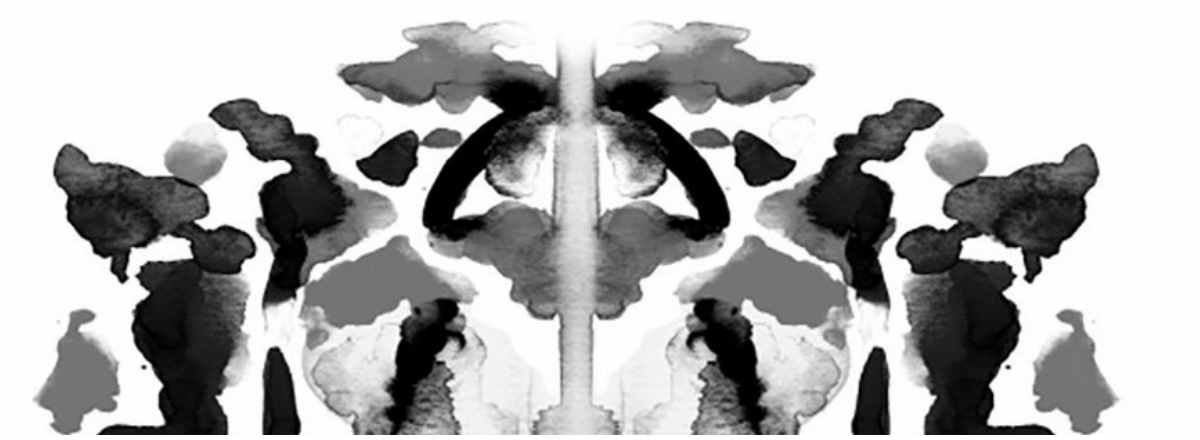
I end with a quote from our wonderful Spanish philosopher Ortega y Gasset:

.....

Tell me what you pay attention to and I will tell you who you are.

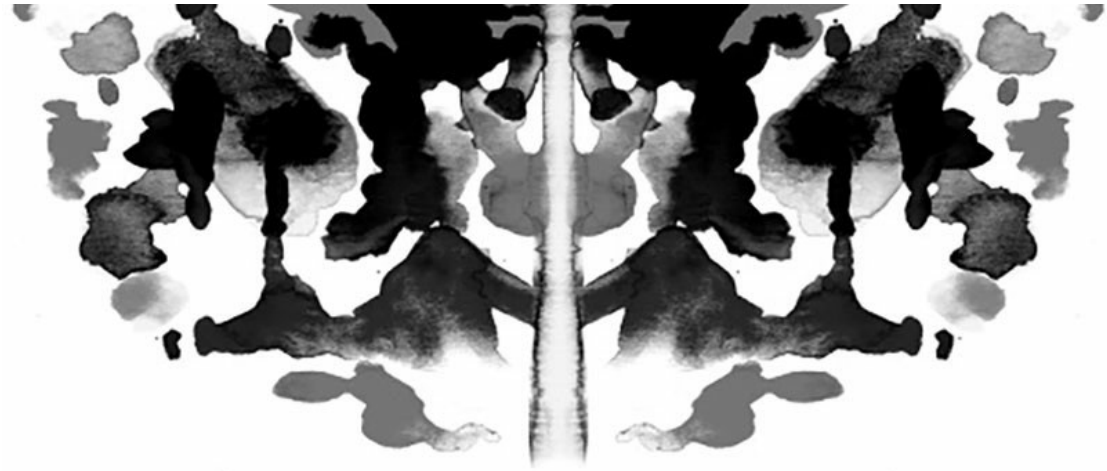
.....

And I say to you: decide what you illuminate in your life. Life is in charge of illuminating realities that sometimes we do not choose.



7

BLURRING: EXPERIMENT, IMAGINE AND CREATE SOMETHING NEW



DESENFOQUE: From the union of the prefix *des-* and *enfocar.*

1. m. To cause an image to lose its focal point, affecting the sharpness with which it is perceived.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT DEFOCUSING

Einstein wrote about ninety pages where he expressed his thoughts. Beyond the scientific aspects, he has let us know a little more of his person, his humanity and his soul through these writings. I really like to approach this personal side of the great names of human history, especially those of brilliant minds. I like to get a glimpse of what lies behind these wise men and women, of their more public image and, above all, I like to know their view of the world.

In these writings, Einstein reflected on the deployment of his research talent and shows his gratitude to the places where he felt free as a student in comparison to the teaching methods that were already then beginning to be implemented and that we now consider traditional.

> It is almost a miracle that modern teaching methods have not already strangled the sacred curiosity of research, because apart from stimulus, this delicate little plant that is curiosity needs above all freedom... Even a hunting animal would lose the desire to hunt if it were forced to eat when it is not hungry.

Einstein was aware that his great ideas came from the freedom with which he could study, think, develop his line of research without being oppressed by a concrete result imposed by a teaching method.

The ability to let his mind wander, to seek different paths, to try, to make mistakes, to repeat, to be guided by intuition and to marvel at thoughts that came seemingly out of nowhere in moments of reverie was the basis of his exceptional intelligence.

Do you know what brain ability Einstein had to access such an extraordinary mindset?

Einstein, without knowing it, had an unusual ability to integrate his two highly developed brain circuits that were key to his greatness. The focusing circuit and the defocusing circuit.

Or, in other words, he had an extraordinary ability to concentrate and bring all his attention and cognitive capacity to a subject of study, while at the same time he could enter into a state of reverie, of deep intuition, where his unconscious was able to unite all the information that his senses had perceived and find a new and brilliant answer to the scientific questions he was asking himself.

The curiosity that defined him and that defines all the great names that throughout history have given us surprising advances is, as he said, "a little plant", something fragile that must be cared for. The freedom to think, to be able to make mistakes, to be able to wander mentally through different ideas was the essential care that Einstein's genius needed.

After all my years working with the human mind and brain, I can say the following:

Effortful brains provide great results, but brilliant results come from free brains.

We are all born with this "little plant" of curiosity. When we are most curious is in our early childhood years. We are in a stage of discovery and our brain needs to inquire, to be interested in everything in order to discover how to live, to discover how to survive. If in these early years our environment gives us the security and freedom to unfold who we are, without filters, we will intuitively let our natural abilities come out. Our system and our brain also understand that these natural abilities will be the ones that will make us survive and cope with the challenges of life.

threats. The desire to survive is something we bring from the factory and it looks for what we are better at because it knows that this will make us defend ourselves better in life.

This is the reason why during these first years of life we begin to see very interesting personality traits. There are those who have an inclination for movement and sports, those who have an inclination for the arts, those who show great communicative skills, those who express greater interest in creating things, those who prefer the calm of talking little and concentrating on their things, those who require the presence of others, those who prefer to follow what others do, those who need to separate themselves from what others do, those who want to be listened to, those who prefer to isolate themselves and focus on their world. All these behaviors respond to the natural coherence of linking what we are innately good at with our survival. Our brain knows that we have to focus on those "powers" we are born with and that by using them we will have a better chance of survival. It makes sense, doesn't it?

But there is something that must be given in order to make this union between our talents and how we behave. The freedom to be able to do it. The freedom for our brain to be able to wander through the different possibilities it has and choose those aspects with which it feels more confident, more capable of surviving. At the cerebral level, to be able to do this we need to be able to defocus. That is to say, to see reality with a very broad view. Not to focus only on one part of reality, but to open our curiosity to everything.

The curiosity of our first years of life is what populates our brain with information and learning. It defines who we are. We receive information from the outside through our senses, learn from it and establish how we react to this information. We learn, for example, that if we put our hand in the fire we will burn ourselves, so we

We establish the relationship "It burns = I don't touch it". But we also think: "I like to place one piece of wood on top of another to make a tower", so we establish the relationship: "Building something with concentration = I feel good", or we can establish: "Painting and creating something provokes admiration in others, so I do it" and register "Act of creating = I feel pride and satisfaction". Any of these examples responds to the way in which our brain creates connections in us of how we relate to the world.

These processes of experimentation and learning take place thanks to our ability to focus and unfocus. We have the ability to focus our attention on something in front of us and forget everything else when we want to focus, but also to open our field of vision and let our senses perceive a much larger part of what surrounds us.

Focus and unfocus, concentration and deconcentration are two different configurations of our brain that are perfectly complementary. Both are valuable and necessary to unfold our potential. Focusing allows us to determine what we should consider relevant and focus on it. Unfocusing allows us to see beyond what our senses perceive, to connect with the unconscious part of our brain and our intuition, to unleash our creativity and to unite more sensitively with our environment.

However, just as concentration is highly regarded and enjoys unanimous approval as being synonymous with efficiency and a job well done, unfocused or unfocused does not provoke the same positive reaction. Unfocusing is related to not being demanding of oneself, wandering aimlessly or being incompetent.

Getting unfocused or losing concentration sounds like a bad thing. In fact, you've probably been told more than o n c e , "Concentrate," but
How many times have you been told: "Disengage"?

The same thing happens in teaching systems. They are mostly based on fostering our ability to focus, to concentrate, and they ask our brain to put out of use its ability to defocus. This is a mistake. As Einstein said, this "strangles our sacred curiosity".

Until the age of seven our ability to defocus is innate, but from that moment on our brain begins to mature the brain areas of concentration. If we do not take good care of our ability to defocus, this new skill of concentration will tend to become the only accepted way to unfold our potential, which implies a great loss of talent.

Curiosity stems from our ability to see beyond what is in front of us. For curiosity to exist, we need the intuition that there is something more than what we perceive. Curiosity is the call to inquire further, to not be satisfied with what we know. This only happens when our mind is able to lift its gaze from something concrete and open its eyes to what we have around us in search of new answers to the questions we are asking ourselves.

Curiosity is the basis for the creation of new realities, new thoughts, new inventions, new products and also new looks on something known. Science is full of phenomena that exist to which human knowledge has not yet had access. Our ability to unravel all these mysteries is directly related to our ability to broaden our gaze. That is, with our ability to unfocus and see a broader reality.

If you want to properly water the little plant of curiosity that Einstein cared so much about, you're going to have to learn to deconcentrate.

You will have to learn to "lose the focal point of an image, affecting its sharpness", as the etymology of the word *"deconcentrate"* indicates. That is to say, you will have to reconcile yourself with blurred vision, open your field of vision, let yourself be carried away by your senses and connect with your intuition: all this is the door you must cross to make your mind brighter.

Einstein had an eccentric character, that is, his character was "not in the center". From his ability to step outside the limits of his concentrated attention and incorporate a broader view came the theory of relativity.

His outlandish predictions of relativity about the behavior of matter, space and time have been proven correct for a hundred consecutive years and still amaze scientists by the extraordinary implications they have.

Einstein claimed that he used his imagination instead of mathematics to work out his mythical equation. His ability to unfocus produced the brilliant result that his concentrated mind would not have given him.

Some of the phrases with which Einstein encouraged the use of our unfocused brain capacity are:

"The mind is just like a parachute, it only works if it opens."

"The important thing is not to stop questioning. Curiosity has its own reason to exist".

"Never consider study as an obligation, but as an opportunity to penetrate the beautiful and wonderful world of knowledge."

Let's see how we can re-educate our brain to regain the ability to defocus that it had in our early childhood and repair some of the damage that traditional methods of education have done to our minds.

HOW OUR BRAIN MANUFACTURES DEFOCUSING

Focusing our attention is a necessary step in order to come up with new ideas and acquire creativity.

But often, when I talk about how increasing our creative capacity is one of the best investments we can make at a cerebral level, I see eyebrows raised. This happens because creativity is usually related only to artistic aspects, when in fact creativity takes many forms besides artistic (wonderful artistic creativity, anyway).

Creativity allows you to set up a strategic plan at work, diplomatically handle a conflict, come up with innovative ideas in the face of a challenge, find new solutions to old problems, cook a delicious meal from scratch or have fun conversations with your friends.

It used to be thought that creativity came from the right hemisphere of the brain, from that part that was more related to the emotional, and that it was a capacity that one either had or did not have. Today we know that this is not correct.

The latest studies in neuroscience show that creativity comes from the activation of the temporal and prefrontal areas of our brain, in both the right and left hemispheres. Moreover, it has been discovered that it is a brain capacity that can be developed throughout life. It makes no sense to say to oneself: "I am not a creative person". The correct thing to say is: "I don't have my brain trained enough to be creative". But that can be changed, creativity is exercised.

Today we know that the brain areas of creativity are activated when our brain is functioning in an unfocused mode. That is, for your creative thinking to emerge, your brain has to roam freely in reality, it has to be free.

Blurring provides us with an emotional and instinctive intelligence that is very important for creativity to emerge, and focusing allows us to connect with our analytical intelligence.

It is also necessary for our brain to be able to rest.

Concentration demands a great effort from our brain. The blurring allows it to rest and recharge its energy.

There are three direct benefits of your brain knowing how to defocus:

1. **It allows you to take perspective** on your day-to-day, order and plan your actions.
2. **It recharges your mental energy.** Your brain consumes a lot of energy from being focused. Going into a deconcentration mode allows it to recharge so you can refocus for longer.
3. **It greatly increases your creativity.** It allows you to connect old ideas with new ones. It stimulates the connection between the information stored in your brain. If you need creativity and new ideas, learning to defocus voluntarily is a great tool.

So, how to make our brain capable of defocusing?

Well, the good news is that this case is different from the previous ones; our brain is very good at "manufacturing" defocus. In fact, we don't have to do anything to make it do it, it does it automatically. It is estimated that forty-seven percent of the time it is out of focus. The question is: is it a good blur? Well, no, not really.

There are two types of blur: one, which happens involuntarily (occurs most of our blur time), and the other, which occurs voluntarily.

When the brain becomes involuntarily unfocused, we are not aware of it, we enter this unfocused state without realizing it. It is about all the times when our mind gets lost in unconnected thoughts, wandering aimlessly in our head. This involuntary unfocusing does not provide us with any concrete benefits except that of being able to take a break from concentration.

But the other, the one that fosters our creativity and recharges us with energy, is always voluntary. In this case, it is necessary to have the intention to enter this state. We must consciously move from a state of concentration or fixed attention to a state in which our mind can wander freely. This also implies an effort and an intention.

It's funny, but yes, voluntarily defocusing also requires effort. In any case, don't worry, we have ways to do it quite easily. I'm going to explain two of them. As always, connect with yourself, with which one you think has more to do with your personality and comes out easier. Let your intuition guide you.

TWO WAYS TO VOLUNTARILY DEFOCUS YOURSELF

1. **Brainstorming crazy ideas.** If you need to find a solution or an answer to something and you feel blocked or mentally unclear, you can get unfocused and increase your creativity by thinking up crazy, fun, brainless solutions. Play with wild possibilities. Your brain loosens its control, becomes unfocused and allows itself to join ideas that arise from your unconscious.
2. **Doing a routine activity that you have automated.** Do you notice that you lose focus and get new ideas when you take a shower, or when you drive, or when you do the dishes? Your brain gets loose and unfocused when it doesn't have to concentrate on doing an activity that you have already mastered and have automated, i.e., that you do without thinking. Let your ideas flow while you do a routine activity.

LOSE YOUR FOCUS. YOU'LL DO BETTER

We agree that our society and our education do not encourage us to deconcentrate. As Einstein said, teaching methods
"strangle" this ability. And in a way it is logical that concentration has been prioritized, because it brings enormous benefits: from it comes our reflective thinking, our memory, our ability to evaluate, choose, act from reason and, ultimately, to control our energy and devote it to something that matters to us and that demands our full attention.

Concrete thinking brings order to our lives. But notice:

Excessive brain order, in the long run, produces mental disorder.

Sounds strange, doesn't it? I'll explain why this happens.

Order and sustained concentration make us rigid. Under the focus circuit, our brain receives information and stores it quickly. But this rapid storage causes thoughts to be stored without having had time to create new associations between them.

When our brain focuses and concentrates, it overrides our abstract or intuitive thinking. We miss out on a valuable part of our brain's wisdom.

Too much focus takes us away from our intuition and abstract thinking, great sources of wisdom.

When we disconnect from our intuitive thinking, we lose the ability to see alternatives, we become mentally rigid people. Y

What happens? Instead of finding creative solutions to problems, we only see limited options, everything becomes black and white and we lose the whole gray range of possible solutions.

There are people who naturally tend to see reality in black and white, either a or b, and people who, faced with a problem, generate a range of possible solutions. Who do you think finds it easier to cope with life's challenges?

If you are a person who thinks in black and white, it will do you a lot of good to learn how to defocus your mind to be more flexible.

Your strategic, creative, innovative abilities come from a brain place where you must embrace blurring. Blurring means allowing yourself to see more reality less clearly, to open yourself to everything around you and to let disorder and chaos emerge. Only when you are able to quietly abandon yourself to a disordered flow of ideas do you allow your unconscious to begin to piece together information and deliver novel responses. You allow new associations of ideas to be established.

I am not telling you to live in mental chaos all the time, but I am telling you to lose your fear of being carried away by your thoughts, to enjoy more the disorder of ideas and to allow your mind to "fly" a little. The ideal situation is a kind of "controlled chaos".

Accepting a degree of disorder as something necessary and good for your mental functioning makes you more flexible in the face of unforeseen events. It also gives you more capacity for adaptation and improvisation. If you manage not to be negatively affected by unforeseen circumstances that come to break what you had planned, you will be greatly improving your quality of life.

Accepting the temporary lack of control of your thoughts as something positive enriches your life.

To achieve this your mind needs to enter a state of defocusing. From there it is able to take perspective instead of focusing and see only a part of reality clearly.

When you do this, it's like unfurling sails and letting the winds of change give you the boost you need.

You've probably had several experiences where your initial plans were cut short and you somehow came up with something new that took you to a better place than you had planned in the first place. If you haven't experienced this yet, you probably need to learn how to get a little more unfocused and allow the mess to have a space in your mind as well. I like to say that when you let go of the control and order of focus, you let the magic appear and surprise you.

Learning to defocus is a great tool to deploy many more of your mental capabilities and be surprised by them.

The blur allows the magic of life to appear.

•••

The blur clock: exercise to increase voluntary defocusing

I have good news for you. Our brain likes to learn to defocus (learning to concentrate costs it more). Although defocusing requires an initial effort, doing so provides the almost immediate reward of relaxing and this is very well perceived at the cerebral level. One of its maxims is to save energy. We achieve this by defocusing.

There is an exercise that has proven to be very efficient to achieve this voluntary brain defocusing. You can measure with an electroencephalogram how the *alpha* and *theta* frequencies of deconcentration increase when you do it.

The second good news is that it is very easy to do and you can do it anywhere.

Hold this book in front of your eyes at a comfortable reading distance and imagine that it is the center of a clock that extends around it. The number twelve would be at the top of the book, the number six at the bottom and the rest of the numbers are distributed as you already know.

Now, while you keep your eyes fixed on the book, with the corner of your eye, go through each of the points of that imaginary clock. From twelve to the rest of the numbers, one by one, without moving your head. You will see the book clearly and you will intuit the points of the periphery, because that area will be blurred.

Make five tours around the book: start at the twelfth and end at the same place while your gaze continues to rest on the book.

By performing this exercise and monitoring brain activity, it has been discovered that as you pass your peripheral vision through this blurred circle while keeping the sharp image of the book in the center, you deactivate your left prefrontal cortex and activate the right. By activating your right prefrontal, your brain lets go of control and allows itself to flow into states of more mental wandering. In essence, what you are doing is moving from a situation of focus to one of unfocus.

When you feel tired and find it difficult to let go of your mind's worries or change activities, do this exercise. It allows you to open your focus, increase your inner calm and let go of thoughts.

The more you d o it, the more you develop this "muscle" of

switch from focusing to defocusing. This allows you to voluntarily choose when you want to turn on the concentration areas of your brain or when you prefer to relax them and let the more instinctive and sensory part take over.

•••

FOCUS AND BLUR, TWO GREAT FRIENDS

As is often the case, success usually lies in balance. Well, I like to say that success is in being able to be unbalanced and enjoy what the extremes give us and then return to a situation of balance.

The same thing happens with focus and unfocus, concentration and deconcentration. Concentrating produces great benefits, but if we go to the extreme and live concentrated on small parcels of our mind and reality, we not only get burned out and exhausted, but we also limit our experiences. We "illuminate" only a piece of reality and miss a large part of the rest.

On the other hand, **defocusing opens a new world of creativity, intuition and wisdom, but if we abuse it, we do not get out of the world of ideas and we could not materialize much of what our mind creates.** Unfocusing allows access to large doses of information of all kinds and then we need to get out of there and focus in order to materialize those ideas.

The ability for our brain to voluntarily move between the approach y the blur define many of our successes, our

satisfaction and the deployment of our talents.

We cannot lose sight of either. Both require a conscious and voluntary effort to occur. The transition from one to the other needs energy, because our brain has to change its functioning. It has to stop moving the focus areas to move the out-of-focus areas and vice versa. It is as if it had to stop turning in one direction to do it in the other.

The right balance between focus and blur, this dance between the two, displays our mental "superpowers".

IF YOU WANT TO KNOW MORE ABOUT BLUR AND BRAIN

Deconcentration has not been something very popular or rewarded until now, quite the contrary. Deconcentration has been understood as the inability to concentrate, a failure, something undesirable. That is why it has not even been given much importance from a scientific point of view. We have been more interested in knowing the processes we go through to concentrate, but not in the mechanisms and benefits of deconcentration. But this is changing by leaps and bounds, fortunately, otherwise we would be missing a lot of creative potential of the human brain.

It is now known that the brain's predisposition to thought disorder, especially when it is voluntary and accepted, is the source of an extraordinary intelligence that allows us to see and create beyond the obvious. It is the door of our brain to the connection between facts, experiences, intuition, our unconscious and the creation of new answers to the same questions. It is the possibility of making a wide scan to reality through

of our senses and our thoughts and choose what is most appropriate, not from control, but from the possibility of discovering something new, from curiosity.

But how does our brain get us into these states of unfocused wandering and wandering?

Let's go back to the *alpha* and *theta* frequencies, which we have already discussed.

BLUR AND HIGH PERFORMANCE

The *alpha* frequencies, functioning synchronously in the parietal and prefrontal lobes, produce an immediate reduction of internal tension and stress. This allows us to let go and widen our gaze. Moving from a closed or focused mode of attention to a more open or unfocused mode of attention.

In this state, muscular tension is released, the senses are opened to perceive more information and the brain areas of high performance are connected. The *alpha frequencies* allow everything that has been learned and automated to come to light without requiring effort. That is why this state of synchronized *alpha* frequencies is essential for high performance. Both athletes and professionals who need to bring out the best of themselves to succeed know the importance of feeling in these *alpha* states, as this blurring of focus allows them to enable their "sixth sense". What does this mean?

For example, the sixth sense of a tennis player gives him the ability to be very focused on the ball, but, at the same time, aware of everything that happens on the court, of the opponent's movements. This allows him to read the game much better and anticipate the movements.

In the world of soccer, this sixth sense makes a big difference among its players. When a player enters this mental state of *alpha* frequencies and open attention, he is able to register where players are deployed on the field, how they have moved previously and predict patterns of play that allow him to anticipate upcoming moves. In short, it allows you to develop a strategy based on previous experience. But, most importantly, it does so effortlessly, it is dictated by your brain connecting your unconscious with the automatic execution part of moves.

When we train, for example, top level soccer teams, athletes in general and professionals who need to move in high performance states, to increase their performance we train them with specific exercises to increase their *alpha* frequency levels. We teach their brain to produce these frequency waves and create new neural pathways that allow them to access a different "dimension".

These states of high performance, in which you get the best out of yourself, with an open but very present and effortless attention, are known as being
"in the *zone*" (*in the zone*).

BLUR AND ART

There is an even deeper brain state of defocusing. In the state of *alpha* defocus that I explained before, you are conscious and with a voluntary open and fluid attention, with all your senses unfolded. You do not focus on anything in particular, but remain open and unfocused to include the whole environment.

There is another, even more intense mode of brain defocusing and it is associated with the presence of *theta* frequency waves in our brain.

These are much slower waves than those of concentration and physical calm, they are very specific waves where our brain enters a kind of reverie, it does not know if it is awake or asleep, it is in a state of sleep.

When you find yourself in this state, it gives you the sensation of dreaming, but being awake. You notice that there are thoughts that invade you, come and go, unconnected. Many of these thoughts are related to situations you have experienced, to bodily sensations, to emotions. It is as if you were sprouting information from inside you, which is relevant to you, but which is disordered, with no apparent connection.

When you stay in this kind of slumber, your brain produces waves of *theta* frequency, as well as *alpha* waves. The latter, as you know, are the frequencies of calm. It is, therefore, a very pleasant situation, very calm and serene.

These states of *theta* frequencies are well known in the artistic world. They are states in which your mind starts to give you answers and inspiration that make you display an extraordinary creativity, as if someone was dictating you what to do without any effort. You enter a kind of creative trance.

There are numerous artists, writers and professionals of all kinds who attribute great works or ideas to moments of almost divine inspiration that have "dictated" to them what to do. Once this moment of inspiration is over, they are surprised that they were able to create that work.

You can train your brain to manufacture more *alpha* frequencies in synchrony (we speak of synchrony to refer to the extraordinary ability, which can be achieved over time, to activate *alpha* frequencies in many areas of the brain at once) and *theta* frequencies. The exercises that I have indicated in this chapter are drivers of these frequencies. Also the

meditation serves to create more *alpha* and *theta*. Depending on the quality of the meditation, you will be able to access more or less deep levels of these frequencies.

And, of course, you can use today's technology to help you exercise your brain. You can perform specific frequency harmonization exercises to increase your brain's ability to move in these frequencies.

In our centers we perform specific sessions to increase *alpha* frequencies in synchrony and *theta* frequencies. These sessions are especially pleasant to do, because while your brain is trained with exercises designed for this purpose, a very peaceful feeling of well-being, coherence with the environment, acceptance and serenity begins to invade you. It is difficult to explain in words. Those who are trained usually refer to it as a feeling of intense peace, of connection with the universe, of perceiving what is your essence and serenity with it.

All this is the result of your brain functioning in slow, coherent frequencies that connect your intuitions with your experiences in a mind-friendly way. From the blurring and integration of all the information with a wide and open view.

THANKS TO THE BLUR

We have to thank this state of unfocusedness for the most important discoveries, advances in science, works of art, great ideas, inventions and everything that comes to us to discover something extraordinary that creates a new order.

Blurring allows us to go beyond the obvious, connect with our inner wisdom and let our brain work for us to give us answers.

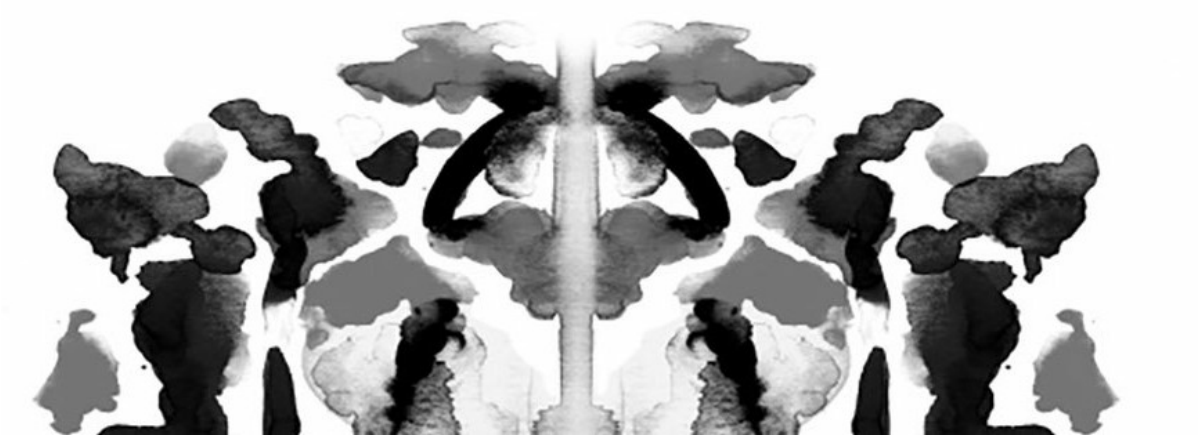
The blur itself allows us to access hidden places in ourselves where much of our greatness is kept.

Blurring also enhances our ability to focus, to concentrate. Without this break in concentration, without this ability to allow ourselves to see blurred for a while to rest our gaze, we would become exhausted. Blur is a great friend of concentration.

The blur is that little plant that, as Einstein said, we have to water, we have to take care of.

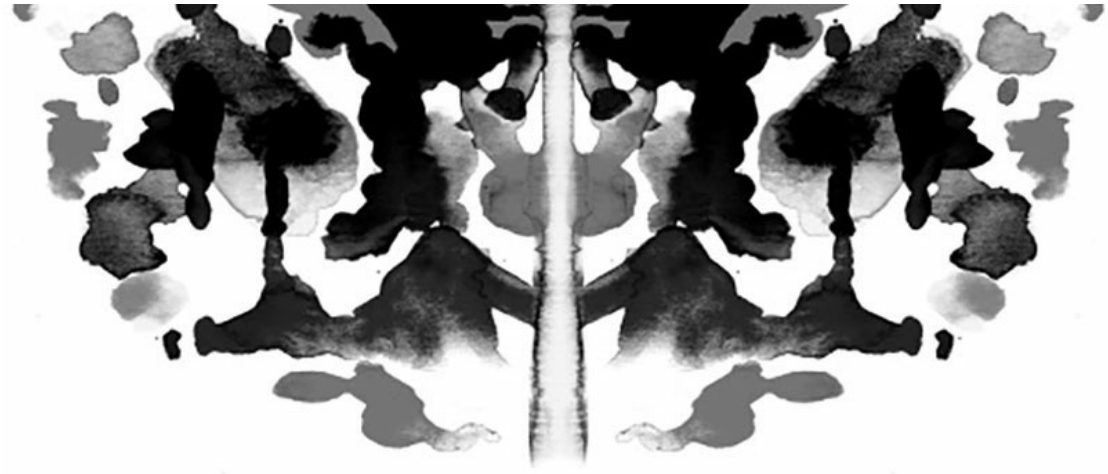
I go a little further: the blur is that little plant that we must take care of so that it continues to discover great minds that will continue to illuminate much more of our world, with a broad, new and surprising look.

The blur allows new Einsteins to appear, in any area of life. We really need to take care of this plant, don't you think?



8

ATTENTION DEFICIT": ADD AND ADHD ARE ACRONYMS THAT HIDE A MYRIAD OF POSSIBILITIES.



DEFICIT: From Latin *deficit.*

1. n. A shortage or lack of something that is considered necessary.

ATTENTION:

1. f. The application of mental or sensory activity to a given stimulus or mental or sensible object.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT "ATTENTION DEFICIT": TDA AND TDAH

The so-called attention deficit with or without hyperactivity causes children, young people and adults to suffer. In recent years, it has also become a problem for children, adolescents and adults.

"undesirable" that marks a student. **Society has established that if you have attention deficit, you are a bad student. I couldn't disagree more.**

Not only should it not brand a student, placing some sort of a brand on him or her, but it is a sign that there is something very interesting going on in that brain. We have to eradicate this suffering.

I do not agree with the term *attention deficit* either, so when I refer to it, I will put it in quotation marks. Here's why.

Let's go to the origin. Attention is the ability to grasp with our mental activity and our senses what we have around us.

If there is one trait that characterizes without exception all the children and adults with "attention deficit" that I have treated over the years, it is their enormous capacity to mentally and sensorially perceive the environment. In fact, they have an extraordinary capacity, that is to say, much above average, to be able to perceive aspects of reality that go unnoticed by the rest of the people. In other words: they do not have a deficit or shortage of attention, what they have is an extraordinary and overflowing attention.

So why is it called *attention deficit*?

Because attention is confused with sustained attention or concentration.

We are always attentive, in one way or another, to what we perceive from the outside through our senses, as well as to what we feel inside.

It is in maintaining attention on something concrete, that is to say, in being able to concentrate on that something, where we can find more or less difficulty. When a person is said to have "attention deficit" (it will not be me, I will always say that he/she has difficulty to concentrate), it is because it is more difficult than usual to maintain sustained attention on something he is forced to attend to. The word *compels* is fundamental here.

Difficulty in concentrating does not always occur, it **occurs mainly when you are not allowed to choose the destination of your concentration.**

I will explain the importance of all this.

One of the goals of my neuroscience and brain training practice is to defend the diversity of intelligence and mental richness. Behind the difficulty to concentrate there is usually a lot of both, intelligence and mental richness.

As I explained in chapter 6, when you place your attention on something, you make that something light up and exist. Your attention is what furnishes your life. What you place your attention on exists.

Well, the following happens to people who find it difficult to concentrate and who fall into this diagnosis of "attention deficit": their attention is capable of illuminating so many aspects of reality, they have a world so full of elements, that it is difficult for them to force themselves to choose only a part of them to concentrate on. Even more so if, perceiving so many interesting aspects as their great attention shows them, they are forced to concentrate on aspects that for them lack interest.

Why focus only on something that is not very motivating and has no clear benefit?

His brain rebels against it.

I do not agree with the term attention deficit because in reality what exists is an extraordinary capacity for attention, not a shortage of it. From this great attention comes the difficulty in choosing just one part and concentrating on something concrete. **What exists, again, is a difficulty in sustaining attention on something, that is, in concentrating.**

Unfortunately, there is a widespread belief that those who do not concentrate do so out of disinterest or laziness. Not at all: the difficulty to concentrate, that is to say, the difficulty to voluntarily and with effort pay attention to something is due in this case to the great amount of information that captures your senses and your thoughts, not at all disinterested or lazy, but on the contrary: active, awake and interested in the environment. But of course, when you receive so much interesting information, it is difficult to choose only a part of it to concentrate on and forget the rest.

Unfortunately, education systems do have a significant deficit in selecting content that is motivating, meaningful and capable of capturing interest, as well as using methods that tap into learners' innate curiosity.

THE INTELLIGENCE BEHIND THE "ATTENTION DEFICIT

There are many types of intelligence. The intelligences that are less understood are are punished. This is the case of the intelligences

multisensory.

There are minds that have the ability to perceive many stimuli, process them, connect the dots between them and produce new and surprising ideas. They are minds that see beyond the known, have the ability to imagine something new and generate new learning paths.

For these minds, the usual methods of study and work are boring. They fall short. If they cannot apply the diversity of their ideas and perceptions, they become demotivated and lose interest. But this does not happen on the conscious plane, but on the unconscious. That is why a child may want to attend to something and not be able to. There is something superior to them that hijacks their attention to other places. Their brain is simply unmotivated. Their brain perceives many stimuli that capture their interest, but if they are asked to concentrate on only one of them (and, moreover, one that is not very motivating) they will not be able to do it or, rather, they will not *want to* do it. It is a cerebral decision.

This is what happens in the so-called "attention deficit" (with hyperactivity when your system also needs to process information with movement).

Let's call this supposed deficit in a way that is fairer to the reality of the brain. It is *multisensory and open intelligence*. A very useful type of intelligence for society, because great ideas come from it.

This is the kind of intelligence possessed by many successful people with good ideas who have had difficult periods as students: artists of all kinds, writers, athletes, people with great creativity in general. Many of the great names we know associated with new ideas, discoveries or creation of content or beauty of any kind are related to this intelligence.

THE DIFFICULT DANCE BETWEEN FOCUS AND DEFOCUS IN "ATTENTION DEFICIT".

If you remember when I talked about focus and blur, I told you that both are good friends. The focus allows us to concentrate on something and the blur is the one that connects with our senses, the ability to capture information from outside and inside, from our unconscious and our conscious and find connections between them.

In "attention deficit", focus and blur don't get along so well. That's the problem. The brain is so happy in defocus, dancing with all this information it receives, making connections, coming up with new things, perceiving stimuli and sensations, that it doesn't want to come out of that state easily to pass the baton to focus.

Let's just say that, to get out of the blur, you need to have a very good reason.

And the education system does not give these brains very good reasons. It fails to motivate them sufficiently to leave the circuit of defocusing and go to the circuit of focusing.

Here is the most important thing I can tell you about "attention deficit".

Give an unfocused brain a good reason to focus and it will not only focus, it will create something extraordinary.

That is the key. Give them the motivation to do it. When we talk about these kinds of brains, it's the motivation and not the obligation that

will get them to focus.

Here's an example. When worried parents come to MindStudio because they have been told that their son or daughter can't concentrate because they have "attention deficit", I ask them: "Can't they ever concentrate? Is there ever a time when they get absorbed in something? And they always tell me about something they do focus on. There is always something on which they can spend long periods of time, hours even, concentrating. What happens so that in those moments they do concentrate?

The answer lies in the fact that what they are concentrating on interests them enough to be able to "turn off" the rest of the stimuli. But there is another reason: they have chosen it freely. Their brain, from its unfocus, has established that this activity is important, and so it befriends the focus and decides to pass the baton to it. It chooses to focus and make the effort.

I'll tell you about a case we had in the clinic recently.

Guillermo is a nine-year-old boy and came with his mother looking for training to learn to concentrate. He had been diagnosed with "attention deficit" after his school noticed his difficulty in staying focused and he took some tests. The tests indicated that he had serious difficulties with sustained attention. Guillermo had heard many times at school that he had the

"His mother, very worried, told me that they had talked to him to explain that he had a special condition that was making things difficult for him at school, and that from now on he would have to take a pill prescribed by the psychiatrist. When Guillermo arrived at the clinic, he was convinced that he had a problem. No wonder.

Guillermo is a very open, cheerful and sensitive child. He asked us about the computers we use, wanted to know all the rooms and was interested in knowing the names of all the MindStudio team. Guillermo clearly illuminated a lot of the reality around him with his attention. He included a lot of information in his system, both sensory and emotional.

When I asked him if he liked going to school, he told me that he did because he loved being with his friends, but he didn't like the classes. Only music, not the rest. He told me that he didn't enjoy listening to the teachers and that they scolded him a lot because he got lost. When I asked him what he liked about his music class, he told me that he did not enjoy listening to the teachers and that he got scolded a lot because he was absent-minded.

He told me that in that class they let them move around, try out instruments and join in with other classmates to make songs. He liked it so much that he had started playing drums at home (he had a small acoustic drum kit) and had invented a system to record himself playing the drums while listening to songs. Then he was making videos with an image editing program. He was even setting up a set of lights that he connected to the drums so that they would change depending on what he was playing. I asked him how long he could stay playing and he told me a lot, so much so that his parents had to limit the time.

Guillermo did not relate his moments of playing music to being concentrated, he related them to doing something he liked and that made the hours pass by without noticing, flowing absorbed in it.

In addition to music, he explained to me that he was very fond of toy soldiers. His grandfather had taught him to form battalions and he now had a very large collection. He would spend hours arranging and designing positions with them. Guillermo also did not identify this with concentrating.

•••••••••

What was happening to Guillermo was that his brain was very clear about what he liked to do and what he didn't like to do. He had powerful reasons to focus and concentrate on music and soldiers and not to attend to other classes. This does not mean that Guillermo is not interested in math or that he is lazy to make the effort to concentrate on something else. It means that his brain prefers to use its energy to take in information from the environment (which makes him ask questions, be curious, and want to know our names, for example) and then focus on what he sees meaning and motivation in, and his brain chooses. Your brain chooses - why focus its attention on what is not interesting?

If Guillermo had math explained to him in a way that he could link it to his music making or his little soldiers, he could spend hours doing math.

This type of intelligence is demanding with the environment. It needs good reasons to devote its conscious effort to something. It needs the environment

"earn" your concentration.

Let me tell you something: Bill Gates (founder of Microsoft and one of the great minds of our century) was a "very bad student" at school. In fact, he argued a lot with his mother because he did not make an effort in his subjects. He was expelled from Harvard University and never finished his studies. Apparently, he didn't focus. Well, he didn't focus on his studies, because he did focus, and very much so, on what he enjoyed. He always enjoyed reading and his beginnings in programming came from his restless and curious spirit. He focused his attention on something that interested him and it seems that he was not wrong: Microsoft shows that he did not use his intelligence in a bad way. I believe that, if he had used it in another field, he would also have gone very far. It was a question of being driven by his motivation and curiosity.

We have here an example of sensory and open intelligence that also suffered in his student years because he was forced to focus on subjects that did not arouse his interest. Apparently, this was the case of Steve Jobs, Thomas Edison, Agatha Christie, Isaac Newton, Pablo Picasso or the singer Cher. All of them suffered as students and all of them found a way to develop their genius.

But then, do we settle and assume that those who cannot concentrate should just let it go and wait to see if they get a chance to be a brilliant mind like the previous ones and make history? Obviously, no. Our great challenge is to know how to alleviate this suffering and train these minds so that their brains learn to concentrate.

HOW TO MAKE A BRAIN WITH "ATTENTION DEFICIT" MANUFACTURE CONCENTRATION

Whenever we want to concentrate, we need to create a bubble of concentration. As we already saw in the chapter dedicated to concentration, there are two pillars that our brain must have to make this bubble. Let's remember them:

1. **Calm:** the brain has to be calm and quiet, knowing that it will not be attacked from behind if it concentrates only on something and stops paying attention to the rest of the stimuli. Remember that our brain is like our bodyguard. It is always on the lookout for threats.
2. **Energy:** the brain must have the necessary energy to be able to make the effort required for concentration.

What happens to intelligences that find it hard to concentrate with these pillars of the concentration bubble?

BRAIN CALM AND "ATTENTION DEFICIT".

First of all, it is more difficult for them to be calm. As it perceives so many stimuli, this bodyguard that is the brain is stressed, looking everywhere. This stress sometimes manifests itself internally, in the form of a flood of thoughts, and sometimes more externally, through movement. It is the latter case that usually involves hyperactivity.

In addition, this intelligence is sensitive, it captures emotions very well. Being so emotionally receptive, it is more difficult to be calm. There is always something going on emotionally.

And, mind you, everything that happens to us on an emotional level has a huge impact on our ability to concentrate. In fact, you've probably noticed that after an emotional impact you feel distracted, feel a sense of mental density and unclear ideas. Also lack of concentration. For

To concentrate, you have to enjoy a reasonable degree of emotional comfort; otherwise, it is very difficult.

In the case of this type of intelligence, the emotional world is very broad. These people are, therefore, much more likely to be emotionally uncomfortable. They perceive everything that happens around them on an emotional level. They pick up everything that happens, whether they show it or not. Many times they keep quiet about it.

And this leads to another consequence that accompanies the "attention deficit", which is anxiety. Much of this anxiety is caused by this internal emotional discomfort. Sometimes conscious and often unconscious, especially during childhood and adolescence. Many people with "attention deficit" also suffer from anxiety. Anxiety is both a cause and an effect of the difficulty in concentrating.

How to help them?

We have to make their brains as emotionally calm as possible. And the first thing is to start by making them feel loved, valued and understood. We are dealing with sensitive brains. In the chapter on fear (see chapter 2) I explain how we all have two great innate fears:

1. The fear of not being good enough, of not measuring up.
2. The fear of not being loved.

Let's put an end to the fear of not being good enough and not being up to the task.

If you hear repeatedly that you have a concentration problem that sets you apart from the rest of the "good" students, you are hardly going to believe that you are up to the task. The main problem that we encounter in a case of "attention deficit" is that the child or adult has believed that he or she has

a problem and that he is not up to the task of being a good student or professional. He is so fueled by this fear that his brain lives continuously on alert. We have to calm this fear. The best way to do this is to be fairer with what we tell him: there is indeed a problem to concentrate, but it has a cause, it is due to the large amount of information they receive and process. That is a virtue. Let's say that the difficulty in concentrating is the punishment you have to pay in exchange for the prize of having that multi-sensory and open intelligence.

If creativity, sensitivity and good ideas were evaluated and rewarded in schools in most subjects and not only in the arts, these boys and girls would feel that they are good, that they are up to the task. But unfortunately these qualities so important in their future life are not measured, they are not rewarded. Therefore, they grow up with the conviction that they do not have what it takes to be good students. And this conviction blocks their self-esteem and affects them emotionally. If they are not emotionally comfortable, they do not have their brains at ease and, therefore, they lack one of the main pillars for concentration. It is the fish that bites its own tail.

We help these minds a lot if we turn it around. We take out of focus the lack of concentration and put under a bright light their great ability to observe, to look beyond, their creativity, their intelligence to forge new ideas, to perceive beyond the obvious, to do things differently. These children arouse admiration with their look at things, and we have to tell them that we are surprised and we like this new look. If you make an open, multisensory intelligence feel good, their
"superpowers" are deployed.

If you have someone close to you with "attention deficit", tell them everything about their personality that surprises you and that you admire. I'm sure there's a lot

you can say. **Tell them: it is necessary for them to feel valid.**

Publicly recognizing the amazing and talented minds is a necessary step.

If you are the one who suffers from this difficulty to concentrate, first ask yourself how many times you have been called attention for your lack of concentration versus the times you have been congratulated for your different and creative way of thinking, for your sensitivity. If there is much more attention calls than compliments, I want you to know that your system feels bad, you have wounds to heal, and that makes it even harder for you to concentrate. Those around you have not seen you in your full dimension, have valued you only for a part of you and have left many of your talents unilluminated.

Let's put an end to the fear of not being loved

In school, a student who does not give problems, who concentrates and accepts the learning system as it is, is more "wanted". A student who does not concentrate well demands extra effort from teachers and the system. If the educational system would recognize all the intelligences that exist among its students, not only would it not have to make that effort for the intelligences of the students, but it would not have to make that effort for the intelligences of the students who do not concentrate well.

"different," but would benefit greatly from them. Students would share their different ways of seeing and interacting with the world. The more easily focused, more rational, more sequential intelligences would provide structure and example to the more open and creative intelligences. And in turn, the latter would contribute openness, flexibility and new ideas. That is to say, the coexistence of all intelligences in freedom.

would provoke learning among the students themselves, it would allow them to be imbued with the way of perceiving and doing of others, which would enrich their own intelligence. Being all valid and all wanted within the system.

We have to create the space within the education system in which everyone students have the freedom to display their talents and be "loved" by them.

BRAIN ENERGY AND "ATTENTION DEFICIT

Your brain concentrates when it has the right energy to do so. If it is over-energized and over-excited or under-energized and deactivated, it fails to do so.

In the case of people with "attention deficit", achieving a good degree of activation is a little more complicated.

Two extremes tend to occur: either the activity is very unmotivating, so they are deactivated, or it motivates them so much that they become overly active and their mind does not stop producing thoughts. If you consider yourself a person with a concentration problem or "attention deficit", I think you will see yourself reflected in this.

You easily go from one extreme to the other. After losing energy by continuously experiencing situations that don't motivate you, when suddenly your brain connects with something that does, it gets so excited that it can't stop, so it can't concentrate either.

It is necessary to teach the brain to stay in intermediate states.

In the case of being unmotivated about something, energy will drop and the brain will not have enough activation to "manufacture" concentration. It is necessary to infuse it with motivation.

If a brain is continuously scanning what is happening around it, as happens in this type of intelligence, it is exhausted, consumes a lot of energy and does not allow it to reach this left prefrontal part, which we already know is in charge of concentration.

So how can we get energy to these left areas even though the right hemisphere's radar is highly activated?

Well, once again, surprising our minds a little.

For a brain to concentrate we have to make it believe that concentrating is good for it.

The quickest way is to convince our brain radar (our right prefrontal and frontal) that concentrating is the best possible option and tell it not to be so aware of its surroundings. This will relax it and free up energy to activate the left prefrontal cortex, which will set the concentration mechanism in motion.

But such a sensory and perceptive intelligence, so sensitive to the environment, is not easy to convince: we have to do it very well.

What does a multisensory, active brain ask for in order to concentrate? If the brain were to speak, it would say, **"Appreciate the good in me, give me a reason to devote my attention to something, and set me free to do it".** The energy to concentrate arises when the union of talents comes together, with a clear benefit and a sense of freedom.

I explain how to give this to a brain that finds it hard to concentrate:

1. Appreciate the good I have inside

Your brain finds energy and motivation when you do something for which you have an innate talent. In the case of these minds, they are usually very gifted at the sensory level, whether visual, auditory or kinesthetic (sensations and movements). If you are a person who is gifted at doing something manually, at building, your concentration will come to the surface every time you use this talent. It is comfortable for you and thus your radar calms down and sends energy to your left prefrontal, that is, it injects energy for you to concentrate.

If you are visual, your brain enjoys looking, picking up information from color, shapes, light. If you want a piece of information to capture your sustained attention, that information has to appear attractive to your eyes.

If you are an auditory person, your brain registers much better everything that comes to it that way. You will retain better what you hear and say out loud. If you close your eyes, you will do even better.

If you are more kinesthetic, your system feels comfortable receiving sensations and movements that motivate you. To fix information, it is good for you to move, to let your body and mind process through movement, through the sensations in your body, through the connection with what that information produces inside you.

It is necessary to know what innate talent has a mind that finds it difficult to concentrate. Relying on it, it is much easier to deploy concentration.

2. Give me a reason to devote my attention to something.

These minds are not easily fooled. They focus if there is a clear benefit.

They don't work with the threat of what will happen if they don't concentrate, but with the promise of the reward for concentrating. They work on internal motivation.

They are often pressured with what they lose by not concentrating. This is not helpful: we only succeed in upsetting and worrying their right hemisphere, which will release even less energy for concentration and will save it all to protect itself against this threat.

We need to do the opposite: motivate these minds by showing them what they gain. Help them to look beyond the effort of concentration, raise their gaze to the benefits.

3. Leave me free to do so

A multisensory mind does not like to feel closed in. The unfolding of its capabilities occurs when it feels free. Free to perceive everything that its senses register, as well as to make internal connections with that information. In cases where hyperactivity appears, this freedom also includes movement.

How do you feel free in situations that force you to concentrate? By maintaining a margin of freedom. Being able to move between concentration and rest, between stillness and movement, between effort and enjoyment.

If you find it hard to maintain your attention, you have to show your brain that you are going to ask it to make that effort only for a defined period of time and that you will reward it with disconnection and rest afterwards.

An educational system has to make its students feel free, with room to think, move and decide within broadly established norms. If it fails to make its students feel free, it will be wasting much of the greatness of these minds.

The order to be able to focus is always: connect with your talents, know the benefit of focusing and choose to do it from your freedom and your desire to put it into practice.

"ATTENTION DEFICIT", MEDICATION AND BRAIN TRAINING.

To help a struggling brain manufacture concentration there are three main ways: **medication, brain training and a mixture of the two.**

The best known is medication. Not because it is the best, but because it is the most "comfortable" for professionals and because of the obvious interest of the pharmaceutical industry in promoting its use. I, as you may have guessed, do not agree with using this route.

Without hesitating for a minute, I recommend brain training and, in very specific cases, brain training plus medication. I explain why.

The brain of someone with an "attention deficit" knows how to concentrate. It does so whenever the stimulus is sufficiently motivating to capture its attention. Guillermo could concentrate for hours with his little soldiers, it was the motivation that made the difference, not his brain capacity.

Brain training teaches the brain to mature the areas of the left prefrontal cortex responsible for concentration. Neural connections in that area are increased and strengthened so that the brain learns to concentrate without needing so much positive stimulus and motivation to do so. It is a brain training that develops the concentration muscle.

What we want to achieve is that the brain acquires the habit of concentrating and then knows how to do it on its own. We want these minds to add to their basic intelligence the ability to concentrate in a reasonable way even though they do not feel motivated. We want them to stop suffering and feeling isolated for not being able to concentrate as the average population does.

Medication does not teach the brain anything. It is a one-time help: take away the medication, take away the concentration. You can be on medication for many years and your brain will still not learn to concentrate. The chemistry of the medication affects the chemistry of the brain, causing it to generate more dopamine and norepinephrine. As soon as it wears off, the levels return to baseline. That is, the brain is still unable to produce the concentration chemistry.

But let me talk about the electricity of concentration as opposed to the chemistry of concentration. It is much more effective to work on the electricity of the brain, that is, on the electrical impulses that neurons emit when they communicate with each other. Recent advances in neuroscience show that it is faster and more effective to modify and develop brain frequency waves, i.e., the electrical impulses of the brain. As you know, it has been seen by neuroimaging that when the brain produces *beta* frequencies in the left prefrontal cortex, concentration soars. Brain training is based on teaching the brain to produce these *beta* frequencies. Once it learns how to do it, it doesn't forget. It doesn't forget because it has created new neural highways that cause the brain to automate the concentration response.

This is the real way to help the brain: to teach it to develop the "brain muscle" of concentration.

There is no medication without side effects of some kind. Medications for "attention deficit" with or without hyperactivity have a direct effect on the emotional part of the brain. In the quest to calm emotional reactivity, a flattening of the emotional world occurs. Many of the cases in which this medication is taken are accompanied by loss of emotional response, personality changes, apathy and decreased appetite. It is like "turning off" to some extent the emotional world of a mind that is naturally very broad. Recall that these minds have very strong sensory intelligence. With medication, the uptake of stimuli is altered and, in turn, the interaction with the outside world and with themselves. If there is someone close to you who is medicated for these effects, it is very likely that you have appreciated these changes.

However, although I am not an advocate of medication, there are cases where it works well. It manages to increase concentration without affecting other areas as much. But even in this case it is not producing a development and improvement in the brain. That is why I always recommend combining training with medication. Let's not stop teaching the brain. It will allow us to reduce the medication in the medium term until it is eliminated.

Brain training is done in several sessions. In most cases, no more than four weeks are needed and it is a training that can be reinforced from time to time to further deepen new neural pathways, especially at times when the patient needs more concentration, for example, before exams.

I know that worry makes us resort to the quickest way to solve the problem, and medication seems to be that answer, but the pity is that with a medication we won't be getting to the root of the problem, and we won't be getting to the root of the problem.

problem. Being able to develop that ability cerebrally, my advice is to look for this other way.

For many years I have been using advances in neuroscience to train the brains of children, young people and adults and improve their concentration problems. It is a great satisfaction to see the results. Not only do they improve in concentration, but also in self-esteem, self-knowledge and pride in their innate talents. Increased ability to concentrate is very important, but it has to come hand in hand with recognition of their own abilities and intelligence. In this way we allow them to shine and enlighten the world with their great ideas, like so many minds that have created the great advances that move the world.

IF YOU WANT TO KNOW MORE ABOUT "ATTENTION DEFICIT" AND THE BRAIN

In the chapters dedicated to concentration and defocusing I have already explained the brain mechanism that allows us to concentrate and defocus.

As you know, the brains of people with "attention deficit" function more actively in defocusing. This means that it is more innate and automatic for their brain to connect the brain areas of the right hemisphere than those of the left. Their perception of the world depends on an uncanny ability to take in their surroundings.

This translates, as is evident, in that their brain has a very high activation in the right hemisphere, in the frontoparietal areas, and a much lower activation in the left frontoparietal areas, responsible for focus and concentration.

It is important to know that this low activity in the left hemisphere can be increased through specific exercise.

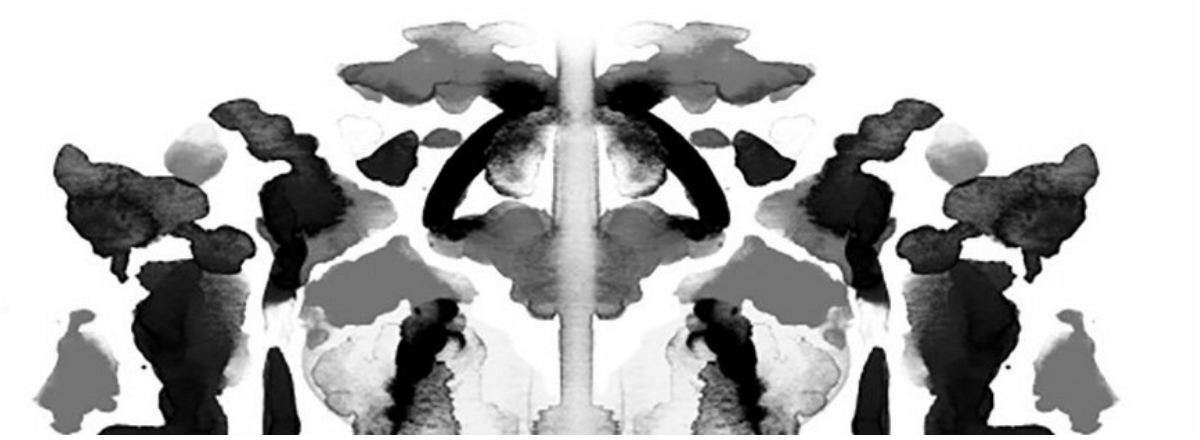
In the vast majority of cases, this low activation is solely a consequence of overactivation of the right hemisphere, which does not allow sufficient irrigation to reach the left. The brain concentrates too much brain energy in the right areas, those involved in perception, sensitivity to the environment and creativity, and does not leave enough energy to activate the left prefrontal areas.

As these areas receive less irrigation, they mature more slowly.

Brain frequency training accelerates this maturation by specifically working the left frontoparietal areas, activating and exercising them to produce the necessary *beta* frequencies.

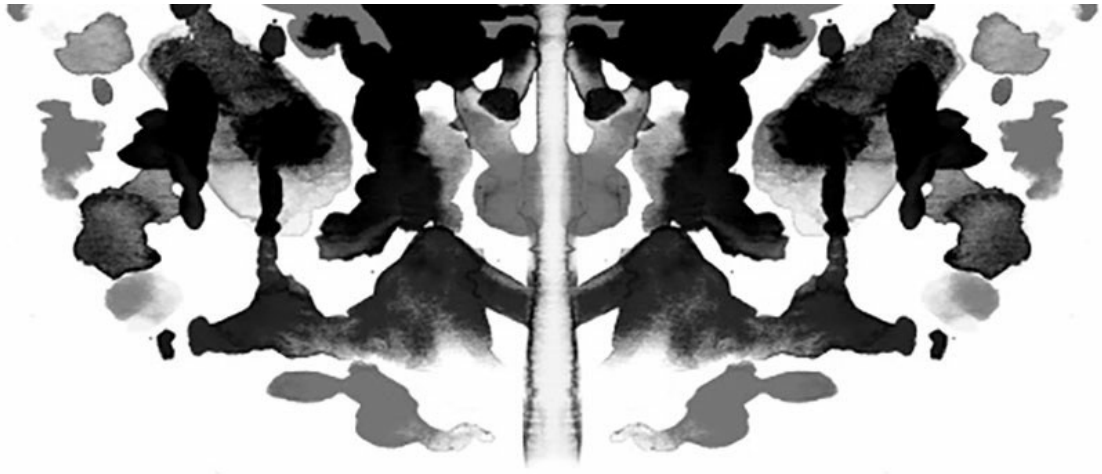
From the cerebral point of view, the "attention deficit" is due to the lack of maturation of these areas, not because there is any deficiency at the level of brain structure. It is an underactivation of this area that can be reversed with specific training.

Maturing cognitive functions can be achieved through brain frequency training that generates new connections and neural pathways. This is why I always recommend frequency training before resorting to medication. We must first try to activate these areas in a "natural" way, exercising this brain muscle of attention so that it can do this work on its own.



9

SELF-ESTEEM: THE ORIGIN OF EVERYTHING



SELF-ESTEEM: From *self-esteem.*

1. f. A person's appraisal or appreciation of himself or herself.

2. f. A positive or negative assessment, perception, or judgment that a person makes of himself or herself based on an evaluation of his or her thoughts, feelings, and experiences.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT SELF-ESTEEM

I'm going to play you a conversation that you may be familiar with, either because you've been on one side of it or the other. Chances are you've been on both:

-How beautiful you look.

-No way, I look terrible, look at the dark circles under my eyes.

It is difficult not to have witnessed or lived a situation like this at some time, but the truth is that there are many phrases that have to do with our self-esteem and that creep into our daily lives:

- "It's always the bad things that happen to me."
- "I'm afraid to participate in class in case I say something silly." • "My opinion is less valuable than everyone else's."
- "Everyone seems to be in control of what they do but me, I don't do things right."
- "I'm alone, I don't belong to any group." • "I don't want to ask for help in case I bother."
- "I can't say no in case it makes him sick."
- "Let him choose, I don't care, I'm fine with everything."

To talk about self-esteem is to talk about the appreciation we have for ourselves. Your level of self-esteem depends directly on how much you appreciate yourself. The value you give yourself. How much you love yourself. And, unconsciously, your brain relates that appreciation you have for yourself with how "lovable" you feel to others.

If your self-esteem is at a good level, you feel entitled to be in this world and to be loved for who you are. You have a

reasonable confidence in yourself and in what you do. There will be moments and times of doubts, of misunderstanding, of loneliness, but in general you feel you have the capacity to modify your environment to feel good. You feel you have the right to express yourself, to show yourself without filters, to decide about your life. In short, you accept that you are "lovable" in spite of everything.

But if your self-esteem does not reach a sufficient level, you establish that being the way you are, you do not deserve to be loved. And this is very serious. First because, if you do not appreciate yourself, you doubt your right to be in this world as you are, and second because your brain interprets that your life is in danger.

Feeling loved is much more than a desire, it is a vital need.

Why does your brain interpret that your life is in danger if you are not wanted?

Because having someone who loved you at birth and took care of you was what allowed you to survive. Your brain has had it very clear since you came into the world: "If they love me, they take care of me. If they take care of me, I survive". Imagine how important it is for your brain to perceive that you are loved: it takes it as a literal matter of life and death.

No wonder then that, if your level of self-esteem is low, you feel very bad.

If your self-esteem is low, what your mind is telling you is that you don't have enough self-esteem.

"you've earned" to be loved.

And this is like telling your body that you have not earned your living.

Sounds pretty harsh, doesn't it? Well, this is the mental mechanism that kicks in when your self-esteem does not reach a minimum level.

reasonable.

But shouldn't loving ourselves very much be the norm? Why these doubts about whether we are worthy of being loved by others?

Because we learn by comparison. We learn everything by observing others. From the moment we are born, we incorporate information about how to function in the world by looking around us.

When we are born, our brains come with a small amount of information from the factory. But the vast majority has to be learned with conclusions of the type: "If I do this, that happens".

The adult figures that accompany us from birth, who are usually our parents, are the reference for our brain. They are our example. But they are much more: they are our lifeline.

At an unconscious level, our brain reaches the following conclusion, in line with the one we have already mentioned: "If this adult loves me, then he takes care of me, and if he takes care of me, then I survive". Our brain begins from infancy an arduous work of learning that lasts mainly until the age of adolescence and during which it accepts as necessary for survival everything that close adults do. They are its heroes, they are the ones who teach it what it must do to get ahead. The brain has a great tendency to assume that what the adult caregiver does is correct.

This is one of the big reasons why we adults have to set a very good example. The young brains around us are absorbing in real time everything we do, what we say and, above all, the emotional environments we generate.

Young brains are very aware of where the affection is, because where there is affection, there is care, and where there is care, there is survival. And in the same way, where there is no affection, where there is indifference, there is threat. Again, this happens mostly at the level of the unconscious. But,

remember, the unconscious accounts for ninety-five percent of our brain activity, its presence is dominant.

I want you to know that your brain has stored all the emotional information you have received through your senses since you were born. And it has been classifying it as a safe emotion or a threatening emotion.

As a child, you quickly assume that keeping the adults around you happy generates safe emotions. And keeping adults happy often means seeing the world as they see it. That is, seeing the world more through the eyes of others than through your own.

And this is where the problems begin. Around the age of seven, a young brain starts to "short-circuit" because it begins to see inconsistencies between what it assumes to be correct in the eyes of adults and what it feels to be correct in its own eyes as a child. Why does this happen? Because his brain, having acquired a great deal of information in his early years, begins to think for itself.

Around the age of seven, the brain begins to think for itself and to question what it has learned from adults.

This is when self-esteem appears. When the brain compares what he feels with what he has learned he should feel.

Self-esteem is the balance between who you are and who you think you should be.

When you were about seven years old, you began to have your own opinion. And a battle began to be waged inside you without you knowing it.

You had to decide whether it was more important what you thought or what others thought. Many times you agreed with the way the adults around you saw the world, but there were many other times when you didn't, you didn't agree, you saw things differently.

And here your brain began to suffer.

Which is better: to follow the opinion of the adult who loves and cares for you, or to listen to your own interpretations? Because, remember: being loved makes you cared for, and being cared for enables your survival. If you go against the one who loves you, he or she may stop caring for you, and your life depends on it. So which is better: to look through the eyes of others or through your own eyes? I know what's best for your brain, but it's not necessarily what's best for your brain, but it's not necessarily what's best for you.

that occurred.

The best thing for your brain would have been to assume that you could interpret the world in your own way and that the adults around you would still love you for and in spite of it. That is, to feel worthy of love despite having different interpretations than the adults.

If the adults around you accompanied you well, welcoming you in your particular way of seeing the world and helping to educate that childish look from understanding, respect, acceptance and affection, something magical happened that was a great gift for you in the form of learning:

.....

Just because you are you, you are lovable.

.....

You are lovable because you are you. There is no outside jury that decides if you are or not, you are lovable, period.

Don't think you have to be different to be lovable, you always are. Another thing is that you can improve, develop, evolve and that by doing so you can

make you and others happier, but none of it changes the fact that you are basically lovable, always.

Unfortunately, this is not the way things usually happen. And, of course, not because adults do not love these children they are educating, on the contrary, it is normal for them to love them and very much so, but they make serious mistakes because they do not know how the brain works.

The priority is for a child's brain to feel safe and not to fear for its survival because it is no longer loved. How do you make it feel safe? Well, by telling them directly: "I will always love you, no matter what happens, no matter what you do, my love is always for you, count on me". If as adults we are able to assure a child that our love is not a bargaining chip, that it neither increases nor decreases because of what he or she does, we can make him or her feel secure,

we will be building solid and valuable self-esteem.

The best gift you can give a child is to tell him that just for being himself he will always have all your love.

Saying it is very important, let's not underestimate the power of words, especially at this age. What you say to a child goes deep into his or her unconscious.

If at that early age the brain assumes that this battle to see the world from different points of view is not a threat, but a learning process through which it is accompanied to educate and redirect the look when necessary, from acceptance and respect, we will be building a good self-esteem. That is to say, we will be building appreciation for oneself, for being as one is.

Let me tell you about some of the cases I have dealt with in recent years:

Pablo is thirty-seven years old and is the financial director of an important real estate company founded by his grandfather. His mother, siblings and several of his cousins work in the company. He studied business in the United States and after some time away from Spain he returned to Madrid to take over part of the family business. Pablo is very friendly and energetic. He started high brain performance training at MindStudio to reduce the anxiety he was experiencing on a daily basis. The goal was to keep his system calm despite the external "storm" of responsibilities he was facing. Paul progressed very well in the sessions and immediately noticed that he was sleeping better and had more inner calm. However, he still felt a great distress in his stomach every Sunday afternoon. The thought of starting the week affected him very much and his family had become accustomed to the fact that on Sunday afternoons it was better to leave him alone because he was not in the mood at all. We began, therefore, to investigate why he felt this way.

I began by doing a visualization exercise with him of moments where he had felt fulfilled. The moment that came strongly to his mind was one playing guitar with his high school marching band.

Pablo was very fond of music, he played the guitar since he was a child and during his high school years he formed a rock band with several classmates. They were called Los Cowboys. At the age of seventeen he thought about studying music in London, but his father told him that this was not a "serious" career, so he decided to study Business Management in the United States. He continued to play music sporadically and, when he started working, he gave it up completely. When I asked him if he didn't miss playing, I noticed his features tighten. He explained that he no longer had the time and that playing music was a thing of the past. Asking more questions, he finally told me that playing music with friends was not a "serious" thing. He had too much work and responsibilities to think about it. Of course I kept probing, because I was surprised that someone who had spent so many hours in his youth playing guitar and enjoying playing with his band didn't miss it one bit. Finally, Pablo was able to verbalize what was going on: "I don't play guitar because my family wouldn't understand. I would really like to get together to play with friends, but now I am a "serious" person with a lot of responsibilities, I can't make time for it.

When I asked him if he didn't find musicians "serious", he told me that of course he found them serious; in fact, he admired them very much, he enjoyed their talent very much. Then I asked him, "Do you enjoy your talent as a musician?". And oddly enough, he was very surprised to refer to his ability to play music as a talent. He had never looked at it that way, for him it had not been a talent, but a youthful "rebelliousness".

"And he told me that yes, he was rebellious because his father had always thought it was a waste of time. That is to say, the same thing he admired in others when he projected it onto himself became something

negative that it was not worth valuing. Not because he didn't enjoy it, not because it wasn't good, but because his father didn't regard it as serious. Worthy of value. Pablo had assumed from a very young age that his ability to play the guitar did not make him lovable, quite the opposite. It made him a rebel who was detached from his father's approval. It kept him from being loved by his parents.

It is not surprising that as an adult, with responsibilities, playing the guitar was not part of his world. Pablo did not appreciate his talent as a musician.

This could be anecdotal. Not playing the guitar is not the end of the world. But, mind you, it is very important. Let me explain why: when your brain enjoys something for which you also have a special talent and you deny it, you are telling it that you don't recognize that part of it as valid. You are turning off something that is innate in you. You can live without doing it, of course, but there is a part of you that is turned off. These types of activities are precisely the ones that naturally recharge you with energy and enthusiasm. If you avoid them, your system suffers.

Pablo came to the following conclusion on an unconscious level: "To be successful and do well and be loved by my father I have to do serious things. Playing guitar is not serious, so I don't do it." But by not doing it he was shutting down a part of his identity.

When you systematically turn off inner desires and motivations to be more lovable to others, you are draining your system of illusion and energy. Life becomes sadder, harder.

And by doing so, you are negatively affecting your self-esteem. You are reducing the value you place on yourself.

That was happening to Pablo. He had long since given up playing the guitar. He didn't value his ability as a musician. And his system, in response, was returning anguish and worry. I encouraged him to take out the guitar again and devote Sunday afternoons to playing. So far, Sunday afternoons had been a drama for him wandering around his house, so he could try to see what would happen if he spent them with the guitar.

We saw each other two weeks later. The features of his face had softened. In the Studio we could see that he had a different energy, that he was lighter, more youthful. I asked him what had changed in him in those weeks. He explained that he had taken my advice, he had taken out the guitar, at first without much conviction. But that his son Daniel had really enjoyed listening to him play. That encouraged him. He began to remember songs and ended up playing for a while every afternoon. Music started playing again at home, he would play chords and his son would join these improvised sessions with another guitar with which he imitated him. He explained to me that he felt like a weight was lifted off his shoulders. But the real magic happened one Sunday when his parents came over for lunch. During the after-dinner conversation, his son asked him to play something and Pablo, because of the

insistence, he pulled out the guitar much to his dismay. His son Daniel awkwardly joined in playing with him and, suddenly, it happened. Pablo's father became emotional and tears welled up in his eyes. He had never seen him cry before. He was moved to see his son and grandson playing together, united, accomplices. And he said to his son: "I had forgotten how well you played, it has always been a pleasure to listen to you". With those words, he let go of a great weight: playing the guitar had made him lovable to his father. That passion had finally united with the desire for paternal protection and affection. Pablo had been healed of a damaged self-esteem.

Since that day he has not had any more anguish on Sunday afternoons.

•••••••••

Now I ask you: have you put aside talents from your childhood and youth? Do you accept that there is something you enjoy very much, even if it doesn't make you a better student or professional? Do you allow yourself to do things that others don't understand?

Pay attention to this information that you may have stored from your childhood and youth years and that may be damaging you today with too much negative self-criticism.

Clara is a twenty-seven year old woman. When she arrived for her first training session, she brought with her an aura of elegance, education and poise. She spoke softly, with few words, very careful about what she said. When she finished a sentence, she would give a warm, shy smile.

Clara wanted to train because she felt very insecure about a new project. She had been a product designer in a large company and had finally dared to launch her own clothing collection. She was very clear about the philosophy and aesthetics of her brand. According to what she told me, she was a natural. He was very clear about what he liked and what he didn't like. She designed with ease and despite being a perfectionist, she was happy with t h e result. Her problem was that she felt very insecure when it came to showing it to others. She felt a lot of pressure and nervousness to "expose" herself to others. This, logically, was a problem to sell her products. So she came to MindStudio to see if we could help her overcome this insecurity.

The first thing we did with Clara were some frequency harmonization sessions to reduce the anxiety she was suffering and then we started to investigate the roots of her insecurity to show herself to others.

It did not take long to see that her relationship with her father had been difficult. Clara was the daughter of a university professor, of advanced age and vehement opinions. As the youngest of four siblings, the three oldest of whom were men, Clara recalled that at home there was a lot of discussion about politics and current affairs, and she didn't have much to say because she was younger than the rest. She had become accustomed to listening to others and not talking much. When Clara remembered what those family meals were like, an episode that had marked her very much came to her mind. At a meal with friends of her parents, one of the friends asked her a question and her father answered for her: "Don't ask Clara those things, she doesn't know about it". That sentence had marked her. At that time she was already a teenager and it hurt her to see how her father undervalued her opinion.

Clara's child and adolescent brain had fixed that it was better to keep quiet, to turn off her voice and show little because what she had to say was not interesting.

As an adult, Clara, despite having been very successful in her profession thanks to her great talent and effort, still thought that her opinion did not matter. That she had nothing interesting to tell others. In other words, that her voice and opinions did not deserve the respect of others. It seems that therein lay much of the insecurity he felt today when it came to showing his work.

Once this was discovered, we did some reinforcement work in this area and helped her to free herself from this obligation to be quiet in order to be liked by others. In a short time Clara overcame much of this insecurity. She was able to see that keeping quiet was a pattern she had acquired in the past, but that it no longer made sense to her. At first she still felt uncomfortable and insecure about expressing her opinions, but she gradually confronted this feeling in order to dismantle her childish pattern. And she succeeded. Not only did she realize that she could speak her mind without receiving criticism in return, but she understood that people appreciated it when she talked about her profession and her work philosophy. His opinion was valuable and insightful and others enjoyed hearing it. At that moment she realized that she was ready to be able to talk about her work without fear. She had overcome the low regard she had for her opinions. Her self-esteem had improved.

•••••••••

HOW THE BRAIN PRODUCES SELF-ESTEEM

Your brain manufactures self-esteem when it feels safe with who you are. When it determines that who you are and what you do is okay, whether others like it or not.

others. Because regardless of what others say or do, you feel lovable.

What has to happen to achieve this?

Well, your brain has to be flexible and take a kind look at you. Understand that you do things right and things wrong. That it is normal to succeed and be recognized, but also to fail and be ignored. Assume that this is all part of what is expected, the good and the bad.

Self-esteem is your brain's claim that you are lovable just because you are you.

When your system accepts as logical to do things well and also to do them badly, as well as to excel in something as well as to be worse than others, you are in front of a healthy self-esteem.

This requires your brain to have flexibility. It must be able to switch from one emotion to another. That it can rejoice and celebrate when things go well, but also be saddened and frustrated when things go wrong without destabilizing its appreciation for you.

How does your brain achieve this flexibility? By balancing two aspects:

1. Past and present.
2. Success and failure.

How your brain looks at these variables determines your self-esteem. Let me explain it to you.

Let's get used to the idea that our brain is a being that we have to educate. (In fact, neuroscience has long since proven this to be true).

Therefore, we have to take him by the hand so that he can acquire information and process it correctly.

When it comes to self-esteem, our brains get very, very messed up.

The first reason is that it confuses what was valid in the past with what is valid in the present, and the second is that the mind does not know how to distinguish between success and failure.

Let's take it one step at a time.

PAST AND PRESENT

As I said, we have learned everything through references and by comparison with the adults who have taken care of us. Also thanks to the people who have accompanied us: siblings, relatives, friends.

In your early years, your brain was very attentive to signals of affection and approval from your environment. Think of that image of a child doing something right and immediately looking for the eyes of an adult to see it, demanding approval. Somehow your brain was seeking approval in the eyes of others to reassure you that they liked you, loved you, and therefore would care for you. You know, the ultimate drive of our brain, to be safe in order to survive.

In this period brain information can settle in you of the type:

- "They want me only if I get good grades."
- "I'm only wanted if I don't get in the way."
- "They love me only if I look like my father or mother." •

"They love me only if I don't make trouble."

- "They love me only if I'm funny."

- "They love me only if I stand out with respect to my siblings."
- "They love me only if I don't make noise and stay quiet." •
"They love me only if I study something serious."
- "They love me only if I am responsible for my younger siblings."

And a long etcetera.

But as you mature, as you get older, you need to update this information.

Do they really only want me if I get good grades? What if I don't get in trouble? What if I only study something serious? What if I don't make trouble? What kind of nonsense is this? If your rational brain thought about it, it would see the absurdity of many of the "truths" it has internalized in your childhood and youth. Many of them make no sense. But I'm sorry to tell you that your brain doesn't see it.

You have left this information stored in the "lessons for survival" place and go now to get it out of there.

If we want him to come out of it, we have to take him by the hand, dismantle these supposed *truths* and show him that they are no longer valid.

There are people who achieve this naturally, without making too much effort. That means they have great brain flexibility. But there are others, many, who cannot do it automatically. The latter are those who suffer from low self-esteem. Their brains have remained anchored in the learning of the past, when they constantly sought the affection and approval of others in order to survive, and they have not realized that now, in the present, this is no longer necessary. They already have the tools to survive without the need to be liked and loved by others. It is great to be liked and loved by others, but not being liked does not imply a death threat to you.

To keep your self-esteem, the value you place on yourself at healthy levels, your brain has to be able to see and accept that what was valid in the past may not be valid in the present. It has to be open to change.

The idea is to dismantle "truths" that may have made sense in the past, but do not make sense now. In fact, many of them never made sense, but your brain interpreted the world that way to feel safe. I can assure you that most of us parents are far from taking away our love for our children for not being good students, being troublemakers or not doing something "serious". But their brains may believe that it is possible. It simply draws its own conclusions, often wrong.

To correct these misunderstandings of the mind, we must take it by the hand and redirect the vision we have of ourselves and our environment. This is called being flexible.

It is a matter of reviewing whether the critical voice we receive when faced with something that makes us feel less is a voice of now or comes from the past where so much erroneous information has been stored.

In the case I was telling you about Pablo, who felt that playing the guitar was not something serious, we can see this in a very simple way.

- His past brain was telling him, "Playing music is not right because your father thinks it's a waste of time. If you play guitar you're not serious. Playing guitar makes you unlovable."
- His present brain tells him, "Musicians are admirable. Making music is fine."

If as an adult Pablo does not play the guitar because he has a "serious" job and a lot of responsibility, so it seems like a waste of time, it is because he is letting his past brain do the talking.

And, as I was saying, this has profound consequences because this patient is turning his back on a talent that fills him with energy and enthusiasm.

When he decides to return to playing guitar with his son, he dismantles this old "truth" and defends its new look. He replaces the learning of the past, which was wrong, with the new meaning of the present. And in doing so, he increases his self-esteem, the value he gives himself and how lovable he feels to others.

Finding coherence between the past and the present is fundamental to nurture our self-esteem.

When negative, self-critical thoughts come to you, ask yourself if objectively, now in the present, what you are criticizing yourself for makes sense. Ask yourself if you would see it as criticizing if it had to do with your best friend instead of you.

Dismantle what you have learned in the past with your present truths.

SUCCESS AND FAILURE

Continuing its drive for survival, your brain assumes that success takes you to good places and failure to bad.

In childhood, when you've done something successfully, you've most likely been congratulated and that's not lost on your brain. You love to be congratulated, what better way to show you that you are loved?

However, when you have done something wrong, you are more likely to have seen worried or disapproving faces around. This to your brain couldn't be more alarming. "What do you mean, they're scolding me and they're not happy with me? They may stop loving me." The mind interprets that the one who the

things not going your way or failing at something is very threatening to your safety.

In our childhood and youth, we tend to be more inflexible with the successes and failures. We find it hard to accept that things can go wrong. It's much harder to make a child understand that they have to give up something they want than it is for an adult, isn't it?

This is due to lack of experience. A young brain has not yet learned that what appears to be a failure at first glance often is not, or is not completely so.

Behind situations that apparently went wrong, there are valuable lessons to be learned. The famous "every cloud has a silver lining" is something that is learned over the years. It is something that our brain acquires and matures.

As we increase in life experience, we realize that crisis situations, failures, disappointments, bring with them new experiences, learning, development and a more mature and wiser version of ourselves. But, again, this is something we have to teach our brain. It does not know how to understand this on its own.

Automatically, your brain tends to make very linear connections, such as:

Success = doing something well = satisfaction = being lovable.

Failure = doing something wrong = angry = unlovable.

A lot of low self-esteem comes from our brain not measuring success and failure properly. It has become outdated in its way of looking at reality as a child, which tends to see everything as black and white. It loses

the intermediate possibilities, which are a source of great joy and progress for a more experienced eye.

When something doesn't go right for you and you are overcome with feelings of insecurity, despair and negative self-criticism, I want you to stop and think about who is sending you these feelings. Whether it is your child brain or your adult brain. If you stop to reflect on that failure, with perspective and constructive spirit (typical of an adult brain), it is more than likely that you will find reasons and ways to improve. You won't tend to self-flagellate and treat yourself badly. You'll be able to look forward even though it bothers you that things didn't go well.

As I have already mentioned, inflexibility in analyzing situations comes from your brain as a child, where success was synonymous with survival and failure was synonymous with the threat of death.

Force yourself to see the situation from your maturity, dismantling the negative and childish thoughts that invade you, and you will see how much more lovable you feel.

I am going to teach you an exercise so that you can help your brain to anchor itself between the past and the present and what it considers success and failure. That is, to increase your sense of being worthy of love when your self-esteem is threatened.

•••

Exercise to increase your self-esteem

This exercise is good to do without thinking too much, just letting yourself be carried away by the first images that come to your mind.

1. First, I ask you to **read this paragraph and then close your eyes for a moment and visualize yourself at home when you were little, in your childhood.** An image of yourself that comes to your mind. Look at yourself from the outside, see how you were. And then open your eyes again. What image came to you? How old do you think you are?

   If you had to say how this child feels, what would you say: is he/she sad, happy, vulnerable, feeling pressure, feeling protected, fun, responsible, mischievous? What comes out at first sight?
2. **Think now, which approval did he seek more at that time? His** mother's or his father's? Who does he try harder to be liked by? The first thing that comes to your mind.
3. **Reflect and write in several words what that girl or boy had to do** to make that mother or father of whom he or she was seeking approval happy.
4. Now **name that ideal child** so that his or her parent would accept him or her and be proud of him or her. Give your first name and an adjective or description. For example, "Paula the responsible one", "Martin the good student", "Maria the funny one", "Angela the pretty one", "Daniel the quiet one", "Rita the well-behaved one".

That girl or boy that you have defined with your name and with that description is you. It is still inside you and directs much of your thoughts and actions. Even if you don't realize it. It continues to seek the approval of that parent.

mother being in that way that she believes is necessary to receive love.

It doesn't matter if you cannot accurately define that childish you. It is enough if you allow yourself to be invaded by the feelings that child had when he wanted to be accepted.

I'm going to help you identify when it's that child taking over and sending you thoughts from their child brain, so you don't confuse it with your adult brain.

1. **Let's go now to your adult self.** Let's go back to the present. Read this paragraph and then close your eyes again and go to a moment in which you felt very capable, very comfortable, very proud of something you were achieving. With that feeling of joy for what you have achieved.

   Does such a moment come to your mind? Look for it, take the time you need. It can be a simple moment, what matters is that sense of pride associated with that moment. We can feel pride in quite simple aspects of ourselves. Open your eyes afterwards.
2. Now **give a name to this proud adult** who is you in that moment you have visualized. It would be something like "Marta who doesn't give up", "Pablo the brave",

   "Daniela the smart one", "Pedro the one with the good ideas". Put that description of your "me" full of pride together with your name.

You already have a duo. You have your child self with his or her description to be loved and your adult self with his or her

description of the capabilities that make you proud.

Now you just have to let them talk to each other.

Whenever you feel that your self-esteem is falling, that you don't appreciate yourself enough and that critical thoughts against you are surfacing, I want you to know that it is that boy or girl you have named before who is speaking.

What name did you give yourself and how does it relate to thoughts of doubting your worth?

Your adult "self" is the one that can get you out of that loop of thoughts and low self-esteem.

•••

Here are some examples. In the case of "Angela the beautiful", Angela's brain believes that she is expected to be beautiful all the time, so she often feels insecure and continually looks at herself looking for flaws, despite being beautiful and objectively above average in beauty. But as a child she learned that the way to be lovable was to be pretty, because precisely because she was, and very much so, everyone pointed out that characteristic about her, so her child brain assumed that this was something everyone expected of her. To stop being so in the eyes of others is a constant threat.

Even as a grown woman, a good professional, who has proven herself in many different ways, Angela needs to feel beautiful in order to feel like she is lovable. She often has feelings of insecurity about her image that cause her to attend few group meetings and she is embarrassed to speak in public because she does not want to be in the limelight for fear of what people will say about her image. How can Angela raise her self-esteem? By calling on the other adult Angela to help her dismantle these fears. If as an adult she is

"Angela the achiever," for example, can be spoken from that state of pride and soothe your child Angela. It is from our adult brain, confident and aware of its capabilities, that we can heal our child brain, which is always looking for affection and signs that it will be protected and cared for.

The adult brain can demonstrate to the child brain that it is capable of fending for itself and has great abilities to be proud of and loveable.

Let me give you another example. Imagine Martin's child brain, which assumed that what was expected of him was to be a good student. It is very likely that Martin, as an adult, will demand a lot of himself at work, as if he had to continually get good grades. His self-esteem, the value he places on himself, is very likely to be linked to his results. Martin should proudly rescue his adult, let's imagine that he is "Martin the one who always has a good strategy to solve problems", to take care of that child. He can explain to him, from that emotion of pride, that he is lovable and that he has talents to do things well, but that sometimes they do not work out and nothing happens. There is no one constantly evaluating you. You can release pressure.

An example we see a lot is the type, let's say, "Rita who behaves well". When a child's brain assumes that behaving well and keeping everyone around you happy is what makes you lovable, this means that even as an adult it is hard for you to say no or contradict anyone. Because this child has understood that to be loved she must behave well and not make anyone angry or antagonize. These thoughts that come from the infantile brain are going to make Rita lower her self-esteem, the value she gives herself, when a situation requires her to contradict someone, for example. Not being able to defend her point of view for fear that others will stop liking her, her self-esteem will decrease. She will give up her value in order to give it to others.

This happens frequently, especially in the female world, where "being a good girl" has often been set as a standard of childish behavior. Rita needs the help of her proud adult brain so that she can overcome these thoughts and dare to put her voice out there without fear of what others think.

The fears and expectations of that child's brain determine much of what we say to ourselves. Many of our self-criticisms come from this information that our brain has stored and that is now obsolete. But our brain doesn't know that. It is our adult brain that can fix this misunderstanding. Make it so that it doesn't confuse the past with the present or failure with success.

IF YOU WANT TO KNOW MORE ABOUT SELF-ESTEEM AND THE BRAIN

Self-esteem depends on how you look at yourself. How you evaluate your environment and how you see yourself within it. Whether you see yourself as worthy of being liked and accepted by others.

The internal dialogue that arises from this assessment determines your degree of self-esteem.

The brain has several areas where it processes this evaluation and comparison. The main areas are located in the right hemisphere. Specifically in the right frontal. This area of the cerebral cortex has been shown to be very active in the processes of analyzing what is happening around you and especially sensitive to interaction with others.

Throughout the years of brain training in frequency harmonization, I have been able to verify that when the right frontal area is worked on

By teaching them to produce more *alpha* frequencies, people report feeling better, more at ease with themselves, less self-critical and more able to relate to others without feeling judged.

This training of the right frontal allows us to access more balanced emotional states, where we can take perspective on the facts. It is the way for our "adult brain" to take control over the "child brain".

As always, it is a two-way street. We can directly train the brain areas involved in self-esteem so that our brain "manufactures" more affection for ourselves without us having to make a conscious effort, as happens in frequency brain training, or we can, based on our actions, modify the functioning of this right frontal.

That is, we have the possibility of working on the brain so that it modifies our actions or we can work on our actions so that they modify our brain.

The above exercise I have shown you to raise your self-esteem is an example of the latter. From what you tell yourself and how you look at yourself with pride as an adult, you can modify your brain structure.

Self-esteem, the value you give yourself, involves many cognitive and emotional processes. When you are able to connect with what you do find valuable about yourself and give it the necessary strength so that it can push aside and minimize other negative thoughts that make you feel insecure, you are directly influencing the brain regions in charge of emotional regulation. And not only that: you improve your decision making and your social relationships. The value of what you say to yourself modifies how your brain works.

With the right words, your brain manages to calm your amygdala.

The amygdala is activated when you experience negative emotions, but if you tell yourself good things that allow you to see over these negative emotions and connect with your strengths, the amygdala gets confused. It doesn't understand why it feels bad, negative, when you are able to tell yourself and remember good times. When this happens it ends up giving in to what you tell it. That is to say, you calm it down and it deactivates. This causes you to feel much more emotionally stable. **A calm amygdala also means calm on an emotional level.**

When you evaluate yourself and compare yourself with others, two other brain areas are activated. They are the anterior cingulate cortex and the medial prefrontal cortex, two very important regions in your relationship with your environment. Both are also very involved in self-esteem. These areas are activated when a person evaluates the perception of self in relation to others, and are believed to contribute to the formation of self-esteem based on social relationships. You can calm these areas through a conscious effort to remember pleasant times when you felt good in the company of others. It is about calming the areas of the brain that connect directly to the human fear of not being liked and accepted by others.

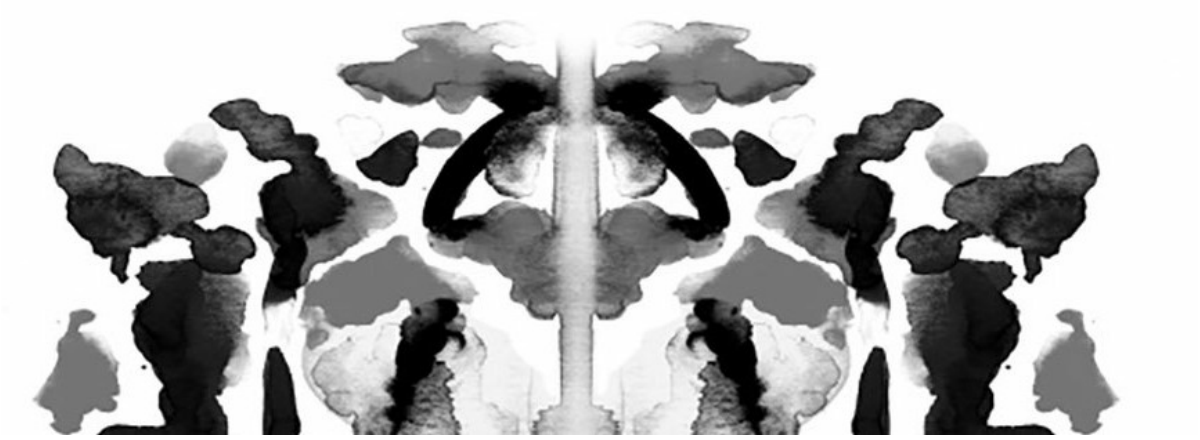
In short, self-esteem and your brain are intimately interrelated and influence each other. Increasing self-esteem helps your emotional, cognitive and social processes and improving your brain functioning will give you greater self-esteem in the long run.

Again, do not underestimate what you, by your actions, can transform and improve in your brain.

I end with a beautiful phrase from Carl Rogers, pioneer of humanistic psychology:

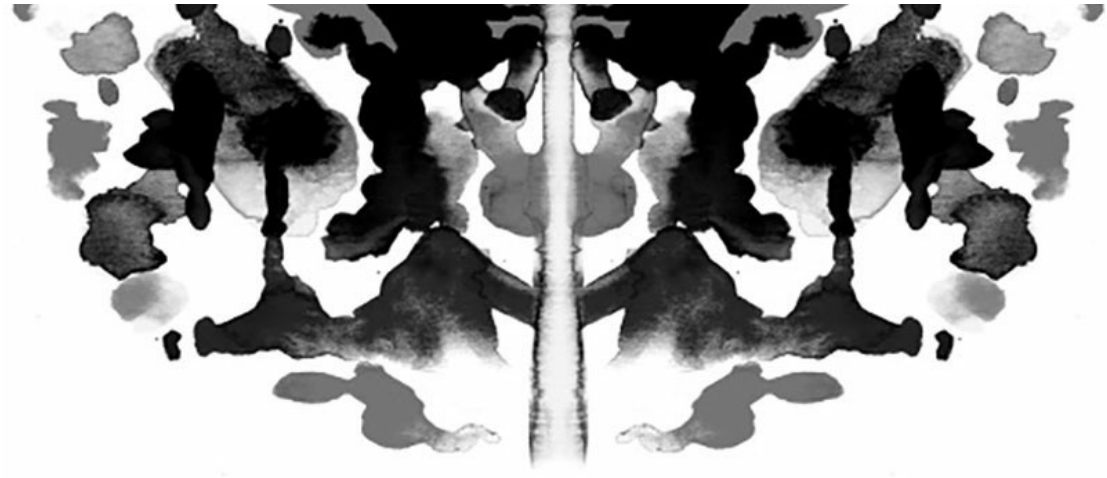
Self-esteem is the courage to be yourself.

I encourage you to have the courage to bring to light who you are. Look for your strength in all that you have lived and where you have already demonstrated your great value and dare to silence the voices of childhood that no longer serve you to live fully. I assure you that the effort will be worth it.



10

PERFECTIONISM AS AN ALLY, NEVER AS AN ENEMY



PERFECTIONISM: From the Latin *perfectionismus* and *perfectio.*

1. m. Tendency to improve indefinitely a work without deciding to consider it finished.

2. m. Tendency to set high standards for oneself and to feel constant pressure to achieve them.

WHAT WE TALK ABOUT WHEN WE TALK ABOUT PERFECTIONISM

To speak of perfectionism is to speak of detail. It is to speak of a taste for defending high standards. It is to speak of sensitivity for a job well done and it is to speak of commitment to the result.

Perfectionists create high-quality realities, environments, jobs and relationships.

But to talk about perfectionism is also to talk about a lot of effort, constant demands, high self-criticism and dissatisfaction.

Perfectionism is itself an eternal struggle to reach a high standard of quality that always asks for more. "You can always do a little better," thinks the perfectionist who is reluctant to give something up. A perfectionist is like a painter who keeps brushing up his painting as it hangs on the museum wall. It's hard to give something up.

Perfectionists are admirable. They have an above-average capacity for effort. They also have a desire to create realities that others benefit from. If you are close to someone who is a perfectionist you most likely enjoy some high quality result that, as a user, is usually quite pleasing. But possibly you also suffer from the need for control and demand that this implies.

One important thing I want you to know is that the perfectionist is born, most certainly made and with difficulty unmade. Why do I say this?

Because perfectionism is something we acquire as part of our upbringing. Of course, there is a genetic component, but most of the time, perfectionism is

Part of it comes from contact with people and environments that inculcate this way of being. Perfectionism is once again the unconscious response we give to the fear of not being good enough or not being accepted.

When a person is sensitive, i.e., has sensory intelligence, he or she develops a strong radar to the environment and the behaviors of others. If that radar detects that doing things very well is a value in that environment, it will tend to do so. And it will become part of its essence. That is to say, it will be difficult for him to do it differently because his system has understood that things are done very well and that from that perfection comes the affection and acceptance of others. Once you get used to that, you will find it hard to get rid of perfectionism.

What is curious about perfection is that it does not rest. In fact, it doesn't let it rest. Put a perfectionist in a place where the standards are mediocre and she can't help but be uncomfortable. She will have a need to make changes. And if these changes are not possible, he will experience discomfort inside. It will rob her of her calm. **A perfectionist person finds it difficult to "not see" something. Even if she does not want to. It is superior to her.**

For a long time, being a perfectionist has been seen as a gift. As something to be proud of. And it certainly is. But I'd put a little something on it. It's something to be proud of if it doesn't engulf you, if it doesn't devour your ability to be calm and happy.

Unfortunately, perfectionism takes away a lot of physical and mental health. It becomes cruel when it is fed without limits. And it ends up exhausting and squeezing the person.

Perfectionism needs limits. If you don't set them, it limits you.

HOW YOUR BRAIN MANUFACTURES PERFECTIONISM

Our brains scan the environment all the time. When a young brain internalizes that doing things very well is the way to be loved, there is no turning back. That brain will always strive to do things right.

But the following happens. The brain gets used to the fact that doing things well requires a lot of effort and so it invents the following conclusion, which it believes is necessary for survival: **doing things well requires a lot of effort.**

Which is the same as saying: I know I'm doing things right and that they love me **if it takes effort.**

Which is the same as saying: **if I don't make an effort, I'm not doing well and I don't deserve to be loved.**

And here begins the trap into which the perfectionist's brain falls. By assuming effort as something necessary to be able to do things well and to be worthy of being loved, they will always demand it.

I mean, if you have a perfectionist brain, it's going to do something like this:

- "I have to do this really well, I'm going to strive to make it perfect."
- "It's done. It doesn't cost me effort anymore. That's wrong, it has to cost me effort, could I do better?"
- "I have to keep pushing myself, I'm going to improve on what I had done."
- "It's better now, but I'm not trying hard anymore, I'm settling. Something I'm doing wrong, it's not enough with what I'm doing. There is still room for improvement."

This iteration can be infinite.

Perfectionism is the tendency to improve something indefinitely.

Now you know why: your brain is scared to death if you don't keep modifying, perfecting something. For your brain the "right" to be loved comes from doing things to the best of your ability and effort. Because you can always do better, right? And you enter a spiral from which you can't get out.

This spiral of striving for perfection brings with it a very harsh criticism of oneself. Anything less than perfection is failure. And the truth is that perfection does not exist, so failure is assured.

When the critical view of oneself is placed on physical appearance, this becomes even more cruel to the person. Your brain continually delivers the message "You will be loved only if you are a certain way", and that way usually has very high and unrealistic standards. It is impossible to stop the physical deterioration associated with the passage of time and we certainly have not chosen our physical appearance, which, although we can alter and improve, is given to us.

The pursuit of perfection is a continuous race after a carrot that you have tied in front of you. No matter how hard you run, you will never reach it.

Are perfectionists doomed to live with dissatisfaction because they do not meet their standards?

Of course not. We can use the talents of perfectionists to turn the situation around and make it work in their favor.

wellness. Here's how.

I am going to tell you a fable to explain this. It is very well known and most probably you have already heard or read it before, but even if that is the case, I invite you to read it with the idea of perfectionism present in your head:

The cracked vessel

An Indian water-carrier had two large vessels hanging from the ends of a pole which he carried over his shoulders. One of the vessels had several cracks, while the other was perfect and held all the water at the end of the long walk from the stream to his employer's house, but when he arrived, the broken vessel held only half the water.

For two full years this went on daily, and of course the unbroken vessel was very proud of its accomplishments, for it knew itself to be perfect for the purposes for which it was created. But the poor cracked vessel was very ashamed of its own imperfection and felt unhappy, for it could only do half of all that was supposed to be its duty.

After two years, the broken jar spoke to the water carrier, saying:

-I am ashamed and want to apologize to you, because due to my cracks you can only deliver half of my cargo and you only get half of the value you should receive.

The water carrier, chagrined, responded sympathetically:

-When we return to the house, I want you to notice the beautiful flowers growing a l o n g the road.

So did the jar. And indeed, she saw many, many beautiful flowers along the way, but she still felt sorry that, in the end, only half of the water she was supposed to carry was left i n s i d e h e r .

The water carrier then told him:

-Did you realize that flowers only grow on your side of the road? I have always known about your cracks and I wanted to take the positive side of it. I planted flower seeds all along the path where you go and every day you have watered them and for two years I have been able to pick these flowers to decorate my mother's altar. If you were not exactly the way you are, with all your flaws, it would not have been possible to create this beauty.

•••••••••

Our imperfections, our cracks are the cracks through which the magic of the unexpected can emerge. We are much more than we think we are. And we are much more than we control ourselves to be.

Perfection is controlling and therefore limiting. It allows only the expected, the programmed to occur. Imperfection, on the other hand, gives us new nuances. It allows us to rediscover ourselves in the face of new situations, which we do not control and which therefore have a life of their own beyond our will. When we accept our "cracks as a part valuable and surprising part of us, we open ourselves to the possibility of things happening that are beyond our control. We allow flowers to come forth without our programming. We tap into dimensions of ourselves that, if we had no, we would not discover.

Surely you have experienced the feeling of "letting go". Whether out of obligation or because you couldn't do it any other way, if you have experienced what it means to let go of control and let happen what has to happen, it is very likely that you have experienced this feeling of fluidity, of things happening effortlessly and that, surprisingly, everything fits together and finds its place.

But then, how do we get a perfectionist brain to come to terms with its cracks and lower its level of demand? We have to get the goal of continuous improvement to be right, balanced between its expectations and the acceptance that they may not always be met, making way for the magic of the unexpected to happen.

To do this we have to use the skills that the perfectionist brain already has and make them oriented to this new goal.

The goal is to educate our brains to consider as "perfect" the enjoyment of the talents talents, the enjoyment of

to develop by bringing out the best in oneself and to accept that not everything is controllable.

In short, it is about understanding that perfection is not achieved through effort and control, but through effort and passion for what we do.

If you also introduce the variable that what you do is a benefit to others, perfection in your life begins to take on very interesting nuances that will allow you to be a satisfied and happy person. Not because everything is perfect, but because you enjoy the path of achieving the best of yourself.

The high standard to be pursued indefinitely changes from being that the perfect thing to do is to do things well, to doing them with the objective of development and enjoyment.

Give your perfectionist brain a good reason and it will use all its energy to achieve it.

Knowing this, let's give it the best of reasons: to develop our talents and have a lot of fun with it. If you are able to pursue this goal, your brain will give you the best it has inside. Instead of being exhausted by the effort from the obligation, it will feed you with motivation and energy.

In the world of elite sports, perfection is necessary. If you are not perfect in your technique, you will lose to someone who is. However, it is not perfection that wins, but enjoyment, passion. If the brain does not enjoy, it does not bring out its genius. The brilliance of the brain emerges when it has the capacity to display all its greatness. This happens from flow, not from control. And a brain flows when it is at ease. On the other hand, a brain is blocked when it feels too much pressure.

Great athletes, if they want to reach and stay at the top, have to really enjoy what they do, to have fun. That is the basis of their success. If they only introduced the variable of effort and perfection, they would burn out, they would not be able to keep up the pace, their system could not cope with it.

The way to withstand the demands is to enjoy the activity.

Success is in the power of the passionate.

Perfection is a very big brain load. We need to let our mind enjoy itself so that it can recharge its batteries.

When we shift our purpose from striving to make things perfect to allowing the best of ourselves to emerge, we are taking a giant step forward in our well-being and happiness.

To these brains in search of perfection we must show them that the new perfection is to achieve development and enjoyment along the way. **This brain will then orient its efforts to satisfy these objectives.** And it will do so by connecting with its own talents that want to come to light and enjoy it along the way.

The cracked jar, once it knew that its crack made flowers grow (something it never imagined it could do), was reconciled with itself. It knew who it was, not a perfect jar, but a cracked jar from whose imperfection sprouted beauty.

That's the message for you and me. From our cracks something is born that makes us unique. If we show our brain that this imperfection and lack of control has a good side and that making an effort to recognize it makes us more perfect within our imperfection, we will have a mind that will manage to calm down.

•••

Laugh at yourself and give yourself nicknames

If we want to control perfectionism, we need a part of us to know how to say: "Stop", "You've done well", "Don't demand more from yourself".

We could have someone by our side to do this work of limiting perfectionism, but I advise you to be the one to do it without having to depend on others. We need our brain to manage this continuous improvement of perfectionism and to stop it when it is no longer healthy.

This exercise helps to do that: it is a great generator of empathy and understanding towards oneself. Something that is very necessary for perfectionist people, who in the search for perfection lose the notion of who they are. It is also a very good exercise for children who demand a lot from themselves.

It's quite simple. As is often the case at the cerebral level, simple and emphatic is what works best.

You just need to have the predisposition to be able to look at yourself from the outside and laugh at yourself (with affection, of course). You simply need to find the humor in your perfectionist character. I assure you that there is a lot of it.

Give that perfectionist character a name and laugh with him at his "crazy" perfectionism.

Here are some examples.

Imagine you are obsessed with cleanliness. You can't see something dirty without getting up to clean it. It's something you want to diminish from your personality, because it exhausts you and you also put your family under a lot of stress with your anger when something isn't perfect.

Deep down, you're being too much of a perfectionist and it's starting to make you sick.

Well, it's time to give a comic role to this perfectionist being of cleanliness so that you can laugh with him at himself.

You can call yourself, for example, Madame Mop every time you get the urge to pick up and clean everything. This way you can say to yourself, "Wow, I'm having a Madame Mop moment," and exaggerate what that character does. You can have fun imitating a tone of voice that you think is how she should speak, make exaggerated gestures and above all laugh with the character. This character that has every right to exist, but that you can also dismantle and laugh with its absurdity. You can share it with your close people, so that it is something to talk about. A facet of your personality that you accept, recognize and take away because you are able to laugh at it when it becomes too invasive.

Or maybe in your work you find it hard to give something for finished because it seems to you that it is always possible to improve it (typical trait of the perfectionist, remember?). Then, when you get into that spiral of dissatisfaction because you don't feel that something is good enough, you can give yourself the nickname, for example, of Dissatisfier, and imagine what this character looks like. When you find yourself not giving something up

for getting into the perfectionism loop, you can dismantle it by unmasking this character. You can say, "Dissatisfier is here. Come on, it's all right, it's finished."

And so on with any aspect in which you see that you fall into the rigidity of perfectionism.

When you do this, you confuse your brain and get it out of the perfectionist pattern. Humor disarms it.

Remember that perfectionism is nothing more than, once again, a survival mechanism. It stems from the brain's fear of not being loved if you don't do things perfectly. So, if you introduce humor in a moment of "perfectionism attack", i.e. "fear attack", your brain doesn't understand anything. It thinks: "But how can you laugh if not doing things right is a threat? Well, if he laughs, maybe it's not a threat" and suddenly the brain stress of doing things perfectly goes down. That is, it frees you from feeling that doing things perfectly is necessary.

This is a way of letting go of the slavery to which perfectionism subjects us.

Humor disarms the brain of its fears and insecurities. I dare say that humor is the most valuable tool we have to take care of our mental suffering.

•••

THE IMPOSTOR SYNDROME

Let me tell you about what is known as imposter syndrome. Something that in one way or another we all suffer from at one time or another.

This syndrome causes you to have constant insecurity and doubt in your own abilities.

People with an imposter complex believe that they have only been successful due to luck or the deception of others, and fear that their true lack of skills and knowledge will be discovered.

This feeling can be very frustrating and often prevents you from daring to take steps because you are afraid of being "found out" as incompetent. You do not feel worthy of the recognition you receive. You think you are doing things wrong or that you don't know, but that other people don't notice. You feel you are fooling everyone.

I'm going to explain to you where this feeling of being an imposter comes from, because, once again, our brain is pulling the strings to make this happen.

Remember how I explained how our brain comes to the conclusion that doing things well means that you have to do them with effort? In our education, effort takes a leading role in determining whether something is well done or not. If it takes effort, you are doing it right, and if it doesn't take effort, you are not doing your "duty" right.

Effort is necessary to develop, that is clear. By exerting yourself, you make your organism "stretch" to reach new places that it cannot reach without effort. Effort is the discomfort to which you must submit yourself to give more of yourself than you would normally give in a situation of rest.

Effort is also the price to pay to achieve great accomplishments and that you can look at yourself with pride for being able to challenge the *status quo* for

to achieve something new, that develops you.

But, once again, our brain falls into a trap. By directly connecting effort and doing things well, it forgets that without effort you can also do things well. You can do things well with effort and you can do things well without effort. But we have been told less about the latter.

Effort is not necessary for something to go well. In fact, from a mental point of view, when you do something with ease, without the need for effort to be present, it is because your brain has already learned to do it so well that it does not need to devote extra energy, i.e. effort, to it.

This happens, for example, when you drive a car. Perhaps the first few times you drove it demanded a lot of effort and attention and you felt a sense of pride after you managed to get the car reasonably well on the road instead of crashing it into a lamppost. It took effort to get it right and when you did, your mind gave you satisfaction for a job well done.

But now, if you drive regularly, you don't congratulate yourself every time you are able to move from one place to another. You take it for granted that it's normal.

Why does this happen? Because it no longer demands effort from you. Driving is something that your brain has automated and no longer brings your attention to it. And sure you drive a hell of a lot better now than when you started, but your brain doesn't see it as important anymore.

The same thing happens to us at all levels. When we have automated an action, it becomes insignificant for our brain. Being a known and mastered activity, it does not demand its attention, because it is not a source of threat. Remember that our brain moves according to what it considers threats.

So what happens with impostor syndrome? Exactly this. **Your brain has become so used to doing something that it no longer requires effort.** And by not demanding effort, your brain cannot reach the conclusion "If it costs me effort, it is well done". So it comes to the (erroneous) conclusion "It doesn't cost me effort, so it must not be well done". And so begins this mental bewilderment typical of the impostor syndrome.

On the one hand, your brain does not give importance to what you do because it has already automated it and, since it does not demand effort from you, it does not give you the mental information "Task well done, feel proud". However, you can receive signals from the outside that it is well done. Your environment can praise you for something that in your eyes has no importance because your brain does not give it to them, it already counts on it.

What happens then? That your brain, in this bewilderment, passes you the message "You are cheating others". What they say is well done is not really well done, it has not cost you any effort and you know it.

But you are wrong. Yes, it's well done. It's like when you're an expert driver. You do better than ever, but your brain doesn't reward you with the feeling of a job well done.

For people sensitive to their environment, with the need to do things well, as is the case of perfectionists, this brain discomfort is even greater.

The need for continuous improvement makes you be very aware of the effort you put into everything, because your brain rewards you according to it.

So when the effort component is removed, they are puzzled and assume they are not doing it right.

Surely you have admired some facet, whether artistic, occupational or personality, of someone that that someone doesn't see. When you draw their attention to it, they're surprised that you find it extraordinary. And you're puzzled too: "How can he not see how well he's done?". Well, she doesn't see it. Rather, her brain won't let her see it. His brain has stopped feeling pride in what he already takes for granted and has automated.

This mental bewilderment gives rise to thoughts of the type:

- "I'm fooling others, they think I'm good and I'm not, I'm a fraud."
- "This I got by luck, I didn't earn it."
- "This went well once, but I'm not going to be able to do it that well again, it was a matter of luck."
- "They're going to expose me, they're going to realize I'm not doing things right."

And so on and so forth. If you believe what your brain tells you, you will suffer. **Overcoming the impostor syndrome comes from understanding that we are talking about a failed mechanism of our brain.** We can redirect it to understand that non-effort is the origin of great achievements as a result of acquired mastery and skill.

I want to tell you something: our great talents (that above-normal capacity that we all have in some aspect of our personality) do not require us to make an effort. **If anything characterizes these innate gifts, it is that they "come naturally" to us. They spring from us without effort. Talents are in our essence.**

That's why they go under the radar of our brain, which spends its life searching for and capturing effort. We are very blind to our own talents because our brain does not pay attention to them and does not reward them.

This is the reason why it is so difficult for us to recognize the greatness we possess within ourselves. We remain stuck to the effort and we do not accustom our gaze to that which comes naturally from within us, without effort or need for rationalization.

As in the case of the jar, we may be sowing beauty without realizing it. But, more importantly, we can realize it and take advantage of it. The satisfaction and happiness that comes from taking advantage of the good that springs from within to develop ourselves is immense.

Our innate talents are a gift given to us. They are those wild cards that life gives us to use to our advantage. Let's not let the need to strive for everything take them away from us.

Listen to what people who love you praise about you, give it importance. They see what your brain hides from you. Be surprised by the good that comes out of you effortlessly and use it.

When you feel this impostor syndrome again, take a second look. Find out if you're being an experienced driver who doesn't recognize his or her driving skills.

True greatness is born effortlessly from within you.
Take advantage of it. It's a gift you have inside you.

IF YOU WANT TO KNOW MORE ABOUT PERFECTIONISM AND THE BRAIN

Perfectionism is related to a high sensitivity to both the environment and one's internal processes. Perfectionists pick up subtleties that other people do not perceive. This means that their brain radar is very powerful. They pick up a lot of information and process a lot of information.

They are also very conscious of what makes them feel good and, if you take them out of it, they feel pretty bad. They have little resistance to adapting to environments that don't live up to their expectations.

On a mental level, this means that they have their right frontoparietal areas very active. These areas function to provide a lot of information from the environment and establish fixed aspects that make you feel good.

Such a high activation in this brain area makes adversities affect more. It is common for a perfectionist to become despondent after a setback and to recover more slowly.

Resilience in the face of adversity requires greater activation of the left prefrontal cortex. This is precisely what a perfectionist brain struggles to do. By activating the right prefrontal cortex so much, it causes less irrigation to the left.

There are large bundles of neurons that extend between certain regions of the prefrontal cortex and the amygdala. The amygdala is involved in negative emotions and negative stress (distress), adjusting attention and activity when we feel anxious, afraid or threatened. What has been found is that people with greater activation in the left side of the prefrontal cortex recover much faster from even the strongest feelings of grief, fear or anger. It has been concluded that the prefrontal cortex sends inhibitory signals to the amygdala; in other words, it tells it to shut up. In this way the left prefrontal cortex shortens the activation period of the amygdala and enables

The brain moves more freely through the different emotions, enduring and adapting to adversity.

A perfectionist mind, therefore, benefits greatly when it can activate this part of the left prefrontal cortex. It helps her to take perspective, to complete tasks and to be less hard on herself.

The exercise you find in this chapter has the ability to reduce the activation of the right prefrontal and increase the irrigation in the left prefrontal.

The brain training of frequency harmonization manages to activate the areas of the left prefrontal cortex, causing very pleasant sensations to people with perfectionist brains. They notice how anxiety caused by the fear of not doing things well enough decreases. It is common to hear patients say: "I feel more zen", as a sign of reaching an inner serenity that is difficult to acquire under normal conditions for a brain with a tendency to perfectionism.

Something that is also achieved by training brain frequencies is to lower the activation of the right prefrontal, which greatly reduces muscle tension. Perfectionists tend to have back and neck pain. They tend to suffer from bruxism (teeth clenching) and, often, from headaches and migraines.

By lowering the activation in this area, these symptoms are greatly improved.

The brain learns to relax and to break the conclusion that effort must be a necessary condition to do things well. It allows the system to rest, relax and, with it, decrease the symptoms associated with stress and tension.

When a perfectionist brain trains its left prefrontal, it experiences feelings of fluidity, serenity and freedom that are novel and very pleasant.

A perfectionist, when he manages to balance the activity of his two prefrontal areas, begins to live in a more serene, fluid and happy way. And, of course, without giving up the wonderful quality of what he creates.

Not surprisingly, perfectionists are generators of great beauty.

RECOMMENDED READINGS

As curiosity should never run out, I also want to share with you these titles that are part of my personal library, of my journey as a reader and of my performance as a professional. If you want to deepen your knowledge of your brain, any of them will be a good choice.

CLEAR, James, *Atomic Habits*, Barcelona, Diana, 2020.

DAMÁSIO, António, *Y el cerebro creó al hombre,* Barcelona, Destino, 2010.

DAVIDSON, Richard J., *El perfil emocional de tu cerebro*, Barcelona, Destino, 2010,
2012.

DOLAN, Paul, *Happiness by Design,* Westminster (London), Penguin Books, 2015.

EKMAN, Paul, *El rostro de las emociones*, Barcelona, RBA, 2017.

FEHMI, Les, and Jim ROBBINS, *The Open-Focus Brain*, Durban, South Africa, Trumpeter, 2008.

GAWDAT, Mo, *That little voice in your head,* Colorado (USA), Bluebird, 2022.

KAHNEMAN, Daniel, *Pensar rápido, pensar despacio,* Barcelona, Debate, 2012.

LEVITIN, Daniel J., *Your Brain and Music*, Barcelona, RBA, 2018.

MILLER, Alice, *El cuerpo nunca miente*, Barcelona, Tusquets, 2020.

PRICE, Catherine, *The power of fun*, New York, The Dial Press, 2021.

ROBBINS, Jim, *A Symphony in the Brain: The evolution of the New Brain Wave Biofeedback*, New York, Grove Press, 2008.

ROBINSON, Ken, *The Element*, Barcelona, DeBolsillo, 2017.

ACKNOWLEDGMENTS

I am a very lucky person, *thank you* should be my last name.

I became aware of my fortune very early, when at the age of three I survived a cancer that, against all odds, decided to go into remission and let me continue in this world. From then on, everything I have lived has been an extra time that I am grateful for and I try to make the most of: life, my life, is a gift. I cannot express in words my gratitude to my parents and siblings, I could not have *fallen* into a better family; everything I am bears your stamp, dad, mom, Monica and Javier: THANK YOU.

Thanks to those of you who have been and are part of the closest spaces of my personal life, you know who you are. I am tinged with your way of being, your way of seeing the world and my heart has very important spaces reserved for you. Friends, friends, past loves, I am very grateful to have coincided in this life with you.

Especially to Vanessa: you left us too soon, but I still feel your presence, your affection and your illusion. Thank you, my friend, I miss you very much.

Thanks to the whole MindStudio team: to María Martín, who joined my madness without thinking about it from the first day; to Almudena Blasco, Marta Mozas and María Coloma. We are a great team, thank you for your dedication and

passion and for opening your mind to all the projects I bombard you with.

Thanks to all of you who train at MindStudio. Your trust is a great responsibility that forces me to be always better. You enrich me enormously as a person and as a professional. I am very proud of this community, thank you.

Thanks to all my guardian angels: your generosity, help and affection move me. Thanks to Paty de San Román, Eva Villar, Mariana Sanz, Bea Alborch, María Inés Vidal, Hugo Machado, Jana Fernández, Alexandre Mattos, Charo Palomo, Raquel Sánchez, Rosa Copado, Nuria Jiménez, Marino Cid, Nuria Torijano, Bea Gaspar and all those I can't name who help me so much. The most beautiful thing about this project is to have approached such wonderful people like you.

Thanks to Sara Esturillo, my editor, for making me enjoy this process since the day we met. Your enthusiasm, trust and professionalism have made everything very easy, thank you.

Thanks also to the publisher Planeta, for giving me the excuse and the confidence I needed to write this book.

Thank you, dear readers, for having come this far and for joining me in this adventure. I am very excited to write for you and I only hope that this book has given you clarity and tools to live better.

Thanks to Olivier, my husband, for bringing out the best in me, for your support, for your unconditional love and for sharing the journey of life together with that excited and illusionary look with which we move mountains. Thank you, my love.

And finally, thanks to my daughters Chloé and Olivia, you are my pride, my admiration and much more than I think I deserve. You awaken in me the love

bigger than I ever thought I would feel. Thank you, my girls, this is all for and because of you.

Surprise your mind
Ana Ibañez

Av. Diagonal, 662-664, 08034 Barcelona
www.planetadelibros.com

Design and layout: Rudy de la Fuente

First e-book edition (epub): May 2023 ISBN: 978-84-08-27356-

1 (epub)

E-book conversion: Pablo Barrio

Find here your next reading!

Follow us on social networks!