

Mo Gawdat

Bestselling author of Solve for Happy

Contents

Introduction

Chapter 1 The Basics

Part 1 The Neural Causes of Suffering

```
Chapter 2 Garbage In . . . - Four Wrong Inputs that Inform Your Thoughts
```

Chapter 3 Under Attack - Three Defence Systems that We Live By

Chapter 4 Practice Makes Miserable - How We Learn

Chapter 5 Both of You - Your Two Brain Polarities

Chapter 6 Talk Talk - The Root of All Unhappiness

Part 2 The Side Effects of Thought

```
Chapter 7 Can You Feel It? - Your Endless Emotions
```

Chapter 8 Alchemy – The Hormones and Electrons Ruling Your Actions

Chapter 9 In Limbo – The Cyclical Nature of Your Behaviours

Part 3 The Neural Path to a Happier Life

```
Chapter 10 Welcome to the Real World - Experience the Real World
```

Chapter 11 **The Engineer in You** – Think Yourself to Happiness

Chapter 12 The Artist in You – Learn to Flow

Chapter 13 **The Mission is on the Right** – The Most Selfish Thing You Can Ever Do

References

About the Author

Introduction

I'm trying to make a billion people happy. Crazy, I know, but I believe it's the only goal worth spending the rest of my life trying to reach.

The story of OneBillionHappy began in 2014. The trigger, as it often is, was a tragedy. I lost my superhero – my wonderful son and wise teacher, Ali. He left our world as a result of preventable human error during a routine surgical procedure and with him took a piece of my heart. Seventeen days after his death, I started to write, and I couldn't stop. My topic was happiness – the most unlikely subject to choose after such a tragic event. What I wrote was what he had taught me; the gift he had given me which I wanted to share with the world.

The result was my first book, *Solve for Happy*, which challenged almost every false belief the modern world had taught me about happiness. It was a true eye-opener. After the tragic loss of Ali, I developed and shared the algorithm I had used to help me move forward. *Your happiness is greater than or equal to the difference between the perception of the events of your life and your hopes and expectations of how life should behave.* Although it was my hope that this would resonate with readers and they would benefit just as I had, I never expected it to take off the way it did. The book was translated into thirty languages, became an international bestseller and sold hundreds of thousands of copies worldwide. People from all over the world wrote to me daily, expressing their gratitude and asking me questions about happiness and my mission.

Losing a child must be the hardest thing a parent ever has to endure. Even today, after so many years, I still can't find the exact words to describe how it feels. Ali was my son and my sun. He lit up my life with his love and wisdom. He was my best friend and coach. He was always peaceful and always happy. Although the pain of losing him still lingers, it's brought me so much joy to know that his loss was the trigger that enabled me to find my mission, which is dedicated to spreading his wisdom, celebrating his life of love and compassion.

Two weeks before Ali left our world, he had a dream that he only told to his sister, Aya. He said, 'I dreamed that I was everywhere and part of everyone. It was so incredible that when I woke up, I felt I didn't want to be confined in this physical body any more.' 'Habibi,' Aya said, 'he dreamed he was dying.' He did. He was! Aya only told me about this dream a few days after his death. My highly trained, achievement-driven brain interpreted this as a target, handed down to me by my master. I have never missed a target – and my work at Google meant I had to set big targets to reach billions of people – so once Aya had spoken I burst into tears. I

realized that Ali had come to teach us, to make us love him so much and then leave, so that his departure would become the spark that ignited what was yet to unfold. I cried so hard; my body was shaking. I knew exactly what it meant. My life was no longer mine, but rather belonged to his mission. The rest of my life was going to be dedicated to making his dream come true. I was going to take everything he had taught me and tell the whole world about it. I was going to spread his essence to humanity at large and in doing so, through six degrees of separation after many years, a bit of Ali-ness was going to be everywhere and part of everyone. The target was set, and I was not going to miss it. I stopped crying, got up and started the work.

As any businessman would, I set myself a measurable target. This was to share the happiness model I had devised with Ali's help with ten million people. Once the target #10MillionHappy was set, the universe itself conspired to make it happen.

Only six months after the launch of the original mission, I had already reached tens of millions of people online. The message was helping to change many lives, and it was clear that we needed to keep moving forward. The inspiration for increasing this mission from ten million to OneBillionHappy came to me during a short meditation. It was a moment when I realized that technology, which I had helped build through my computing career, was shaping our future beyond recognition. I realized that unless we teach the upcoming artificial intelligence about the essence of what makes us human – happiness, compassion and love – we would be in deep trouble. This is the core message of my second book, *Scary Smart*. I realized that Ali's target was real, that we could reach not just ten million but billions. We had the means to go everywhere and reach everyone.

Our small team kept making progress, and the content we created has now been viewed more than 120 million times online – a big reason to celebrate. But also to keep going. To reach a billion people, we need a much more fundamental change.

We need to get real about where we are in the world. The more we succumb to our negative thoughts, the more our actions become negative, and the more people behave negatively. You get back what you put out. If more people focused on being kind and compassionate to others there would be a ripple effect. People would start mimicking that kind and compassionate behaviour. We would start a positive Ponzi scheme, with each newly happy person bringing in two more. This scheme would have the power to change the world, and it starts right inside you, with the very biggest reason for unhappiness – negative thoughts.

I believe thought is the most immersive of all illusions. There's a little voice in our head always, always telling us what to do. It's constantly there, like air, so we deal with it mechanically, just like our brains deal with our breathing. Year after year, we take that little voice for granted and it takes us for a ride to suffering.

In my research I found that thoughts, and only thoughts, have the single biggest impact on our state of happiness. That little voice in our heads affects our mood even more than some of the harshest circumstances we endure in life.

In this book, I will draw from my experience as a software engineer and my extensive study of spiritual teachings and neuroscience to take you on a journey through the hidden corridors of your brain. I will aim to show you that, although it is highly sophisticated, your brain, just like your computer, can be highly predictable. That if you give your brain specific inputs and run specific programmes on it, it will always give you the same output. The most undesirable of all possible outputs, I believe, is unhappiness. Our thoughts are a major reason why we become unhappy. My aim here will be to show you how to run your brain correctly to live happier. If you understand exactly how the code that runs your brain works, it will be easy to use it to consistently deliver your happiness. It is that predictable.

In fact, your brain is so predictable that I can summarize the way it operates in a clear and concise user manual. This book is that user manual. It will include step-by-step instructions on how to deal with your negative emotions, repetitive negative thoughts, stress and other conditions you may encounter in the operating environment of your computer – your brain.

It will also include **training instructions** because your brain can be trained. Using specific exercises, you can steadily reshape the very wiring of your brain over time. That way, you don't need to keep going back to the manual and instead make healthy habits your standard operating procedure. This book guides you through these rewarding and hopefully **enjoyable exercises in simple, straightforward steps**.

Consider this book a fusion of computer science and neuroscience, written in a clear and accessible way. As an engineer, I will often use technology analogies and simplified process diagrams of the different programmes we run in our brains and show how each influences our thoughts.

Don't be alarmed if you are not a techie. I will use simplified terminologies and explain the concepts plainly. Occasionally, you may need to learn something new about tech itself, but once you do, you will notice it in your everyday use of technology, the concept will become clear and that will help you remember it and include it in your approach to a happier life.

Any process starts with inputs. Regardless of how smart a computer is, the wrong inputs yield the wrong results. The inputs that we allow into our brains can often be destructive. We need to cleanse the palate of inputs that find their way into our head in order to stay happy, just like we follow a healthy diet to stay healthy.

Then there's the process – the way the programme runs. Follow the wrong path as you run your code and you end up suffering. Follow another and it will give you a path to everything you want from life. We need you to gain full awareness of what is actually happening inside your head so you're able to tell when you're thinking the wrong way. Once we refine the inputs and gain control of the process, we can start to optimize for what, I believe, is all we truly want from life – happiness, success and compassion for others.

I believe that much of our unhappiness comes from problems in our neural network – the underlying functioning of our brains. To define these in a way you can always remember, I will call them the 4-3-2-1.

There are *four* wrong inputs that we constantly allow into our brains. These trigger *three* exaggerated defences. As we navigate life, we suffer an imbalance between *two* polarities in our approach to life. A downward spiral to unhappiness, then, is triggered by *one* type of malicious thought. To continue the software analogy, none of this is because our brains are running badly. It's not even that they run on bad programmes. It's that they are good programmes run badly. So, as any good software engineer would, we need to debug our brain software.

We will run those programmes on the pages of this book and show you the kinds of symptoms they produce – uncontrollable emotions, chemical imbalances and endless loops of hurtful thinking. Once you learn to observe and identify those symptoms, the programmes producing them can be fine-tuned to fit their purpose and perform as intended – that is, to help you become successful in life while keeping you at your optimum state as a human: happy.

When the causes are known and the symptoms are identified, the solutions become easy – as easy as 1-2-3-4.

There are four main programmes that we can run in our brains that are optimized for our happiness. These are to fully *experience* life as it is, to *solve* problems, to *flow* and to *give*. Learn to make those a primary part of your operating system and you will consistently find your path to joy.

Later in the book, once you've acquired the skills you need, I will arm you with a flow chart. Yes, a bulletproof process to bounce back to happiness whenever life throws you off your path. With the process clearly documented, I will leave you in charge. You can find your way back to happiness or stay stuck in suffering. That's your choice; but don't say that life is making you unhappy. If you choose not to change, then the only thing making you unhappy is you. You are in charge.

We live in a world that is different to the world for which the code in our heads was originally designed. We will start with updating *your* code in this book, but who knows how far the effects of that may go? When you learn how to change your own world, it's possible that you may change the world itself.

Maximizing Your Benefit from This Book

This is a practical book, full of exercises, not just a book for your intellect.

If you are used to reading textbooks and being given knowledge in a distilled version, you may be tempted to skip the parts of this book that don't simply convey information – especially because some of them may appear oversimplistic initially.

Please resist the urge to do this and follow the exercises as intended. It will benefit you and solidify your understanding more than I am able to describe in words.

You may also have the tendency to keep your books clean and neat. I'd urge you to change that with this book. Books are like houses: they are meant to be lived in. Make your book your own. Feel free to scribble all over it, take notes and fill in the blanks on the pages themselves with your own commitments and observations. This will be a rewarding experience, not only in terms of breaking some of your preconditioning, because it will remind you of what registered most, but also because user manuals are made so you can come back and revisit them. Your notes will guide you to the parts you need to tackle the functions or errors you want to address. I do advise revisiting the concepts a few times in the first few weeks. Some of the controversial topics we will discuss here may need a bit of revision to stick.

Finally, I will occasionally ask you to put the book down. I might ask you to go and do something else online or simply to stop reading and take a break. Please do allow yourself the time to stop. This is not a race and there are no trophies for those who finish fastest. The trophy – which in this case is a lifestyle change that will lead to a happier you – is for those who never really finish, those who keep dedicating the time needed to find their path to joy. We are not trying to achieve anything within a finite amount of time. We are trying to upgrade the code that runs our brain by frequently installing happier and happier versions.

Progress is not only achieved by learning or doing. Sometimes it's good to just be. This will be the model we will use to make progress. I call this model: Be-Learn-Do. Be before you learn and learn before you do. Give yourself time to reflect and make concrete changes.



I guess what I'm trying to say is . . . chill. Enjoy the journey.

Now. Let me introduce you to your tools. We'll be using seven practical tools to help you through your learning experience:

1) We've All Been There



At the heart of our ability to change and improve is a need to acknowledge what is not going well. Since the success of *Solve for Happy*, I have noticed that sometimes readers, or audiences at public events, speak to me as if I am some kind of guru – a master of happiness who is immune to the habits and practices that make us unhappy. This could not be further from the truth.

If I have any unique contribution, it is that I discuss the topic of happiness from the position of a normal modern-day human, one who is engaged in the hustle and bustle of life daily. I'm not a monk sitting in solitude practising meditation or a spiritual teacher lecturing from some faraway part of India. Just like you, I get stuck in traffic, I get bored out of my head in meetings, I have relationship problems and I worry about where our world is heading.

In this book, I have found the courage to share with you my worst stories. The times in my life when I was the opposite of everything I now teach. It humbles me to acknowledge what I did badly and hopefully these stories will remind you that we have all been there, we all have our faults and blind spots, and it is only in being more open about them that we can address them as we should.

2) Exercises



Once you acknowledge a need for change, there's no better way to proceed than through practice and reflection. This book is full of simple exercises that will enable you to learn a skill, form a habit or deliberately dig deep within yourself to find awareness and grasp a concept.

Do your homework. As a matter of fact, go back and do it over and over again. Neuroplasticity (a concept I will explain more about in Chapter Four) enables us to learn better the more we repeat the same actions. It's the power of habit. It's the only way to put this user manual behind you because the skills contained within it will become your second nature.

Exercises will come in two different forms: **Awareness exercises** will help you reflect and learn something important about yourself. **Practice exercises** will help you develop a necessary skill.

Because we are all human, we will all be better at one than the other. Those who are naturally very aware are not always great at putting things into practice, and those who are great at doing are sometimes not fully aware. Push yourself even if you don't feel like doing one or the other. Being and doing are both equally important to give you a complete learning experience. I promise you that all the exercises are designed to be fun. So, whatever you do, don't forget to enjoy them.

3) Group Discussion



For the complex bits, however, there is nothing more powerful than discussing them openly with someone else. Often, I will ask you to get together with trusted friends to openly share your views about a variety of topics.

The only rule to keep in mind is that there are no right answers. Everyone's view is true . . . for them. Respect and embrace every diverse view. Even better, be curious and ask clarifying questions so that you can go deeper in understanding the views that differ from yours.

The best way to do this is face to face with real people. Perhaps you could ask a few of your friends to read this book too so you can set aside a time for a weekly one-hour meeting to discuss what you've read, as well as the group discussion exercises that have come up during the process.

Obviously, this may not work for everyone and many of you may prefer to work through the book alone. That's fine too – just adjust the exercises accordingly. Though I would still highly recommend that you have the conversations with at least one close friend who you trust to help you see through any blind spots you may have.

4) Some Pop to Remember



Well, I don't know about you, but I remember good songs and movies more than anything I ever learned in school. They stick in my head, playing on repeat. I love

discussing the scenes of a movie or the inspiring lyrics of a song with friends and I want to share those with you too. Many of the concepts we will discuss in this book have been captured in the lyrics of incredibly talented artists or in scenes of timeless cinematic art. I will suggest those to you, so please stop reading and listen or watch if they inspire you to get the full experience of this book.

Plan an evening with friends to watch my movie recommendations. Try to look beyond the obvious and reflect on your own life to see how a scene or a concept of a movie may apply to you. For songs, please download a legal copy of the song or watch the official video on the internet. Play it until the concept sticks. Then add it to your happy playlist so that you can revert to it often. Learn those happy songs by heart. You'll be surprised how, at the time they are needed most, they will surface, play inside your head and remind you of exactly what you need to do. Music is life. So don't be shy to shake those hips while doing those not-so-demanding musical assignments.

5) Appii



Appii is your happiness assistant. It is built around the Be-Learn-Do model. It helps you track how you feel, customize the learning experience to your needs and give you relevant exercises to develop the skills you need on your path to happiness. The free downloadable app contains thousands of useful videos, inspirational quotes, tasks and exercises. Appii will also use artificial intelligence to help you develop healthy happiness habits.

Get Appii from your play store or app store for free, or go to www.appii.app and use the promo code ThatLittleVoice to get a three-month premium subscription for free – giving you access to longer video lectures, training and advance features.

6) Slo Mo



Slo Mo is a top global podcast in terms of popularity. My podcast invites you to take time out of your busy life, slow down and reflect on topics that matter. I host some of the wisest people on the planet to share their inspirational stories and what they've learned, so you, the listener, can learn too. We discuss happiness, spirituality, neuroscience, relationships and other topics that can help you become a better version of yourself or make our world a better place.

Join our community. Download Slo Mo for free on your podcast player or go to mogawdat.com/podcast to learn more.

7) OneBillionHappy



This book, as well as the other tools I provide you with, are part of a mission, perhaps the most crucial mission of our generation.

Despite the progress and technological advancements we've made in the last one hundred years, humanity is failing when it comes to our happiness. One in every six people will be diagnosed with depression in their lifetime – which is likely to be an underestimate of the true number suffering.¹ One human life is lost to suicide every forty seconds.² One in every four people surveyed in the USA say that when they feel unhappy, they don't have a single person to turn to for help.³

We need to reverse the trend. Our joint mission #OneBillionHappy has you, not me, at the heart of it. I can't reach one billion people alone. But together we can.

Help me reach the dream by taking on your own share of the quota. Make two people happy – it could be your children, spouse, sister or best friend – by alerting them to the fact that happiness is their birthright and should be their top priority. Teach them what you learn about happiness from this book and make it clear that happiness is predictable. If you do the work, you will get there. Pay it forward.

Spread the word. If you really want to make a difference, tell twenty people, two hundred or even two million if you can. Be a happiness hero.

Please visit www.OneBillionHappy.org to learn more.

Throughout this book there will be a few tasks related to the mission. Please don't ignore those. Take them seriously and make them happen. Do it for humanity and enjoy the reward it brings.

A billion is not a large number if we all do it together, one person at a time. I will do my part and start with you. Let me, now, take you with me along the journey.

Destination . . . Happy!

What We've Learned So Far

Here's a quick recap on a few of the concepts from my first book, *Solve for Happy*. Those are key to establishing a foundation for what we will discuss here. The first important basic principle was that we are all born happy. Children and infants, as long as they are fed, safe and given their basic needs for survival, are happy.

Happiness is innate within us. It's not something that we should seek outside us. **Happiness is our default state.** As we become adults, societal pressures, obligations, expectations and the illusions we learn to believe convince us that success is more important than happiness.

We relentlessly chase success and, in the process, we lose our happiness.

That happy child we once were, however, is still there inside each of us – only buried under a pile of false and limiting beliefs, waiting to be rescued so it can return back to its happy, childlike nature.



Happiness is not found by adding things to your life – all the fancy clothes, gadgets and vacations. A child is happy until something interrupts its happiness. If a diaper gets wet, the child will cry. Change the diaper and the child will go back to its default state – happy. This is still your nature even today. If you manage to remove the things that make you unhappy, what's left behind is happy. Simple as it sounds: happiness is the absence of unhappiness.

When you really get it, happiness is very predictable. So predictable, as a matter of fact, that it follows an equation:



Happiness happens when life seems to be going our way. We feel happy when the events of our life match our expectations, our hopes and wishes of how life should be.

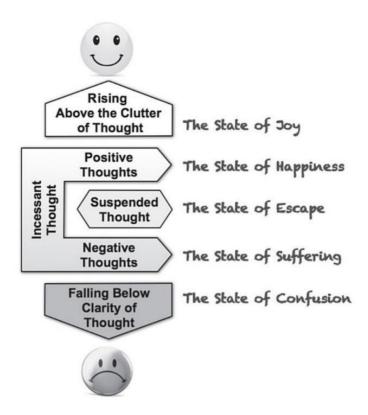
Rain, for example, has no inherent value of happiness in it. Rain doesn't make us happy or unhappy. Rain makes us happy when we want to water our plants and unhappy when we want to get a tan.

Guided by that equation, you can find an accurate definition for happiness. Happiness happens when events meet or exceed our expectations. It is that calm, peaceful contentment we feel when we're OK with life as it is. It's the moments that we want to last forever because we don't want anything to change. It doesn't matter exactly how life is. If you're OK with it, you're happy.

Unhappiness, on the other hand, can be defined as a survival mechanism. It happens when our brains look at the world around us, find something that worries them and attempt to alert us that something might be wrong. Because we rarely listen attentively to our thoughts, the alert comes in the form of an emotion – shame, anxiety, regret, sadness or any of the other emotions we associate with unhappiness.

Between feeling happy or unhappy, we find a state that is neither – the **state of escape**.

Escape is when we engage our physical forms in activities that occupy our brains and numb them long enough to stop trying to solve the happiness equation.



We find this state of escape when our bodies engage in fun and pleasure. There is nothing wrong with fun. It's just that when we use it to escape our unhappiness it acts rather like a painkiller – a replacement for happiness but not the real thing. So, we go back for more and more; we become addicted to fun. The more we do this, the more difficult it becomes to find true lasting happiness.

People who are in the state of joy are constantly happy. They look at life in a way which recognizes that most events don't deserve unhappiness. They rise above the clutter of useless, harmful thoughts and there they find their joy.

Those, on the other hand, who are in a state of confusion always search for what's wrong with every passing event, big or small. If you search for what's wrong, you're more than likely going to find it. Everything will miss your expectations; your suffering will go deep and will linger.

Unhappiness as a survival mechanism is useful but it doesn't need to linger. There is a massive difference between **pain** and **suffering**. The initial pain, emotional or physical, happens because of external conditions. It's what triggers the alarm in our survival mechanism. As much as we dislike pain, it helps us focus on what matters, change direction, learn, develop and stay safe.

Pain is out of our control; it happens to us. **Suffering is a choice!** We choose to stay unhappy by replaying the events that triggered our emotional pain over and over again inside our heads when they are no longer happening or have not yet happened in the real world. It's almost like **pain on demand** – a very unwise choice indeed.

No event in your life ever has the power to make you unhappy until you choose to grant it that power by turning it into a thought and ruminating on the negative side

of it to torture yourself with unhappiness.

If unhappiness lives firmly inside our thoughts, then learning to think better is the answer to all our suffering.

That is what this book is all about: learning to think better.

Let us begin.

Chapter One

The Basics

What is real? As your eyes scan over the words written here in this book, ask yourself, are those words real? Is the book real? Are your eyes real? How can you tell for sure that you are not in a dream? And if you are dreaming, is there anything wrong with that dream? If you could still get to the information, connections and life that you live in it, why should it count as anything other than reality itself?

The Objective Nature of Reality

As you read my words, you turn them into concepts in your own brain. Those concepts will become reality . . . but only for you. They will become your reality which could be different to how someone else may comprehend the same words. If I told you that this book was going to be long, for example, the concept of 'long' may in your own brain translate into more than 300 pages. However, 300 pages won't seem long to you if you've read all 1296 pages of *War and Peace* a few times in your life.

The concept 'long' is an idea, a thought, that each of us creates in our own brains. Each of these definitions is real for the one who is thinking it. But, at the same time, none of them are actually real.

The book itself may not even be real. Through the lens of physics, the words on a page are nothing more than a bunch of particles organized in a specific pattern to form the page, and a bunch of other identical particles organized differently to form the pigments of the ink. As the photons of light hit the page, the ones that hit the white are reflected into your eyes and, because light is absorbed by the colour black, those photons that hit the ink are not. The photons travelling back to your eyes create the impression of an image – that is flipped upside down – when they reach your optical nerve, and the pattern is turned into electrical pulses that represent, but are not, the shape of the words. Your brain then takes those electrical signals and turns them into a vision of words on a page.

If I managed to simulate the electrical signals directly into your brain using electrodes that touched your scalp, you would end up seeing the same vision, only in that case there would not even be a book there. This should not be seen as some form of science fiction. A simpler version of it happens when we get completely

absorbed in a movie. We feel as if we are actually observing some form of reality when it is actually nothing more than moving pictures.

We all know that what we see on a movie screen is not real. We all know that the actors are not really making love, just acting it out, and yet we perceive it as reality. We don't even need a movie theatre to create this illusion. We sometimes wake up from a dream feeling it was completely realistic, as if we were really there. None of the events of the dream happened, but the electrical signals occurred in our brain. This is sufficient to make us see it and even believe it is real.

You see, it doesn't really matter what the world presents to you . . .

Nothing is real until your brain decides that it is.

This, hands down, is the most important foundation we need to agree as we navigate the journey inside your head and attempt to understand how that little voice inside actually operates. It is important to realize that some of the very basics of what you may have spent a lifetime believing might not be entirely true. I will invite you to reconsider some of your most cherished beliefs and even invite you to question some of what we are told is true by gurus and scientists. Those truths, perceptions and beliefs that I will ask you to question, you will find, apply only within a certain context. Sometimes, when you change your vantage point, your whole world changes as a result.

Now, use that brain of yours that creates your reality to think about this: when your brain has so much power over your perception, how often does it tell you the truth? What happens when it doesn't?

Living an Illusion



Have you ever believed something so wholeheartedly that it affected every single one of your actions – only to find out later that what you believed wasn't true? My life has been littered with an endless stream of such misplaced beliefs: belief in corporate slogans, patriotic biases, religious doctrines, and belief after belief in the lies of the modern world. None, however, do I regret more than the belief that my wonderful family were a duty and a burden on me instead of seeing them as they really were: the biggest gift I have ever been given.

I have always avoided talking about this, even to those who are closest to me, but here I am now, writing it in the pages of a book. But, hey, you know what? We've all been there. We've all acted in ways at a particular point in our life that we now wish we hadn't. The Mo that acted in that way is now long gone.

I Was Wrong

I never really liked kids. I thought they were noisy and messy – that is, until the morning Ali was born. Ali *habibi*, my beloved, was born around two years after my late father, who was very dear to me, left our world. We did not plan for Ali. Nonetheless, I was raised to be a reliable man and, as such, I welcomed his anticipated arrival with a sense of responsibility – perhaps not the top quality a child needs but it was a good start. I may not enjoy the company of kids, I reasoned, but if it's *my* kid, he will be granted everything he could ever wish for or need. I worked a bit harder, closed a few extra deals, set up a room for him, paid for medical expenses, and was ready – as a good husband should be – to join Nibal in the delivery room.

The minute he arrived, everything changed. In his face I could see my dad, I could see my love for my beautiful then-wife manifested and I could feel vividly in my heart that, at that moment, I was being given a gift that would completely change my life . . . and he did.

The joy this crumpled little creature brought into my life was beyond my wildest expectations. Nibal truly blossomed as a woman and emerged as the incredible mother she was always destined to be. I, on the other hand, just went to work. Eighteen months later, our daughter, Aya, joined the gang to bring more love, more blossoming for Nibal – and more work for me! By the time Ali turned five, I was spinning out of control, becoming a true workaholic and dissatisfied with my life in every possible way.

The truth is, I brought it all on myself. The only way I knew how to express myself as a father was to provide. I could not recognize, as Nibal made clear to me a thousand times, that a real father provides a lot more than just the financial means necessary to send the kids to a good school, buy them toys and cover their needs – but what can I say, I was an obsessive hard-working engineer. When I set my mind to something, I did it, then overdid it, and then overdid it some more.

Work comes with stress and, in my case, it came with a lot of stress. The jobs I chose were regional or global because those earned me more money. That meant endless hours in airports and on aeroplanes. I was doing well but then I overdid it. I worked extra hours to address more customers, close more deals and make more commissions – more money than I actually needed. I was doing very well financially but then I overdid it some more. I chose to trade in the American Nasdaq market, which opened every day at 5.30 p.m. my time in Dubai and added another work day

Did you guess it? The answer is Vanilla Ice Cream Sundae. It doesn't matter if you guessed it, by the way. I'm not your second-grade teacher. What matters is, did you manage to stay unhappy while you tried to guess it?

I've run this test, or some variation of it, with tens of thousands of live audiences in my public talks and, I will tell you, I am yet to meet someone who can complete both tasks correctly.

Those who manage to guess the thing drop out of their self-induced state of unhappiness, and those who decide to let their unhappiness linger by focusing their attention on whatever it is they chose to make themselves unhappy, always fail to guess the words Vanilla Ice Cream Sundae.

This is an important point because it helps you fully comprehend the way your thoughts work.

When the little voice in your head speaks, it can't focus on anything else, and when it focuses on something else, it simply can't speak.

The Only Thing That Ever Made You Unhappy

Reverse-engineering refers to the process of examining the construction or performance of an existing product in order to understand how it operates. To understand how a product works in all its modes of operation, an engineer would take the machine from one extreme of its full range of motion all the way to the other extreme and record readings of how it performs at each point. Let's call this a full cycle simulation.

The blank brain test you just performed is a full cycle simulation of you, as a machine, when it comes to your state of happiness. Right before the test started – call that moment T(0) – you seemed to be engaged with reading the book and not feeling unhappy. At T(0) nothing was upsetting you. You were happy!

I then asked you to think of something that made you unhappy. Let's call that moment T(1). Once you allowed an unhappy thought to take you over, you immediately moved to the other extreme of your range of states and you became unhappy.

available

available

fields that have studied the brain can help us view the different functions our brains perform as independent 'programmes'. There is code in our brains that helps us reason, other code that collects sensory information and yet more code that controls our hardware – our bodies. These programmes operate independently and interact with each other. Use them well and you have the most sophisticated machine on earth at your disposal. Use them in the wrong way and the software becomes buggy. It leads to the wrong results and crashes into states of sadness, even depression, way too often. I will avoid the deep technical terms and help you understand our brain's software operation at the basic level. Once you know how the machine works, it will be easier to spot the bugs that cause the programme to malfunction and make us unhappy. Fix those, and we're good for prime time – a computer that resolves our daily challenges without causing us unnecessary suffering.

Let's begin with a tiny bit of engineering lingo. In their simplest form, operational diagrams describe the relationship between what you input into a system, the processing that takes place by the system software and the output that results from this process. If the inputs into a system are the numbers two and six, for example, and the software performs a process of addition, the output will be eight. Simple!



The complexity of real systems, however, increases beyond the apparent simplicity of this diagram. Most systems have multiple inputs and various processes that sometimes operate independently and sometimes interact, overlap, complement or contradict each other. Such complex systems then often result in multiple possible outputs.

So, here's the plan: to keep things reasonably simple as we explore how our brains work, I will break our brains down into inputs, several distinct processes and, accordingly, several possible outputs. Together, we will take the machine apart piece by piece to give you a comprehensive look at each of those components. As with a computer, I will use neuroscience to show you which part of your brain runs which specific software. I will explain the primary function of each specific programme, and if there are any bugs in the way we use it, I will show you how to fix them. We will also examine the interrelationships between the different programmes. If a certain programme enables or inhibits another, I will make that clear. When you finally understand how each programme works, we will put the machine back together to arrive at some kind of a user manual. This will include practices that you, as a user of your brain, should adopt to ensure good working order and optimum performance of your own priceless machine.

Don't be intimidated by the complexity. It really is going to be simple, entertaining and filled with 'Aha' moments as you realize things you've never understood before. In the first few pages of every user manual, there is always a

miserable or help you blow your nose. Perhaps the most pivotal step in ensuring your brain delivers valuable results is to know what you want it to do.

Those who master the use of their brains, and use them efficiently, produce the ultimate output any brain can achieve. This can be summed up in three outputs. They realize their own individual happiness, they achieve a reasonable measure of success (depending on how they define success) and they live with the compassion needed to impact the lives of others positively.

All my work – my books, my podcast (Slo Mo), the happiness app (Appii), every training I have taught and every talk I have given – aims to help you achieve those three goals. This book is no exception. As we dive deep into the inner workings of our brains, we will attempt to deliver your happiness without ignoring your own individual success and your positive impact on the world. I hope you will find this worth your time.

I'll go put on my overalls now and grab my toolbox to start deconstructing the machine. This may take me a few minutes. So while I do, let me suggest that you spend the time doing the following exercise. Take your time to finish it, and I will wait for you in the next chapter.

What are the sources of information you rely on as the input that informs your thinking process?

Every bit of information that enters your brain leads you down a path of a different set of thoughts. Over time, those thoughts make you the person that you are. They shape you so much that paying attention to what triggers them might be the most important thing you will ever do.

Awareness Exercise What Triggers Your Thoughts



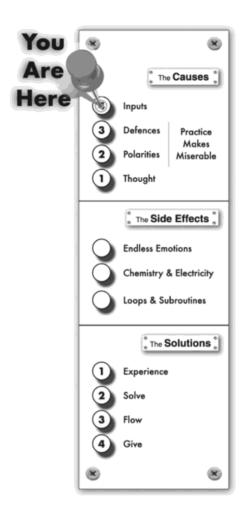
Target	To become aware of what your thoughts are made of
Duration	5 minutes
Repeat	Repeat at least once a week as needed
You'll need	A quiet place where you will not be interrupted A notepad and a pen

available

available

Chapter Two

Garbage In . . .



They say that you are what you eat. I believe that. Whatever you put inside that biological form of yours shapes you into what you become. The impact will become visible in the shape of your body, sometimes immediately and sometimes in the longer term, for example, when you drink too many sugary drinks.

You also are what you think. The stuff that you allow into your head forms the thoughts that trigger your immediate actions, makes up your ideology, informs the memories that shape your beliefs, constructs the experiences that define your attitude, your choices and everything else that makes up your identity.

You could own the best computer on the planet and write the best programme to run on it. If, however, you sat in front of it when it was ready and used the keyboard to enter the wrong data, what would you get? The wrong calculations and,



First published 2022 by Bluebird

This electronic edition published 2022 by Bluebird an imprint of Pan Macmillan

The Smithson, 6 Briset Street, London EC1M 5NR

EU representative: Macmillan Publishers Ireland Ltd, 1st Floor,

The Liffey Trust Centre, 117–126 Sheriff Street Upper,

Dublin 1, D01 YC43

Associated companies throughout the world

www.panmacmillan.com

ISBN 978-1-5290-6615-9

Copyright © Mo Gawdat 2022

The right of Mo Gawdat to be identified as the author of this work has been asserted by him in accordance with the Copyright, Designs and Patents Act 1988.

Pan Macmillan does not have any control over, or any responsibility for, any author or third-party websites referred to in or on this book.

You may not copy, store, distribute, transmit, reproduce or otherwise make available this publication (or any part of it) in any form, or by any means (electronic, digital, optical, mechanical, photocopying, recording or otherwise), without the prior written permission of the publisher. Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

A CIP catalogue record for this book is available from the British Library.

Visit www.panmacmillan.com to read more about all our books and to buy them. You will also find features, author interviews and news of any author events, and you can sign up for e-newsletters so that you're always first to hear about our new releases.