

"Great ideas for a better living; that not only help you connect with yourself but also to connect with others."



Dr. David J Lincoln – Chief Advisor and President ANLP India.

VISHAL JACOB



CONNECTING WITH YOURSELF

Why we think, feel and act the way we do

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To my son, Kevin

I would never have written this book if it was not for you. May you grow into your most wonderful self.

Contents

[Acknowledgements](#)

[Introduction](#)

[Chapter 1. Perspectives](#)

Why perceptions differ

[Chapter 2. Intelligence](#)

Why we are designed to excel at different things

[Chapter 3. Learning](#)

Why we are suited to learning in different ways

[Chapter 4. Habits](#)

How we form habits and why it is so hard to change them

[Chapter 5. Decisions & Biases](#)

What goes behind making the right decisions

[Chapter 6. Willpower & Self Control](#)

How we can develop willpower

[Chapter 7. Emotions](#)

What role emotions play in our lives

[Chapter 8. Survival & Stress](#)

What survival means in the modern world

[Chapter 9. Happiness](#)

What makes us happy

[Chapter 10. Bringing It All Together](#)

Connecting with yourself and with others

[References](#)

About the Author

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INTRODUCTION

WHY THIS BOOK

It was time to tuck my son into bed. We have a habit of reading him a story before he sleeps, so I casually asked him, “Kevin, who would you like to have read you a story for the night?”

He said without any hesitation, “Mom, of course!”

Ouch! That hurt.

“Why Mom?” I asked.

“Well,” he replied. “She is good at telling stories.”

He was right. My wife does tend to bring stories alive.

I have spent my entire career in the communication industry working for different agencies. One would expect me to deliver great stories, but as my son so clearly pointed out, it is not my greatest strength! However, over the years, I have added value by helping people tell their stories. As a coach and mentor, I have helped people connect their own dots. From their workplace presentations to key aspects of their lives, I have helped them relate their stories.

I believe every life is an interesting story and this story is best written when people go through life’s experiences by staying deeply connected to who they truly are. Unfortunately, not many people know themselves deeply enough. Our schools, colleges and workplaces do not teach us the art of self-introspection. So most of us go through life with just the intention of meeting the standard expectations of our parents, teachers and society. Then, somewhere down this line of trying to fit in with the lot, we lose touch with the key elements that make us who we really are.

The journey of self-discovery is an interesting one. For me, it started by asking myself repeatedly why I thought, felt and acted the way I did in different situations. I believe that staying connected to my sense of self is the reason I have enjoyed the experiences life has thrown my way. The more I have walked down this path, the more I have looked forward to this never-

ending journey. I have come to believe that success depends less on major life choices and more on our daily decisions, actions and habits. These are based on our perception of right and wrong and are influenced by our thoughts and feelings. Even though it is known that the brain plays an integral part in creating each of these—thoughts, feelings, perceptions, habits, behaviour and more—surprisingly, very few of us are aware of how our brain helps us get there.

The intention of writing this book is to kindle the fire of self-discovery and provide the reader with a starting point of why he/she thinks, feels and acts a certain way. This book presents some interesting facts about the human brain. These are facts every individual should know as they open the doors to understanding ourselves and others better. The ideas in this book are drawn heavily from concepts in neuroscience and psychology.

Let me be honest—I do not have a formal degree in neuroscience or in psychology, but I have dedicated the last few years of my life trying to find answers to the above questions. It has helped me understand myself and other people better. Now it is time for me to share my study with you. Through this book, hopefully, you will be able to write your story too. I hope you enjoy it!

HOW ONE SHOULD READ THIS BOOK

As mentioned, this book attempts to answer some of life's interesting questions relating to why we do what we do. You will learn why each of us perceives things differently, why we are designed to learn and do things differently, how and why we create habits, why we feel insecure and what makes us truly happy.

Each chapter is self-sufficient, and one doesn't necessarily need to start reading from the very first chapter. You can follow any order you choose. That said, some of the points made in earlier chapters do set a certain degree of context in later parts of the book.

Each chapter first sets the context of the question being raised and goes on to present-related theories from the fields of neuroscience and psychology. Finally, the 'Key Takeaways' summarise the chapter and provide points to ponder on, meant to get you to reflect on the insights from the chapter. The

intent is that they serve as a starting point in creating internal conversations within you.

I will be keen to hear from you on your thoughts and any feedback you may have on this book or any of its chapters. You can write to me at vishaljacob@gmail.com. Happy reading!

Chapter 1

PERSPECTIVES

Why perceptions differ

“Two people can look at the exact same thing and see something totally different” perspective fact.

– Poulo Coelho



I was elated on my first day as an intern at one of Delhi’s largest advertising agencies. In my need to understand all the demands and nuances of the work and the flurry of activities all around me, what I didn’t realise was that the day would provide an interesting glimpse into much more than just my work or the industry.

The Account Director who managed a cluster of accounts received an urgent call. One of the clients had requested a series of changes to be made on a creative. He turned to a Client-Service Executive and explained in detail all the changes that he had just been instructed. As most things are in our industry, this was “on priority” since it had to be in print the very next day.

Jay, the Client-Service Executive, worked on all the modifications and shot the creative off to the client well within the required time. A few hours later he was summoned to meet the Account Director. The walk to or from the boss’s cabin is universally significant and speaks volumes. As Jay walked over, it was clear that this was no walk of shame—it was a triumphant march! He smiled slightly, perhaps thinking his boss was about to acknowledge the prompt action on his part.

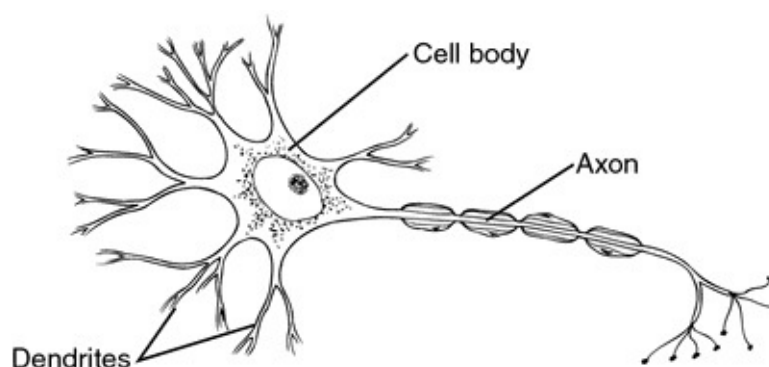
Unfortunately, Jay was greeted with some of the harshest four-letter words one can find in the English vocabulary! The reason? While the changes had been incorporated, they were made on the wrong creative! The Account Director had specified the modifications at great length but had left out a critical detail—the creative itself that needed to be modified! Jay had assumed that the client had merely asked for changes to the last submitted creative. This lack of clarity almost cost the agency the business and one executive his job.

Fifteen years later, I still see this as one of the most common problems in our lives—differences in understanding and interpreting the exact same situation. These differences grow into differences in opinion, conflicts, office politics and misunderstanding simply because we assume that others will perceive things exactly the way we do. Why does this happen? The key is in knowing what makes our individual perceptions similar or different from others. To understand this, let us first understand how our brain functions.

NEURAL PATHWAYS AND PERCEPTION

Our brains are built up of billions of nerve cells that are wired together into a complex matrix of continuous neural impulses, chemical and electrical reaction chains and an untiring system that get us through every moment of every day. These neural units coordinate thought, emotion, behaviour, sensation, perception and physical movement, whether they are conscious physical movements like raising our hand or involuntary body processes like maintaining our blood pressure.

These nerve cells, called **neurons**, are the functional units of our nervous system. Each neuron has two main types of branches growing out of its cell body – **Dendrites** that receive incoming messages from other nerve cells and **Axons** that carry outgoing signals from the cell body to other cells, such as a nearby neuron or muscle cell. The signal flows unidirectionally, starting from the dendrites, down the axon stem and out through the axon's terminal branches.



From Dorland's Medical Dictionary for Health Consumers

The signals flow as a combination of electrical impulses within a neuron and chemical impulses between adjacent neurons. Interconnected in such a way,

bundles of neurons provide efficient, lightning-fast communication pathways in our brain. As you read this, neurons in your brain are connecting with one another trying to help you comprehend and visualise this complex process in a way that is unique to you. That said, why is this unique to you?

It is because no two people have the exact same neural pathway for an impulse. As a result, two people will always perceive things differently. For example, let us say that for Amit the smell of fresh jam kindles fond memories of his grandmother preparing fresh batches of homemade jam. Yet the same smell of jam may kindle unpleasant memories in his friend Anita, possibly because she once ate too much as a child and fell sick. Thus differences in perception easily arise even on receiving the same stimulus.

Perceptions are built by a person's internal makeup and life experiences. However, perceptions are also deeply rooted in the feelings that those life experiences originally evoked in us. So, at times we may even forget the original experience, but we still remember the feeling, and that guides our lifelong perception of something. For example, even if Amit had not specifically remembered his grandma making the jam, the happy feeling he associated with the jam may have remained. And even if Anita had not remembered falling ill as a child from eating too much jam, the feeling of repulsion might still be deeply etched in her mind and recalled every time she smelled it.

Thus, it is not always the stimulus by itself, but the conscious and unconscious associations we make with it and the different neural pathways that they trigger in our brain that shape our individual, unique perceptions. Isn't it unreasonable then to expect others to understand exactly what we understand from a given situation?

We must realise that others' perceptions, even when completely different from ours, can be valid. Furthermore, we must also be aware that our own perceptions may at times be invalid. That is because they may stem from feelings evoked during some past experience that may be completely irrelevant to our current situation.

I once participated in a pitch to a potential corporate client who provided

limited information about the business and its challenges. Despite approaching them multiple times for their inputs, few details really came by. When our team probed further, we were told it was something for us to figure out, that they were looking to test our line of thought and would award the business only if our assessment matched their own. Four other agencies had also pitched to the same client. None was awarded the contract. The client was not satisfied with any agency's assessment! From that day on, every time I have encountered a brief with limited information and a client unwilling to provide clarity on critical aspects, I have made it a point to decline the pitch.

In the case above, one bad experience has coloured my perception of what the outcome of any similar event can be. Such coloured perceptions and pre-conceived thoughts are termed *biases*. The biases we develop from our experiences help us immensely in reaching decisions quickly. But they also hold the potential to deceive us at times into reaching incorrect decisions. In his book, 'The Art of Thinking Clearly', Rolf Dobeli mentions 99 different cognitive biases that influence our thinking and decisions. Kai Musashi's book 'The 25 Cognitive Biases: Understanding Human Psychology, Decision Making & How to Not Fall Victim to Them', also provides a detailed account of how biases work. We will visit the topic of biases in greater detail in a later chapter. Yet, just noting the number and variety of biases that exist should make us even more aware that our perceptions, which most of us hold on to very strongly, are often incorrect. Let us consider for now the practical aspects of being aware that each person's perceptions are unique.

PRACTICAL ASPECTS OF KNOWING THAT PERCEPTIONS DIFFER

1. Right v/s Wrong

This point essentially summarises the learnings from the sections above.

"Right" and "wrong" are perceptions based mostly on society's codes of what is acceptable. But perceptions of "right" and "wrong" also differ from the influence of years of personal experiences including upbringing. Thus the perceptions of any person can be just as "right" as the completely different perception of another person, evaluated purely on their different experiences.

As mentioned earlier, our perceptions are often also borne out the conscious or unconscious feelings that our experiences etch in our minds. The same stimulus can ignite an old feeling of disquiet even though the feeling is completely irrational for the situation at hand. Consider for example a person who is anxious about drowning even though he is standing in merely a few feet of water. His fear of drowning is strong but is unnecessary and incorrect. Furthermore, the biases we hold on to often colour our perceptions and lead them astray. This makes it even easier for our perceptions to be wrong.

Being aware, therefore—that we aren't always right and others aren't always wrong—should humble us and make us more accepting of others' ideas, opinions and thoughts.

2. Being Relatable

Understanding that we should be open to other's perceptions does not solve the matter of how one can present his own perspective to others. The problem compounds in bigger groups where more opinions and ideas vie for acceptance. The only way to make our view acceptable to others is to keep it as relatable to them as possible, tapping into their own set of experiences.

For example, I once reported to a senior manager who was very staunch in his approach to work. He was an excellent strategist but scrutinised every last detail of his team's work and mandated his own ideas on them. Although his approaches had merit, his unwillingness to hear other's points of view had earned him the reputation of being an authoritarian. The manager was convinced his way was the best. His subordinates felt they were stifled and, given a chance, their own approach could be equally good. Eventually, many team members quit. Had the manager, on at least a few occasions, chosen to illustrate instead of mandate why his approach was better, he would still have had a team to lead!

The need to view an issue and present a solution from the perspective of others is essential. Consider another example. A manager may motivate different employees to improve their customer-satisfaction scores in different ways. One team member may need to be reminded of the pride of delivering efficient, accurate and pleasant service. Another team member may need to be

reminded that a satisfactory score is an eligibility criterion for the promotion he so fervently seeks. Thus, understanding the different perspectives that will relate to different team members helps in effectively convincing each of them. Staying relatable is key.

3. Detachment

The only true way of addressing a difference of opinion is by suspending our agenda and accepting that it is not necessary for others to agree with us. When we suspend our agenda, people find it easier to accept us as they can sense we have stopped pushing our own motive. The chances of our perspective actually being heard, digested and considered fully greatly improves.

I have seen this happen many times during brainstorming sessions with my team when I watch each person sharing his or her idea with the group. I notice that most people are very attached to their ideas and somehow tend to believe that it is only their idea that will cut ice with the client or truly benefit the campaign. However, as people learn to get married to the outcome rather than the idea, the people become far more accepting, and the sessions become far more productive.

4. Multiple Perceptions Help

Often, we see that when many perspectives come together, they tend to clash. Even if a person wants to be accepting of everyone else's views the way forward seems to be by making a choice about whose idea, perspective or opinion is the best of all. What must be understood, especially in a team setting, is that it is often not just a single idea that is the best. Instead, it is the combination of ideas borne out of a healthy discussion of a wide variety of possibilities that proves to be the best solution. When this happens, not only does the best combination of thoughts win, but the team wins as a whole, as against pitting individual people and their ideas against each other.

Among many situations where one can see this at play, one of the finest arenas I have seen this come alive is at the Emvies—one of the most recognised award functions in the Indian media and communication industry. Entries at the Emvies are judged by a panel of about 10 jury members. An entry is not just 'submitted' offline but needs to be presented live to an open

forum. The pressure is immense to be impactful on stage—not just to present competently, but to win! Presenting before an audience of tens of thousands (and in these days of live online streaming, several thousands more) with the atmosphere charged with adrenaline only serves to intensify the experience.

In the years of participating in the intensive background action that goes into the making of an Envies entry, I have seen that typically each presenter at Envies changes his story at least 7 to 8 times from what is originally drafted. He bases this on the inputs he takes in from multiple people, heavily relying on their varied reactions, responses and perspectives to fine-tune his story to cover all bases. Even the presentation eventually made must strike a chord with a panel of 10 jury members—each viewing it with his/her own ‘coloured glasses’. Therefore, it becomes critical for the presenter to seek multiple perspectives at the very beginning in order to stitch a compelling story together.

5. Empathy

Empathy is imagining yourself in somebody else’s shoes and feeling what they are feeling—actually undergoing the same distress, understanding their pain and even reconstructing, to the best of your ability, their thoughts and emotions.

Given we know that no two brains are wired alike and chances of misinterpretation are more common than we may like, it becomes even more important for us to constantly try being in others’ shoes and attempting to see things from their perspective. Maybe if Jay’s manager had kept this in mind, he would have realised the extent of misunderstanding he had himself opened up. Had he empathised even after Jay’s erroneous submission, he would have realised why Jay did what he did. He could then have chosen to respond, not react and they would both likely have ended the day on a much better note!

Ultimately, we must accept that we are each unique. We live on the same planet, maybe even the same country, the same city or the same street. But your world is different from my world, and your mind is different from my mind. Some of us may see a pond and sense happiness envisioning a playful dip in the water, while others may wince at the thought of swimming with

frightful little creatures wiggling in the depths. We look at the same sights but see different things. We listen to the same words but hear different things. As we seek for our views to be appreciated, so must we learn to appreciate other's views. Perceptions will vary. Biases will colour both sides differently, but someone must take the first step in crossing over. The more we extend ourselves to understand another's point of view, the more the favour is returned, and others are open to understanding ours.

KEY TAKEAWAYS FROM THIS CHAPTER

1. *Our brain is made of billions of basic building blocks called neurons. In response to a stimulus, a series of neurons that are in line with one another connect together at lightning speed to 'light up' a neural pathway.*
2. *No two brains are identical, and the same stimulus causes different neural pathways to 'light up' in different people, making us perceive things differently.*
3. *Our perceptions are our personal truths borne from experiences. Similarly, perceptions of others are their truth too. We must be aware that others perceptions can be as right as our own.*
4. *Perceptions also stem from the feelings we associate with past events that we may or may not be conscious of and that may be outdated. Perceptions are also affected by our biases. Our perceptions can, therefore, be wrong at times.*
5. *One must be humble and accept other perceptions because we are not always right and others are not always wrong. Practising empathy and detachment helps us accept other's perceptions. Staying relatable helps them accept ours.*

Chapter 2

INTELLIGENCE

Why we are designed to excel at different things

“Everyone is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.”

– Albert Einstein



I went through most of my life believing I was not an intelligent person. I was hardly in the third standard when “reality”, in the guise of my class teacher, made it very clear to me that I was quite the lost case. This honour was bestowed upon me because I cared little about the exactness of numbers and words and was utterly bored of anything that figured on the board. I really loved music, and as I grew into my teenage years, I often dreamt of a career revolving around music in some way or the other. My parents, teachers and friends (due to what their parents and teachers told them, of course) kept my “fantastic delusions” in check and made me “realise” that success was just a synonym for being either a doctor or an engineer. The point was further hammered home that the 10th and the 12th grades were big milestones, for the marks I scored would spell the beginning of a lifetime of success or of doom.

A very similar picture played out in the homes of all my friends at school. Soon after completing our 10th grade, we learnt that it had all been worked out for us—the ‘intelligent’ students who scored high enough in the 10th and 12th grades were told they were destined for the Sciences. ‘The others’ would simply have to “settle for” the Arts or Commerce. Any thought of ‘intelligent’ students opting for the arts was sacrilegious and ‘the others’ dreaming of a career in science was deemed utter buffoonery! Given this mindset, I chose science. It was my first major mistake in life.

Even two decades later when I look now for how far things might have progressed in our educational system, I see that little has changed. When the 10th and 12th CBSE¹ and the ISC² results were announced earlier this year, newspapers carried pictures of the top scoring students with the idea of

celebrating their success—of achieving 99.5% and upwards. Yes, including decimals! This was then followed by weekly full-page advertisements by several coaching classes showing pictures of the toppers who had enrolled with them who were now eligible for seats in the prestigious Indian Institutes of AIIMS³ and IIT⁴—readying another generation for the coveted careers in Medicine and Engineering.

Alarmingly, it is not just in high school that the focus on scoring marks begins to take undue importance. Ask any young school goer who the most intelligent person in the class is and one can be assured the child will point to the person scoring highest on tests. For generations, our school systems have driven the thinking that high-test scores are the true measure of intelligence.

It is, of course, commendable that some students score very high (provided there is real learning and not mere rote). But should a 99% score in a school exam be automatically equated to high intelligence? Should a lower score of say 60% or even 40% be equated to low intelligence and should it label a student as capable of nothing more than mediocrity? Is intelligence fixed? Is an assessment of a person's ability (and let's not even mention the factor of his motivation to display his ability) in his teenage years enough to bracket him for the rest of his life? In our attempt to answer these questions, let us first try and understand where our idea of intelligence comes from.

INTELLIGENCE AND IQ TESTS

1. Binet-Simon Scales

Traditionally, IQ tests or Intelligent Quotient tests have commanded the most respect in the area of measuring intelligence. In 1904, the French Ministry of Education passed a law mandating uniformity of education for children as per their age. At the behest of the French government, Alfred Binet and his student Theodore Simon devised the first IQ tests (although the term IQ was applied much later). Binet and Simon had been commissioned to identify students who were slower than others in learning from regular classroom sessions at school. The idea was to identify these students for extra classes since classroom instruction was being standardised based on age. The tests came to be called the Binet-Simon Intelligence Scales. Binet and Simon

believed that intelligence was a learned entity. Using the average performance of an age group as a reference, they classified a child's performance as below par, at par or above-par intelligence.

2. Stanford-Binet Scales

The Binet-Simon Intelligence Scales underwent many revisions. Lewis Terman, a psychologist at Stanford University, "Americanised" the tests in 1916. These came to be called the Stanford-Binet Intelligence Scales.

The Stanford-Binet Scales began to be used as more than just as a means of identifying students who needed "extra" classes. Instead, these tests were widely used to diagnose developmental or intellectual deficiencies in children. Over time, the tests began to be used across wider age groups right up to late adulthood. The tests are currently in their fifth edition (called simply SB5). In each new edition, care was taken to update the questions to match the level of information a person in the present year was expected to have compared to someone of the same age in earlier years.

3. Wechsler Scales

Several editions of the Stanford-Binet Scales, right up to the 1950s, were strongly criticised for their over-emphasis on verbal skills. In the 1930s, David Wechsler, Chief Psychologist at Bellevue Psychiatric Hospital, shared further criticism on a number of additional factors. He finally designed his own system to make up for what he considered were the many shortcomings of the Stanford-Binet tests. Wechsler's Intelligence Scales reduced the emphasis on verbal skills and provided significant weighting to performance-based abilities. He strongly advocated the role of non-intellective factors (like lack of confidence, fear of failure and personality traits) in the display of intelligence.

Additionally, he considered that a person's intellectual performance might deteriorate with simply the advancement of age—i.e., the model of posing questions of higher difficulty to older age groups could only be applied to children, not adults. Lastly, Wechsler disliked that the Stanford-Binet test resulted in only a single overall score. Both tests tested several different functional areas through subtests. Wechsler preferred to keep scores for each

functional area separately available in addition to the overall score. Like the Stanford-Binet tests, Wechsler's scales have been brought out in several editions and are widely administered to this day. There are two separate Wechsler Scales, one for children and another for adults.

Despite the many decades of research and revisions that have made IQ tests what they are today, the conflicts in determining which factors ought or ought not to be considered during the measurement of intelligence have been many. There are also further views that from a neuroscience perspective it really isn't clear what these tests measure. What makes matters worse is that studies have proven that the results of these tests not only vary based on a subject's age and year of birth (something Binet and Wechsler factored in but could not wholly make adjustments for) but also depend on the social status of a person and his temperament at the time of taking the test!

The social aspects of these tests are also many. Both the Binet-Simon and the Stanford-Binet tests began as a means of identifying slow learning children and saw a high rate of adoption in schools. As the popularity of these tests went up, they began being applied in the recruitment of military personnel by the U.S during World War I. Terman and his influential colleagues in the psychiatry community eventually began promoting the controversial idea of increasing overall American intelligence by restricting higher positions to higher IQ scores and even discouraging individuals with low IQ scores from having children. Although the public expressed heavy opposition to these methods, many institutions began basing admissions and education itself on students' IQ scores. The narrowing choices of education that could, therefore, be received had a subsequent influence on future career prospects. Many of these ideas have persisted in the general manner of providing education and opportunity to the children and young adults of today.

Don't get me wrong. By relaying the above issues, I do not seek to invalidate the significance of IQ tests. It is my firm opinion that these tests are an extremely helpful tool in narrowing in on a person's natural strengths (at least from within the functional areas examined in these tests). Furthermore, it has been proven that people with higher IQs do tend to be, on average, better

at problem solving. The problem arises when our understanding of intelligence, as derived from these tests, is assumed complete and when institutes and organisations use these tests as a metric to decide the candidature of prospects without looking at an individual in a more holistic manner. Like Wechsler felt compelled to include a number of additional dimensions to unravel intelligence isn't it possible that we have still to go a long way in arriving at a more precise and wholesome understanding of intelligence? In attempting to unravel this let us delve into the other ideas that have shaped the understanding of intelligence.

4. General Intelligence - the “g”

In 1927 Charles Spearman, an English psychologist, proposed the existence of a general intelligence or simply “g”. He noticed a positive mathematical relationship (called correlation) among different cognitive tasks per individual, i.e., an individual's performance on one type of cognitive task tended to be comparable to the same person's performance on other cognitive tasks—often even when the tasks were of a different type.

The mathematical correlations indicated the existence of a single, common, “general” influence. Spearman coined this simply, the “g”. He also proposed that the “g” existed only up to a certain level in any individual. In his words, “a person could no more be trained to have it in a higher degree than he could be trained to be taller.” He determined that “g” contributed to as much as forty to fifty percent of a person's intelligence scores.

5. The Theory of Multiple Intelligences

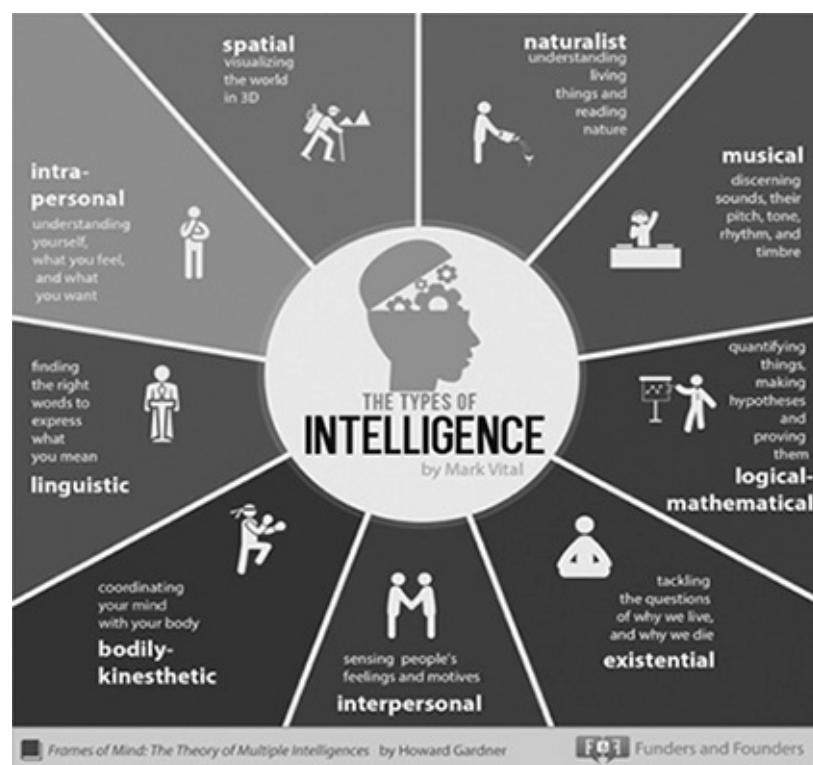
Charles Spearman's model of a single dominant intelligence prevailed for a decade. Then in 1938, L.L. Thurstone improved it by devising a different mathematical model. Thurstone's work formed the basis of Howard Gardner's Theory of Multiple Intelligences (1983) that is widely regarded even today.

Thurstone argued that Spearman's general intelligence or “g” was not a form of intelligence at all. He argued that the “g” merely resulted from the specific mathematical procedure (correlation) that Spearman had used. Thurstone created a new mathematical approach called factor analysis (which is widely used to this day beyond its application in measuring intelligence).

He explained that a person's overall intelligence was simply the combination of several primary abilities like word fluency, number facility, spatial visualisation, etc. These abilities, however, he stated, were exhibited in different weightings by different individuals. Thurstone called the primary abilities 'factors' and their weightings 'factor loads'.

Howard Gardner built on Thurstone's idea of different primary abilities. Over time he also added newer abilities to the list. He termed them 'multiple intelligences'. He also posited strict criteria that any intelligence would have to fulfil in order to be considered an intelligence at all. Among others, the criteria included identifying the area of the brain that processed the intelligence, a developmental progression of the intelligence, a place it held in evolutionary history and the existence of prodigies who displayed an extreme form of that intelligence.

The nine intelligences are:



i. Logical-Mathematical (Reasoning & Number Smart)

Logical-Mathematical intelligence involves the ability to detect patterns, reason deductively and think logically. This intelligence is most often associated with scientific, mathematical and investigative thinking. It uses

numbers, math and logic to find and understand the various patterns that occur in our lives: number patterns, visual patterns, thought patterns, colour patterns and the list goes on.

ii. *Existential (Life and Death Smart)*

People with existential intelligence tend to have a heightened sensitivity and capacity to handle questions relating to the purpose of life and death. They are often spiritual in nature.

iii. *Interpersonal (People Smart)*

Interpersonal intelligence is the ability to understand and interact effectively with others. It involves effective verbal and nonverbal communication, the ability to note distinctions among others, sensitivity to the moods and temperaments of others, and the ability to entertain multiple perspectives. Teachers, social workers, actors and politicians—all exhibit interpersonal intelligence. With all other intelligences at par, young adults who also have this intelligence tend to be leaders among their peers, are good at communicating, and seem to understand others' feelings and motives.

iv. *Bodily-Kinesthetic (Body Smart)*

Bodily-kinesthetic intelligence is considered one of Gardner's most controversial multiple intelligences. The main aspects of bodily-kinesthetic intelligence are the ability to control body movements and to handle objects skillfully. This form of intelligence also includes a sense of timing and a clear understanding of the goal of a physical action. People who are generally good at physical activities often prefer learning through activities that require them to get up and move around. This means they often learn best from doing something rather than reading or hearing about it. People with a high degree of kinesthetic intelligence end up either being sporty or skilled at dance forms.

v. *Verbal-Linguistic (Word & Language Smart)*

Verbal-Linguistic Intelligence is an intelligence that involves skill in language whether reading, writing or speaking, though usually in all three. It involves

articulation, grammar and sentence construction skills. It also involves understanding the socio-cultural nuances of a language, including idioms, plays on words, and linguistically-based humour. We put our linguistic skills to work nearly every moment of our day as we speak, read, write or listen. Since in classrooms, kids must draw on their linguistic talents all the time, for those who aren't strong in this area, schoolwork can be a struggle. Consequently, linguistic skills tend to be emphasised both in regular classroom instruction and in our culture at large.

vi. *Intrapersonal (Self Smart)*

Intra-personal intelligence is the capacity to understand oneself, one's thoughts and feelings, and to use this knowledge in planning and giving direction to one's life. Intra-personal intelligence involves not only an appreciation of the self but also of the human condition. It is evident in psychologists, spiritual leaders, and philosophers. Often young adults with this intelligence may be shy. They are also aware of their own feelings and tend to be self-motivated.

vii. *Visual-Spatial (Picture Smart)*

Visual-Spatial Intelligence is the ability to perceive the visual world accurately and to be able to re-create aspects of one's visual experience, even in the absence of relevant physical stimuli. This includes the ability to perform transformations and modifications on visual entities that may be real or in thought. The following skills represent the core abilities of individuals with Visual-Spatial Intelligence:

- a. Spatial Awareness—The ability to solve problems involving spatial orientation and moving objects through space, such as finding one's way around or manoeuvring a car.
- b. Working with objects—The ability to use strategic eye-hand-coordination such as in the use of precision instruments for medical usage, artillery, etc., or while constructing and fixing things.
- c. Artistic Design—The ability to judge, design and carry out tasks which require aestheticisms, such as jewellery design, fashion design and

interior decoration.

viii. *Naturalist Intelligence (Nature Smart)*

Designates the human ability to discriminate among living things (plants, animals) as well as sensitivity to other features of the natural world (clouds, rock configurations). This ability was clearly of value in our evolutionary past as hunters, gatherers, and farmers and continues to be central in such roles as those of botanists, chefs, forest troopers, bird-watching enthusiasts and the like.

ix. *Musical-Rhythmic (Music & Audio Smart)*

Musical-Rhythmic Intelligence is often also referred to as Musical Intelligence and Sound Intelligence. Importantly, it is not limited to music and does not relate only to sounds that are particularly rhythmic.

Individuals with Musical Intelligence are very perceptive of what can be heard with their ears or vibrations that can be felt, such as the drumming of a beat during a rain shower. Those who respond to sound often have a great appreciation, and sometimes talent, in the field of music. They may tend to remember a melody after only hearing it once. These individuals typically tend to move well to rhythmic sounds. Music is not the only auditory element that they respond to—it goes for most noises such as a breeze in the trees, birds chirping or even traffic.

Gardner's work has been criticised and praised in equal measure. On the one hand, it has been argued that his view of intelligence is too broad and reduces intelligence to the more generic concepts of aptitude rather than thinking skills. On the other hand, many educationalists agree with Gardner that it is unwarranted to assume that only certain human abilities like thought deserve to be arbitrarily singled out as intelligence whereas others do not.

As we have seen, right from Alfred Binet's first Intelligence Scales devised in 1904 through until Gardner's 1983 Theory of Multiple Intelligences, there has never been a single, absolute definition of intelligence that has found universal acceptance. However, there has been agreement that intelligence is a multifaceted phenomenon.

In my opinion, rather than focusing on measuring one's intelligence, the real endeavour should be in honing a wholesome set of abilities while identifying one's personal strengths among them and leveraging those for the best. To use Gardner's terminology, our educational systems today lay too much emphasis on logical, verbal and mathematical intelligences. They nurture individuals who exhibit these forms of intelligence at the expense of other forms.

We also often hear industry stalwarts lament at the gaps between the calibre of students our educational institutions produce and what is really required of them in the workplace. Even highly ranking and meritorious students often fail to exhibit a wholesome set of aptitudes. For instance, I have always found the need for people at the workplace with strong interpersonal and intrapersonal intelligence, as they tend to unify and lead teams better, no matter what level they work at—yet these are not the skills honed in school. Let us also consider that we live today in a world when the wheels of change in every aspect of our lives turn much faster than ever before in history.

With Artificial Intelligence (AI) taking giant strides in our personal and professional worlds, the kinds of intelligence that have thus far been valued—logical reasoning, mathematical ability and verbal skills—have already begun to be handed over to AI. In a media agency related work environment such as mine, the core tasks of planning cum scheduling campaigns and even content creation is already partially handled by Artificial Intelligence—partial not because of AI's incapacity in handling it but because of human reluctance in handing over the reins. It is safe to say this reluctance will be broken in a matter of time. AI has found similar in-roads into a variety of industries.

Our mindset urgently needs to see a shift by recognising that creative people who can imagine, visualise, strategise and manage relationships need wider appreciation and acceptance for the value they can continue to add in this changing landscape. With this context in mind, perhaps it is time we relook at our current systems in both the educational and corporate world and work towards identifying and nurturing young talent with a varied set of key strengths and appreciating the unique way their brains are naturally wired for different forms of excellence. By doing so, not only will we foster an

environment that will drive an increase in productivity, but we will also create a more content and happy workforce.

KEY TAKEAWAYS FROM THIS CHAPTER

1. *Our educational systems favour specific ideas of intelligence at the exclusion of others. They also incorrectly identify intelligence with scores on exams or IQ tests. This creates an incomplete assessment of students which is carried into later years of their lives.*
2. *Intelligence has been variously understood as having exceptional skill in:*
 - *Verbal abilities (Stanford-Binet)*
 - *Verbal and Skill-based abilities (Wechsler)*
 - *An overarching General Intelligence (Spearman) and*
 - *A combination of abilities of different forms – Logical, Linguistic, Musical, Spatial, Kinesthetic, Interpersonal, Intrapersonal, Existential and Naturalistic (Gardner).*
3. *Given that the understanding of intelligence has been constantly changing, instead of measuring it to exactness, our focus should be on identifying a person's specific strengths.*
4. *The currently in-demand skills in logistic reasoning, mathematics and linguistics are headed to be handed over to AI (Artificial Intelligence) applications. So it becomes even more important for us to recognise the traditionally overlooked intelligences.*
5. *Creative people who can imagine, visualise, strategise and manage relationships need wider appreciation and acceptance for the value they can continue to add in the changing landscape of growing AI adoption.*

Chapter 3

LEARNING

Why we are suited to learning in different ways

“There is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning.”

– Jiddu Krishnamurti



The newspapers, a few months back, ran several articles on the possibility of a 100,000 software engineers in India losing their jobs by the end of this year alone. The reasons cited ranged from the change in the U.S policy on issuing work-visa permits to changing demands of Indian I.T. After years of learning computer skills and languages, these engineers may suddenly find their skills becoming redundant. In the recent years, we have witnessed several points of flux in India’s corporate landscape, leading to mergers and acquisitions, and in the process, several thousand individuals have been laid off. The recent and still ongoing upheaval in the Indian telecom landscape, turning things around entirely from the inside out is another such story playing out in the newspapers daily.

In the backdrop of these changes, Greek philosopher Heraclitus’ oft-quoted words come to mind—change is the only constant. This is true as much for the corporates that find the need to reinvent themselves as for individuals who hope to stay relevant. It isn’t until we push ourselves consciously and regularly to adapt to our changing environment that we can hope to persist and draw a lasting narrative for ourselves.

The only means of staying relevant is firstly to learn, then to adapt by learning again differently and finally be prepared to repeat this cycle over and over again! But how should one go about tackling this humungous task of reinventing ourselves? In the remainder of this chapter, we will see how we learn and how being aware of our preferences of learning styles can make us both proficient learners and effective communicators.

I was 12 years old when my grandfather gifted me my first guitar. I was a

big fan of Slash from Guns & Roses and Joe Perry from Aerosmith and would often imagine myself playing my trusty air guitar before an imaginary audience. Now that I finally had a real guitar, I felt one step closer to making this dream a reality. My father had it arranged for me to visit a nearby music school and I began earnestly.

For the first two weeks, all I did was pluck one string at a time to a beat set by my teacher. If I missed the timing or skipped a note, I was yelled at. Then one day, a senior student in the class showed me how to play a scale. I still remember how excited I was! I practised the scale till I got it right and when it was time for my next class, I hoped to impress my teacher! As it turned out, he was anything but impressed. Rather, he was disappointed for reasons I could not comprehend at the time. (I later realised that learning the basics well at the very beginning had much bearing on whether a person became a good or a great guitarist in later years). Overnight, the guitar classes, that I had so looked forward to, became a source of dread. Within a few weeks, I dropped out of the class. Ironically, it was not the lack of interest but my fervent interest that has prompted me to quit.

Now that there was no teacher to guide me, I took up the task of teaching myself. I learnt the chords from books, then selected songs I liked and learnt to play them by watching closely as my friends played. I practised hard, alone in my room, until they sounded right. Back then, we did not have YouTube, and one had to either remember the sound or play it repeatedly by rewinding a cassette on a tape recorder—an arduous and time-consuming task!

So, did I learn to play the guitar? Yes. Did I become a brilliant guitarist? No! But as I learnt the guitar, I noticed a few things. These turned out to be valid insights that in recent years have helped me better understand the science behind learning. Before we go on to the science itself, let us look at what my 12-year old self noticed:

1. ***Practice makes perfect:*** Every time I tried a new song, it seemed very difficult to start with. But as I practised the same part over and over again, my movements became more fluid—so much so that after a while, I would be able to play even without consciously thinking about

each hand movement.

2. ***Beyond books:*** *I could never learn from a book. I loved to watch someone play, and I picked up chords by watching or by just listening till I got the tune right in my head– a mix of visual and auditory learning.*
3. ***Intrinsic gratification:*** *While I absolutely loved playing alone, I detested playing for an audience. I would rather lock myself up in my room and play late into the night than be the centre of attraction in a crowd.*

The guitar-learning phase in my life was a source of personal joy for several years in my life. It continues to be so on fleeting occasions even now as I make my way through the varying demands of the day. An additional and valuable aspect of that phase is that the insights they gave me helped me realise unique nuances to the way I learn and how learning preferences can be very different between different individuals. Let us look now at this underlying science behind learning:

To begin with, what is Learning? Widely, psychologists accept it as ‘a relatively permanent change in behaviour that results from experience’. Learning is commonly understood to begin in the early stages after birth. But in fact, multiple prenatal learning studies show fetuses engaging in associative learning while still in their mother’s womb. This is why a foetus can be “taught” to kick on cue, say by tapping the mother’s belly or hearing her voice.

So how does ‘learning by experience’—in fact, there isn’t any other kind—play out in the human brain? We noted in the earlier chapter on *Perception* about neurons, the functional building blocks of our brain, interconnecting together in a complex web called the neural network.

Any stimulus generates a signal in the brain that follows down a path from neuron to neuron, interconnecting successively into what is called a neural pathway. For a particular stimulus, brains of different people will choose different pathways, colouring our different perceptions. But for a particular person, it is found that Learning takes the form of our brain choosing the

same neural pathway, again and again, each time we receive the same stimuli.

It is often thus said that “Neurons that fire together, wire together.” This means that attempts at learning, if repeated over and over again, will hard-wire a neural pathway, thereby making the retention more permanent. MRI scans have been able to show the “lighting up” of the same neural pathways as a result of such repeated experiences.

Experiments conducted by Nathan Spreng, Associate Professor in Neurology at McGill University, have further shown that after sufficient loops of repetition, the brain’s manner of recollection changes. He monitored the parts of the brain that were used in the process of learning. He noted that towards the beginning of learning, areas of the brain that aid in focused attention do much of the work. As the repetition progresses, the usage gradually shifts to parts of the brain related to memory.

What is amazing is to know that very real physical changes occur in our brain every time we make an attempt to learning something new—it is completely within our control to change the wiring within our brains and create pathways that never existed!

STAGES OF LEARNING

For any skill-based learning, we move through four progressive stages:

1. Unconscious Incompetence

This is a pre-learning stage where we are unaware of the fact that we even lack a certain learning. This is akin to saying, “I don’t know that I don’t know how to do this.” For example, you have never tried driving a car. You have seen others drive through and it looks fairly simple, but you’re in a state where you are not aware of the fact that you don’t know how to drive. You might think it’s not even something that you need to learn—that you can just drive off the moment you grab the steering wheel and stamp down on the accelerator.

2. Conscious Incompetence

During this phase, we usually acknowledge, “I know that I don’t know how to

do this, yet.” This is often a difficult stage at the outset of the learning curve where learners are prone to self-criticism and also to quit. Maybe you tried driving and realised that there is a lot more to it or maybe just observed someone who is driving really closely and realised that it takes a lot of coordination. Thus, you admit that this is indeed something that you cannot just know unless you learn.

3. Conscious Competence

Here, we usually start going up the learning curve and feel “I know that I know how to do this.” While the learning has started to be internalised, we tend to be rather self-conscious at this stage. This is when you’ve started learning, and whether you’re still driving a learner’s car with your instructor controlling the side pedals or have finally taken the courage to drive your own car, you are overly conscious of it, but you can drive. It’s a different story that you are probably even terrified of thinking of anything else while driving, constantly checking your rearview mirrors, petrified to take the turn and praying that nothing comes your way when you have to go reverse!

4. Unconscious Competence

This is the final stage of learning a skill where it has become completely internalised, and we don’t have to be conscious of it while carrying out a task related to the skill. After you’ve learnt driving (and not just been given a licence like it is the case with many of us!), this is when you come to realise that you are no longer very conscious of each and every movement. Though it is not recommended, you are now able to think of the meeting you are going to attend, or listen attentively to the song on the radio or even pay attention to a conversation you’re having while driving. The learning has seeped down and crystallised into your “muscle memory”.

PERSONAL LEARNING STYLES

The mechanisms that help us learn are varied, and it is intriguing that each of us has a unique learning style. Here’s a quick glance at the different types of learners based on the sensory mechanisms they most engage and what learning and feedback formats work best for them:

1. Visual learners

They need to see or at least visualise what they are learning. During a presentation, these are usually those who follow the slides. It is easier to engage with them using pictorial representations to explain relationships or concepts. Even with feedback, the same approach works. Rather than being told, they grasp things better when it is explained to them in the form of charts, graphs or other visual aids.

2. Auditory learners

During a presentation or meeting, these are the people listening intently. It is best to keep them engaged by encouraging their verbal involvement—asking them to reiterate the points discussed or conducting a question-and-answer session.

3. Reading/Writing learners

They engage in what might seem like a private learning process where they note down what they wish to learn and read it. Interaction with questionnaires or a test is more important to them than verbal or visual interaction. During a discussion, it is best to ensure that they are given enough scope to ink their own pointers or follow the presentation over pre-printed handouts. In order to engage with them aptly during feedback, it helps to put it all on a mail or on paper and discuss it over the same medium.

4. Kinesthetic learners

They are those who rely the most on experiential learning and need to “learn by doing”. Like learners who learn by reading and writing, they might also benefit from writing things down, but that is primarily because of the physical act of writing itself. Kinesthetic learners learn best through activities that echo the essence of concepts.

While each of us may use the combination of the above styles during learning, our overwhelming preference for one style—our leading style—over all the others always remains. Our leading style categorises us into the types of learners we are.

The importance of inculcating a mixed pattern of imparting teaching in schools, colleges, corporate training programmes and other educative ventures cannot be stressed enough. It is only through creating teaching modules that combine the use of different sensory methods—lectures, projected images, demonstrations, role plays, simulations, handouts and more—that the needs of the different types of learners can be attended to. Without this, we run the risk of only engaging with a small percentage of our audience.

Worldwide, such combined application of methods is unfortunately still in a fledgling state. While we wait for these ideas to become more mainstream, being aware of our own learning style can help us choose ways to imbibe lessons more efficiently. This awareness also helps us avoid disappointment and self-blame when we find it difficult to cope with standard classroom teaching methods. In a team setting, knowing such diverse learning styles also improves the effectiveness of our own communication.

FROM LEARNING TO UNLEARNING

We have seen so far how every time we learn something new, our brains get wired to make us capable of executing that task seamlessly. The more we repeat the task, the stronger the brain gets wired until the task gets easier and easier. Eventually, we reach a point where we aren't even fully conscious of executing the multiple tiny steps that go into executing the single task. In learning the guitar, this is like no longer noticing that to strike a single chord one has to first place relevant fingers at different positions on the frets with one hand while strumming a particular choice of strings with the other. The playing of the chord is now simply seen and executed in its entirety in one fluid movement.

We also saw earlier the importance of adapting to change. Adaptation may take different forms – upgrading skills to stay relevant or rectifying something learnt incorrectly in the past. But the learnings of the past are not easy to change. They are often too deeply ingrained to be easily forgotten. Try learning a new instrument by playing the major chords a thousand times, and chances are you will remember them for a lifetime. But it is equally true that you will find it close to impossible to change the chord progression—the

order in which you had habitually learnt to play them.

Breaking habits become extremely difficult because they are repeated and reinforced over long spans, often several years. To make things worse, the plasticity and the ability of the brain to change itself greatly decreases with age. Thus, people who have learnt and mastered a certain task over the years find it very difficult to do the same task again in a different way. So, how does one rewire the brain to do the same thing differently? Well, we will answer that in the next chapter.

KEY TAKEAWAYS FROM THIS CHAPTER

1. *Change is inevitable. The only solution is adapting. This is done either by learning new skills or rectifying something learnt incorrectly in the past.*
2. *During the process of learning, neural pathways are formed in the brain that are strengthened by repetition.*
3. *We go through four stages of learning—from **Unconscious Incompetence** through to **Conscious Incompetence**, **Conscious Competence** and finally, **Unconscious Competence**.*
4. *We each have a preferred style of learning based on the senses we most engage—**Visual**, **Auditory**, **Reading-Writing** or **Kinesthetic** styles.*
5. *Once our brains get hardwired to do something a certain way, it isn't easy to unlearn it. We will have to rewire the brain.*

Chapter 4

HABITS

How we form habits and why it is so hard to change them

“Your beliefs become your thoughts, Your thoughts become your words, Your words become your actions, Your actions become your habits, Your habits become your values, Your values become your destiny.”

– Mahatma Gandhi



While choosing a house to live in, my wife and I decided to select one close to the highway. An important consideration was that from behind the house ran a short route that cut through several inner lanes allowing us to reach the highway within minutes. That represents precious time saved if you have the slightest idea about Mumbai’s dreadful traffic! This is the route I have been taking to work for the last seven years.

The local government, in their enthusiasm for finally tackling Mumbai’s traffic congestion recently began working on a network of metro-rail lines. One line has been planned right alongside the highway. Construction has been in full swing for a few months now and commuting to work has turned into a nightmare! A one-way trip that once took a mere 30 minutes is now a 50-minute long hassle through slow traffic, blaring horns and a prevailing sense of impatience.

I noticed one day that if I chose to skip the “short-cut lane” from behind home, that had become a favourite to many, and instead drove along a few interconnected stretches parallel to the highway, I could save a valuable 15 minutes! So I began setting out from home daily, ready to take this new route. But each morning, I sat in my car, my mind invariably drifted to pressing concerns that awaited me at work. Before I knew it, I was back in the old lane. The route was simply hardwired into my head! Taking the old route was a habit I had developed over the years. I now needed to put in a conscious effort at rewiring my brain to change this habit.

It is possible to observe easily that some of our actions are very purposefully carried out while others are accomplished without investing

much attention. For instance, consider you are asked to walk across a room with a glass filled to the brim with water. Your task is to ensure that not a single drop falls out. How much concentration would this task need? How about if you were asked to brush your teeth? How much would you concentrate on the action of brushing itself while you were brushing? Clearly, the attention required during the task of carrying the water would be more. Brushing instead is easily carried out even in a state of inattention.

The ability to conduct tasks inattentively, i.e., without conscious, focused attention, is built over time. When you walk, run, chew your food, brush your teeth or execute many of the dozens of little tasks that you do every day, you might notice your mind wandering off to other things. At times, although you may **choose** to concentrate on these tasks, the **need** to concentrate is little. The nuances of carrying out these tasks are ingrained in your brain because of years of repetition as a child. Any action if repeated often enough can become a learned behaviour. And the final stage of learned behaviour (as seen in the previous chapter) is the state of Unconscious Competence—i.e., a state when the learner is no longer aware of each detail of the task he is executing—a state of inattention.

Habits are learned behaviours already in the stage of Unconscious Competence, but also with an added element—the element of compulsion. So while one can learn to ride a bicycle or to swim, neither are habits. The specific nuance though, of choosing to always begin by pushing say the left pedal or choosing to breathe after every fourth swim-stroke instead of the second or sixth is a habit. There is a strong sense of compulsion to do it the same way each time.

If habits are essentially some form of compulsion, doesn't it become extremely important to ensure we choose to be compulsive about the right things? We wouldn't want to compulsively and uncontrollably watch ourselves repeating such actions over and over again that jeopardise ourselves, do we? Of course, not. And yet we do! Nearly every one of us struggles with habits we want to give up or change. Or we dream of "better" habits we want to adopt. Eating healthier, exercising daily, controlling angry outbursts or procrastination—you name it. Our fitness, health, happiness and

productivity are all related to the kind of habits we develop. It can be argued that our entire life is nothing but the sum of our habits. Cultivating the right habits, giving up those that jeopardise us and learning to change the ones that need to be bettered are the crux of leading a productive life. Therein lies any success we hope to achieve.

Unfortunately, when our brains are wired to engage in a habitual activity, it becomes nearly impossible to unwire it—whether it is to change or break the habit. From being learnt over extended periods to being played out in a state of Unconscious Competence, to being compulsive—each bit that defines a habit goes into strengthening it further in our psyche.

The extremity of the strength of a habit is best showcased by Charles Duhigg in his account on Eugene Pauly (mentioned in his book *The Power of Habit*). In fact, the study on Eugene Pauly is considered the single most important case study in trying to understand habits.

Eugene Pauly was an ordinary person, until one day his unfortunate encounter with viral encephalitis left his brain severely damaged. Only certain parts of his brain turned dysfunctional. Eugene could still walk, talk, change clothes and even cook, but he lost a part of his memories along with the ability to create new ones.

Despite the partial memory loss, Eugene was remarkably still capable of holding conversations. He resorted to topics that he had familiarised himself with several decades before. But his inability to remember events of more recent years meant he no longer recognised his grandchildren. Similarly, he could not even remember the names of his doctors who had introduced themselves minutes before.

Eugene and his wife eventually moved to a new house to be closer to relatives. As Eugene was unable to memorise the layout of their new home, his wife had to guide him around daily.

Remarkably, one day, despite his inability to form new memories, Eugene started learning his way around the new house! He walked to the refrigerator if he was hungry and he knew how to open it to take out food. Similarly, he knew where the television was and how to work it when he was bored. Yet,

when doctors asked Eugene to provide directions around the home, he simply could not. Although he seemed to have learned his way around the new house, he didn't have a memory of it that he could convey.

So, what had happened?

Eugene had developed habits.

The outer layers of the human brain—those lying closest to the scalp—are evolutionarily the most recent while the innermost central portion is evolutionarily most ancient. Complex tasks like the creation of thoughts and ideas are controlled by the outer layers of the brain while primitive functions like the automatic process of breathing or a startled response are handled by inner layers. The basal ganglia are a small portion of the brain towards the centre that control such automatic processes, including the near-automatic habits. The basal ganglia also process emotions, another near-automatic response to senses. Memories, evolutionarily, a still recent process, are stored outside of the basal ganglia.

Eugene's ability to form habits had stayed because of his basal ganglia remaining intact.

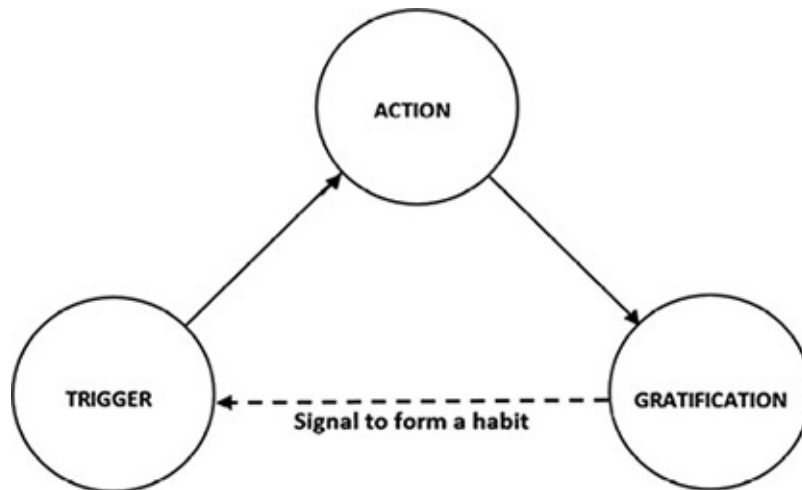
MRI scans on a normal brain show that learning by repetition (such as in forming habits) successively lights up different areas of the brain. As repetitions progress, the engagement of the brain goes steadily from areas relating to focused attention, to areas of lower attention involving memory storage and memory recollection and finally down to areas of least attention that involve automated pattern recognition. Habits are nothing but pattern recognition and execution. Importantly, it was seen through what happened with Eugene that it was possible to form habits without going step by step down this path—neither focused attention nor memory needed to be used!

This takeaway that focused attention and memory are not integral to habit formation is significant. Unfortunately, in attempts at controlling habits, the focus remains widely on using these two. Let us try and understand what habits instead comprise of and the best way to be in control of them.

THE STRUCTURE OF A HABIT – THE TAG LOOP

Habits are patterns with three distinct stages as explained by the TAG loop:

- **Trigger:** *This forms the cue.*
- **Action:** *This is the specific routine performed on seeing the cue.*
- **Gratification:** *This is the reward received after the action is complete. The sense of gratification makes you look forward to the next time the same cue occurs.*



Let us understand this better with an example. I have grown up on a diet of spicy food. As a child, I was always handed something sweet after a meal to quell the fire. Even today, after enjoying an especially spicy meal, I crave a good dessert. If the meal isn't spicy, there is no craving. Therefore, fiery food is my trigger. I am compelled to eat anything that is sweet. This is the action. The sweetness, in turn, sends a strong feel-good message to my brain making me relish every bite. That is the gratification. The gratification is so strong that I am easily compelled to repeat the act when faced again with inflamed taste buds at the end of another spicy meal. The loop is thus complete.

Gratification is both the reward of strong contentment received at the end of performing the Action as well as the strong impetus that powers the loop to play out the next time the Trigger is encountered. One reason gratification possibly plays such an important role is that the basal ganglia, that control habit formation, also control emotion. And gratification is ultimately the feeling of pleasure at being satiated—a strong positive emotion that we get hooked on to, much like the high experienced by an addict. This also explains why we sometimes form habits that leave us sulking, angry, disappointed or generally negative. The strong positive emotion in gratification is not to be

confused with a feeling of delight (though delight may also occur in some cases)—it is instead satiation in a different form, possibly vindication, self-righteousness or even relief such as after the release of a negative outburst.

CREATING AND CHANGING HABITS

Now that we know the anatomy of a habit, the TAG loop, we are better equipped to deal with how to go about making a new habit or breaking an old, undesired one. Let us see how we can do this:

To Create a Habit

- *Design your Action to be specifically linked to a chosen Trigger.*
- *The Gratification is implicit—because you have consciously chosen to start this habit, the Gratification is received as a consequence of simply completing the Action.*

To Change an Existing Habit

- *Be aware of the occurrence of the Trigger*
- *Replace the current Action with the desired Action such that...*
- *The Gratification you now receive trumps the gratification received from the old Action*

The following steps help to stay on course when creating or changing the habit:

1. Know your Purpose

Most habits are formed unintentionally and even unknowingly. As long as the Gratification is strong, the Trigger and Action will play out every time. But the act of choosing to form a new habit or breaking one removes the factor of unintentionality. And where there is the intent, there needs to be a reason. It is helpful to note down why you want to form or change a habit.

What is your purpose? Why do you need it? A very personal narrative always helps the most. It doesn't really matter why half the world thinks reading books is a good habit. Why do you want to do it? Is it to get back in touch with an old favourite pass time? To research on a specific topic for work? Or because you seek inspiration? If you want a habit to stick, at the

very outset it helps enormously to know what the very specific need is that you are hoping to satisfy.

Having mentioned the importance of knowing your purpose, it must be noted that not all habits need a strong sense of purpose. Sometimes, the purpose exists but plays little or no role in reinforcement. For instance, no one really needs to be reminded of why it helps to remember to place their keys in the same place every day or why they need to feed the cat! But the more crucial the habit is that needs to be formed, the more knowing your purpose helps.

Also, importantly, purpose must not be confused with motivation. Motivation grows and ebbs several times during the day. You need your habit to play out even and in fact especially at times of low motivation. Knowing your purpose is only to serve you as a reminder every once in a while of why you chose to go down the path in the first place. It is a reminder that you need to do this for the benefits it provides.

Motivation on the other hand often turns into a vehicle of stress and guilt in the hands of some. Every little lapse—and know that you will have them now and then—is seen as a failure, building up guilt and stress and increasing chances of the next lapse. Before you know it, you are going down a spiralling void. It is best to avoid linking habits to motivation. Stick to purpose instead.

2. Apply the TAG Loop

Whether you are following the steps to create a new habit or change an existing one, it is important to bear in mind that each element in the TAG loop heavily depends on the previous element. Let us understand this with an example. Let us say you want to start the habit of taking dietary supplements every morning. You've tried several times, but in the morning rush, you simply forget. Here, the action defined only as "taking supplements every morning" has been designed without keeping in mind which specific trigger will make you take that action. It is doomed to fail.

Instead, let us suppose you fix yourself a cup of coffee every morning. You can place your supplements next to the coffee jar as a reminder. Now your act

of taking supplements is explicitly linked to the trigger of seeing the coffee jar. In case it is someone else fixing your cup of coffee, then think of your other morning routines to choose a suitable trigger. For example, the fact that you grab your wallet and keys before stepping out to work. In this case, the supplements can be placed in the same drawer where you place your wallet. You get the idea. Designing your action so as to be clearly linked to a trigger improves your chances of acting out the intended Action.

In the above case, which is of the creation of a new habit, the gratification is easily gained simply by the successful completion of the act. But if it is required to break or change an old habit, the role of choosing the best gratification to trump the gratification you got from your old habit becomes even more crucial. This is where the role of purpose, mentioned earlier, helps to strengthen the new gratification.

3. Start Small and Slowly Build Up

This is related to the idea of your motivation growing and ebbing at different times. If your target is to run for half an hour every day, start with a 10-minute daily walk. Keep the initial target so small that it is easy to complete with even no motivation. Most people fail at their habits in the initial days. And it is not because of too little effort but because of too much! Think about it, isn't it easier to start with one healthy meal a week than a healthy meal for an entire month (which is what most diets need you to do) at the exclusion of eating all the goodies you love? Always, always, start simple.

Once you are used to the simple routine, slowly start building up. For example, move from a 10-minute walk to a 20-minute walk, before you try running. Or from one healthy meal a week to two or three. You can also divide the added routine into separate chunks. For example, do walking repetitions twice a day for 10 minutes each. Breaking it down makes each chunk easier to complete by itself.

4. Prepare for Setbacks

This takes two forms:

The first is a balancing act. Remember that setbacks are a part of the

process. They simply will happen, and you mustn't be too hard on yourself. Always remember that it is OK to slip up sometimes. But how does one protect themselves from not slipping too often? Keep a maximum allowable count. And see that you don't reach anywhere near it. For example, I tell myself that it I will not successively miss three days in a row. But to do that, I try my best at not even reaching two. So every once in a while I slip up, I won't beat myself over it, and I find enough motivation to continue and not get nearer to missing twice or thrice.

The second form is to be aware of triggers that negate your desired habit and make you do the habitual opposite. Does that cookie jar in your cabinet making you overindulge in your favourite treat? Stop stocking it. Is a late night TV show likely to make you skip your morning walk? There is no point trying to push yourself in the morning after ignoring it all night. Handle it at night.

Habits have been banked upon heavily by companies by either trying to fit in their products into existing universal habits or trying to cause a collective shift towards a habit that will help their products carve out a niche. Marketing's usage of habitual loops is as old as designing gratification by the introduction of fresh, minty flavours in toothpaste or coupons that serve as triggers to snag that awesome deal!

Nike launched an app that allowed people to track the number of steps they take and miles they run. Then they added the ability for people to share their performance with their network. As a result, not only did seeing counts on the app succeed in boosting gratification and increasing miles run, but it also helped to get more runners into the fold because of the sense of competition.

Triggers in the form of phone notifications are a common example of how habit loops are used day in and day out by companies to encourage the frequent use of their apps. The constant pinging is impossible to ignore. One either yields immediately or if he doesn't, there more often than not, builds-up a very real "fear of missing out" that has been the focus of various recent studies on mobile phone usage. Extensive studies even point to a noticeable release of dopamine as a response to every text or notification that calls our attention.

Charles Duhigg, the author of *'The Power of Habits'*, mentions Dr. Wendy Wood's research on the number of habitual actions people perform during an entire day. She determined that on average, an astounding 45% of our daily behaviour is formed of habits—the mode we take to work every morning, the route that we take, what we eat for lunch, where we stop for fuel, what kind of fuel we buy, what sort of soda we drink—all those decisions and many more. Habits form nearly half of our actions in a day! Therefore, understanding how to build new habits and how to be in control of our current ones is essential for making progress in our health, happiness, and life in general.

KEY TAKEAWAYS FROM THIS CHAPTER

1. *Habits are usually formed by repetitive learning over years that use focused attention and memory in the initial period. But unlike repetitive learning, it is still possible to form habits without focused attention and memory. Depending on these to control habits is often futile.*
2. *To be able to create a desired habit it is helpful to be aware of our very specific and personal purpose for wanting to do so.*
3. *To be in control of our habits, we must master the TAG (Trigger-Action-Gratification) loop. It is important to remember that each element in this loop has a very strong dependence on the previous one and designing each element must take that into account.*
4. *To find more success in being in control of our habits, it is best to start small, grow the habit gradually, use the technique of chunking and be prepared for inevitable setbacks.*
5. *Habits make up, on average, 45% of the decisions any human being makes in a day. Hence being in control of this extremely compulsive behaviour—both in terms of creating preferred habits and controlling undesired ones is the only way to define a life of our own making.*

Chapter 5

DECISIONS & BIASES

What goes behind making the right decisions

“Set aside a half hour or an hour to rethink the way you make decisions, the habits you have, the biases you may have. And if you think of things, if you come with a little bit of a blank slate and be willing to acknowledge what you don’t know, and you’d be willing to think like a child, I think it’ll help not only individuals but society at large.”

– Stephen J Dubner



It was down to the last two hours before a deadline. My team had to provide closure on a creative concept so that we could take things live quickly and meet project timelines. An earlier concept shared with the client had ricocheted off with the rather laconic feedback that “it lacked depth”.

This had naturally left the team perplexed and frustrated. I asked the team to show me the best-revised option we had on hand and also picked two other options that were below par. We submitted all three options to the client taking care to present the sub-optimal options first. Within minutes, the client emailed his preference for the option we were rooting for!

This is a classic case of using a universally acknowledged and utilised tactic—creating a comparison bias. When choosing from among a few options, even something quite average stands to look special when compared to options of lower quality. So whether a creative evokes the ubiquitous reaction, “this works” or is branded “too evolved” or is regarded “lacking in wow”, it is merely being assessed relative to what else is in the field of comparison.

From a psychological standpoint, decision making is understood as a cognitive process wherein a belief, thought or action is selected after evaluating several options. It is based on the personality, upbringing and cultural fit of the decision-maker along with the situation that s/he is in.

Warren Buffet is often quoted as observing that, “in the business world, the rearview mirror is always clearer than the windshield.” It turns out that this

truism is not confined to the world of business. In other spheres of life too, our decisions tend to seem easier and more apparent in hindsight. Take a moment now to look back on some of your decisions. Think of the ones that you thought were really difficult at the time. Do the consequences of those decisions seem easier to predict now than when you were actually struggling with your options?

This tendency to assume, after a decision has been taken and has long passed, that the decision and its consequences were quite predictable is called the hindsight effect. Think of it as the “I knew it all along” effect. However, this tendency depends on whether our decision led to positive or negative outcomes. We often assume responsibility for good decisions but blame bad decisions on unforeseeable circumstances or bad luck.

Now that we are looking back on past decisions, let us go deeper. Replay in your mind a few situations you’ve been in and the decisions you’ve had to take. As you go over them, do you notice a possibility that you were inclined to feel the *same* way in certain *similar* situations? Does it also seem like your *inclination* affected your decision? If yes, you just honed in on some of your biases. You are not alone. Each of us has certain predispositions of thought and prejudiced inclinations of favour and disfavour. These stem from our biases. We will discuss biases at length, but let us first take a peek at the role of emotions in decisioning.

DECISIONS AND EMOTIONS

Antonio Damasio studied people with brain damage, particularly those with damage to parts of the brain corresponding to emotions. He observed that these individuals were more or less normal. Despite the brain damage, they suffered no major handicap other than the expected inability to process emotions. But interestingly, they had one other common peculiarity—they couldn’t make decisions. Importantly, they knew and could explain what they “needed” to do logically! Yet, they found it almost impossible to make even the simplest of routine decisions. So even tasks like selecting what they wanted to eat for lunch or which soundtrack they preferred listening to was impossible!

An integral part of decision making is to weigh out the options successfully—shall I have the sandwich or the burger? This process is laced with emotional valence more often than we realise. At times, we catch ourselves resorting to our emotions when we “feel” preference for one choice over another, but in most decisions, this intuitive aspect plays out quietly in complete unawareness.

Thus, emotions play a crucial part in making choices. Even if we intend to evaluate criteria in an objective and rational manner, the criteria itself are selected based on our emotional makeup. When making a purchase, the criteria that are most important to you will differ from the criteria most important to others. The importance you assign to each depends on your emotional makeup built from past experiences. For instance, when buying a car whether you value utility over keeping-up-with-the-joneses affects your choice of car. Even the choice of “utility” doesn’t indicate a decision stemmed from rationality alone. The fact that utility is **valued** makes it an emotional choice.

So ultimately, every choice is influenced by the subjective emotional and intuitive part of your mind. Advertising is solely based on this. The goal of an advertisement is to create a campaign that can build an emotional bond between the brand and its consumers. The focus on establishing a “connect” more than explaining the benefits is carefully worked into the Ad. Brands that have a very strong emotional connect—not necessarily overt but strong—tend to do better than those with dry campaigns. Look at it this way, people **like** like-minded people. Even the less emotive ones tend to **like** and not just **agree with** other less emotive persons. It is the same with advertising.

INTUITION AND DELIBERATION

Daniel Kahneman describes in his book, *Thinking, Fast and Slow*, two systems that our brain uses. For the sake of simplicity (which he is very careful about, having studied interpretation and decisioning for years), he terms them ‘System One’ and ‘System Two’. System One is intuitive. It is effortless and fast. System Two is deliberative. It is effortful and slow.

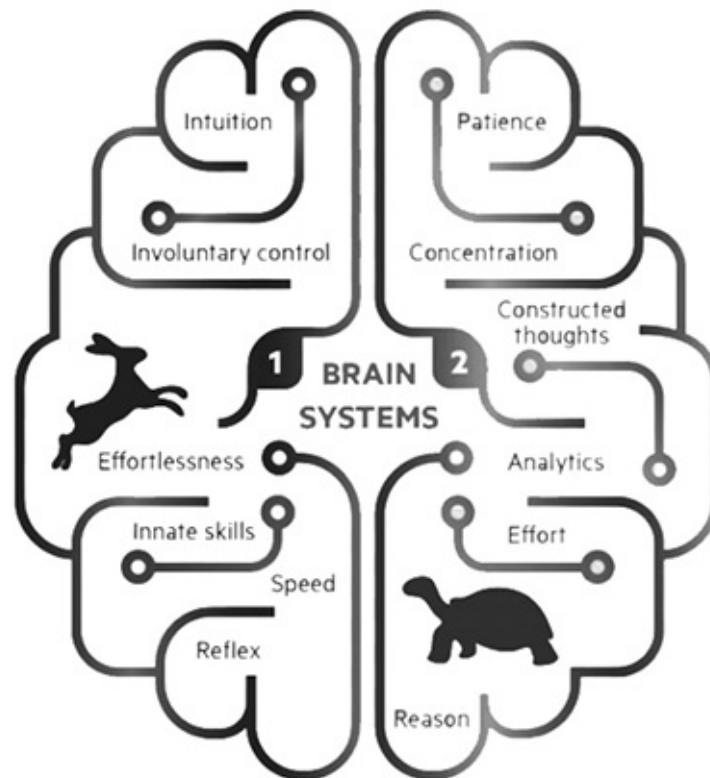


Image Credit: Blog post “Tortoise & Hare Marketing” by Tatiana Sturdza for BigArrowgroup

System One is unconscious and automatic. Within moments it connects the dots between words, images, feelings, actions, ideas and memory to stitch together the most coherent story—but coherent only individually to us based on our personal past experiences. It can be thought of as recognition. For example, you recognise danger in an instant—even without fully knowing why. You instantly recognise someone’s mood from their tone—you don’t consciously think of it at the time, but it is because you have learnt over several repetitions of people’s voice modulations what a happy or sad tone sounds like.

System One is associative memory on adrenaline, working super fast to build a story coherent to you. It works across thoughts, feelings, emotions and actions. In skill-based action, for instance, it helps you “recognise” a practised movement such as riding the cycle or playing the guitar so that you can seamlessly execute it once more. System One is the state of Unconscious Competence we have seen in the chapter on Learning.

Unfortunately for us, System One builds its story even with information that

is sparse and unreliable. It simply connects the dots it sees and ignores those it doesn't. It is thus very prone to bias.

System Two is the conscious, deliberative and rational part of our mind. It performs all intentional thinking and intentional action. It is also used at the beginning stages of learning, whether new concepts or new skills. It makes judgements based on facts, logic and evidence. Because of its dependence on a small working memory, it processes small chunks of information at a time. Therefore, very unlike System One, it cannot process multiple ideas or tasks in parallel.

System Two is careful and conscientious, but also very effortful and slow. It looks for the complete availability of facts and in doing so tries its best to avoid bias. Like a muscle, it can be strengthened by regular use but is unconsciously often discarded because of the ease-of-use of System One. Therefore, as best as we try to avoid it, bias eventually creeps in.

These observations made by Daniel Kahneman and the earlier observations of Antonio Damasio show us how decisions, even those based on objective rationality, are intertwined with subjective intuition and emotion. Correlating to earlier chapters, 'intuition' or 'System One' is akin to the parts of the brain where habitual processes are born. Again, as mentioned in earlier chapters, habits are stored in the same part of the brain that controls emotions, i.e., the limbic system.

Let us now go on to look at the different biases that influence our intuitive and emotional side:

BIASES

We have seen how our decisions, which we like to believe have been rationally arrived at, actually also result from the subjective, intuitive and emotional part of our mind. In this section, we dig deeper to identify several specific tendencies of thought that serve to lead our rational mind astray. These are biases. Biases are our predisposed inclination to knowingly or unknowingly favour or disfavour something. They make our decisions lean one way or another thereby disallowing fair and truly rational thought.

The number and types of biases are many. In the following section, we will look at some of the most common bias patterns that our minds tend to use.

1. The Confirmation Bias: *The tendency to pay more attention to information that conforms to our beliefs.*

The fear of our beliefs being negated prompts us into being more attentive to information that is in accordance with our beliefs while simultaneously leading us to ignore information that negates our belief.

Political siding is a fine example. Before any election, season papers are rife with articles surmising the successful and unsuccessful initiatives of the political party in power. Yet, even the most objective article is often perceived differently by different readers. It is observable that a reader who disfavours the party is inclined to pay lesser attention to the positive accounts in the article even when they occupy extensive newsprint. Yet the slightest mention of a negative measure would rarely fail to catch his attention. Similarly, for a person who favours the party, the article can seem to him as strongly endorsing his view even when it represents the opposing facts in equal measure.

2. Gambler's Fallacy: *The incorrect reasoning that the chance of an event having a particular outcome is influenced by the past, that too by the frequency of the opposite outcome occurring in the past.*

The Gambler's Fallacy usually plays in the mind like this:

- *“The flip of the coin has resulted in heads for five times in a row. It will surely be tails on the next try.”*
- *“The last time they spun the wheel, it landed on 15. So, it won't land on 15 this time.”*
- *“The stock price has been rising the last 5 weeks. It is sure to crash soon.”*

In reality, each separate trial of the events mentioned above has a particular mathematical chance of occurring. This chance is independent of the previous outcome. Gambler's fallacy is based on the erroneous notion that small samples are representative of the larger population. It assumes that nature

veers towards a balanced result when viewed over a large number of tries. With respect to the coin toss example, each individual toss has a 50–50 percent chance of resulting in heads or tails. The Gambler’s Fallacy extrapolates this to considering that the overall outcome of say 10 tosses will also be more or less 50–50 percent heads to tails—so a continuous streak of the same result (heads) must eventually even out by having future events have the opposite result (tails). It is often the Gambler’s Fallacy that keeps us invested in a decision despite its outcome being unfavourable. We just assume that our “luck” will change because it “needs to” even out!

3. Survivorship Bias: *Systematically overestimating the chances of success in a given situation because we are exposed more frequently to success stories than to failures.*

The newspapers don’t shy from narrating stories of startups and young entrepreneurs who have made their ventures successful. Similarly, stories of the successes seen by movie stars, sports personalities, authors, musicians and artists flood the news channels daily. Multiple stories of the huge successes tasted by people coming from simple and common backgrounds entice many others to follow their footsteps. But often the stories are one-sided, harping upon the successes seen and neglecting the pain and difficulties in the path to success or even the immense role of plain old luck.

Sadly, it is common to see many talented youngsters follow their passions and their idols with fervour only to taste limited or negligible success. Being carried away by other’s success stories (rather than drawing inspiration from them and considering the many variables that determine success) is a result of the survivorship bias. This bias makes us hone in on the many success stories of the few survivors who reign their particular field while neglecting the many casualties in the same field simply because their stories were never narrated.

4. Post-Purchase Realisation Bias: *Also called the choice-supportive bias, this is when after a decision has been taken and is suspected to be incorrect, we justify it by downplaying the evidence that disfavours it*

and amplifying the evidence that supports it.

Post-Purchase Realisation though similar to Confirmation Bias goes beyond it. It not only seeks to avoid threatening our world-view but it seeks to avoid threatening our view of ourselves. So rather than admit that a choice we made was wrong, we seek evidence to justify it.

An example would be the act of convincing oneself of having voted for the right candidate despite evidence suggesting his/her incompetence or unworthiness. In the more common example of purchases, it is when, after realising that a purchase was either unnecessary or that what you picked up was not the best option available, you tend to rationalise buying it by coming up with various reasons. So if you purchased a shirt which, though lovely, isn't really your style, you might rationalise the purchase stating to yourself it is smart, purchased at a fantastic discount and will often be worn!

5. Social Proof Bias: *The tendency to act in accordance with popular belief.*

In one interesting experiment subjects were shown a line printed on a piece of paper. Next to it were three other lines numbered 1, 2 and 3. The first was shorter, the second, longer, and the third equal in length to the original line. The subjects were then asked to identify the line that was equal in length to the original line. It was noticed that when the subjects were by themselves, a large majority selected the third option with little hesitation. However, when the subjects were seated in a room with 5 or 6 actors who chose option 1, it was found that 1/3rd of the subjects changed their answers to option 1!

The effect of peer pressure was clear. Yet, one question remained. Did the participants change their answers only to avoid looking foolish to others or did they really believe in their revised answers? Muzafer Sherif, in his 1935 study, asked participants to assess how much a single dot of light moved when viewing it in a darkened room. The dot was not actually moving, but the human eye perceives it to be. It has been determined that each person perceives a particular distance moved and that this distance does not change in repeated attempts by the same person.

Over multiple attempts, Sherif noticed that participants did not change their answers if they were seated alone in the room. But when placed in the room with a group they could converse with, they reported a group consensus—the average of the distance originally stated by each group member. Importantly, when the experiment was repeated again in solitary, they reported the average figure once more.

Thus, Social Proof Bias is so strong that it perpetuates even after the social influence has waned. The extreme strength of this bias is theorised to originate in evolutionary dependence. During the hunter-gatherer age, our survival depended crucially on our dependence on hunting partners watching out for each other's backs. To ensure survival, our brains were wired to assign more importance to the evaluation of a social group than the evaluation of an individual, even ourselves! While this helped us immensely in the hunter-gatherer age, this evolutionary inheritance allows societal pressure to easily dissuade us from believing in ourselves to this day!

6. In-Group Bias: *The classic “us versus them” conflict that makes us favour our own kind and disfavour others.*

You are probably familiar with the saying, “I can do no wrong, you can do no right.” This saying is the gist of the in-group bias. Oxytocin is a chemical neurotransmitter that works as the “love hormone”. It helps us be social, loving and caring for our group mates. Yet, oxytocin can also make us hostile, suspicious and scared of out-of-group members.

As an example, consider rejigs in income tax rates. It is amusing to note, for instance, how anger or vindication is often aimed towards people falling under other tax brackets depending on whether their tax rates decreased or increased compared to our own. Often, we are capable of such emotions even without knowing the members of either the “in” or “out” groups personally (though at times we know who they are)!

7. Neglect-of-Probability Bias: *The tendency to ignore probability when making a decision.*

If a situation has several possible outcomes of relatively equal consequence, it

would be correct to prepare for the occurrence of the more frequently possible risk, i.e., that having the higher probability. However, probability is often difficult to calculate or even comprehend. It is therefore often neglected and instead an equal likelihood is erroneously assigned to each outcome resulting in incorrect decisions.

Furthermore, if the consequence of a particular outcome is perceived to be threatening, the probability assigned to that outcome is tended to be overestimated.

As an example, it is widely believed that travelling by train is safer than travelling by air. Yet, the converse is actually true. It has been statistically proven that air travel is safer. People who consciously avoid air travel for reasons of safety make two wrong judgements. Firstly, they ignore the fact that the chances of an accident in the air are lower. Secondly, they assign higher pain to the possibility of falling thousands of feet from the sky than to being crushed in a train accident. This is likely because of the familiarity of being on ground versus the unfamiliarity of being suspended in air. They forget that irrespective of which is more familiar, when accidents occur, both are equally fatal. So naturally, the circumstance with lower chances of occurrence ought to be safer!

One may take comfort in the fact that indeed all of us are prone to bias; after all, some biases are evolutionarily designed. It is hoped however that as we learn about the different types of biases, with time and practice it will become easier for us to be aware of when our mind is resorting to using them. Once we are aware, we can choose to temper them with rationale.

KEY TAKEAWAYS FROM THIS CHAPTER

1. *Every decision we take, even when we believe it to be taken solely on rational grounds, also shares an emotional basis. In fact, without emotions, decisioning is itself impossible.*
2. *Our mind has a rational part and an intuitive part. Because rational thought is deliberative, effortful and slow, our brain automatically switches (as often as possible) to using the intuitive and swift part of our mind. This opens the door to bias.*
3. *Some biases are evolutionary in nature. At the same time, switching from deliberative, rational thought to using the intuitive part of our mind is also an evolutionary preference. Hence, biases cannot be completely removed. Yet, if we can learn to be aware of them, we can be closer to achieving rational thought.*
4. *Some of the common biases we tend to hold and must be aware of are:*
 - *Confirmation Bias*
 - *Gambler's Fallacy*
 - *Survivorship Bias*
 - *Post-Purchase Realisation Bias*
 - *Social Proof Bias*
 - *In-Group Bias*
 - *Neglect-Of-Probability Bias*
5. *Our biases are our intuitive shortcuts. While they can burden us with irrational thought, they also lighten our load by being intuitive and effortless. Being aware of when and how we apply them allows us to temper them with rationale.*

Chapter 6

WILLPOWER & SELF CONTROL

How we can develop willpower

“Strength does not come from physical capacity. It comes from an indomitable will.”

– Mahatma Gandhi



It was New Year's. We were celebrating at my home in Goa, aptly considered a revellers' paradise. This had been preceded by a week of grand feasting with friends and family, church groups and neighbours over the Christmas season. The delights of the several meals were beginning to show conspicuously around my mid-riff. So, in line with the traditions of the New Year, I set myself a resolution—I vowed to be off sweets. No more sugary treats, chocolates or the hundreds of variations of ghee-soaked Indian delectables for me, I staunchly proclaimed. I had made up my mind and stood determined and confident about achieving my goal. And it worked! At least, for a whole three weeks. For how could I possibly refuse the kind offer of cake from friends, family and colleagues on my birthday? That it arrived on the heels of the New Year was not their fault!

I told myself it was just a slight interlude, and after the day had passed, I would be back on track. Much to my chagrin, that one day's lapse set me up for another and then yet another lapse. Soon enough, I was back to my routine saccharine indulgence.

Why is it that most of us find ourselves in situations similar to this? Not to say that you too have attempted the battle of the bulge, but surely most of us have attempted taming our will sometime or the other? Why is it that when we set ourselves a goal and intend deeply to pursue it, we still succumb to some temptation that comes before us? Further, why does this happen even when the benefit of the goal is clear and when the goal is deeply desired?

Before we go further in trying to understand the above aspects, let me take a step back and clarify some points. This is especially for the reader who may be thinking of strengthening his will in order to develop or change his habits.

In an earlier chapter on habits, I have stressed that when trying to change undesirable habits, one must not be overly dependent on willpower and motivation. Willpower and motivation are bound to grow and ebb during the day, and we will shortly see why. Controlling it, as we will also see, can indeed be learnt. But together attempting to change a hardwired habit as well as tame a weak will is a tremendously difficult task! It is not advised to use the ideas in this chapter to try managing habits. It is both easier and more effective to use the ideas mentioned in the earlier chapter on habits.

Continuing from before then, let us begin by unravelling the mystery of why we fail to meet our goals even when the benefits of achieving them are clear and when we deeply desire the goal. How is it that a deeply intense desire or motivation is overcome by just a weak will?

THE DUAL MOTIVE CONFLICT

Take a moment to recall instances when you succumbed to temptation. You will notice that each time there were dual motives in play. Say, the fight between wanting to lose weight and wanting to satiate a sweet tooth. Or the intention of waking early to exercise for a fitter body versus simply enjoying a little more sleep. Or the decision of studying for the test the following day versus catching up with friends immediately. Or saving up for a holiday versus splurging on an ongoing sale. Each time, there are two opposing motives, fighting each other and vying for your attention.

If you notice closely there is one more trend here - losing weight, having a fitter body, doing well on a test and saving up for a holiday are each desirable but can only be achieved over a long term. The benefits are far off in the future. Succumbing to a dessert, sleeping a little longer, partying “now” with friends and splurging on a sale—each provides instantaneous, immediate satisfaction. Every instance when our will is tested and a temptation taunts us is essentially a fight between two competing motives—one immediately gratifying and the other providing delayed gratification. Our brain tends to push us towards reward systems that are immediate and therefore more appealing rather than towards those that are distant and therefore abstract. This tendency of the brain is called temporal discounting.

PROCRASTINATION

In the weakest instance, when faced with two conflicting options, we yield to the quickly gratifying temptation immediately. In other instances, the brain may call for a truce—a compromise between the two options. For example, one may choose to sleep a little longer but also extend the gym workout by half an hour. Making such a truce is only effective if we successfully keep the tailing end of the bargain. There is no point allowing yourself to sleep in late if you don't also extend the gym hour! Left unchecked, this practice of making a truce can be very harmful. It can be fertile ground for an entirely new problem—procrastination.

Procrastination is when the quickly gratifying option is accepted immediately and the slowly gratifying option is put off for a later date. Because the latter is never “given up”, only “put off”, the person does not feel the guilt of failure. Procrastination becomes an issue if it becomes habitual. Habitual procrastination pervades into several areas of life and can be debilitating. To tackle it, we must employ the steps enumerated earlier in the chapter on habits.

THE CONFLICT WITHIN

The Dual Motive Conflict can be understood further when one sees how it manifests itself in the brain. The fight between the two motives—one distant and obscure, the other immediate and tangible plays out in different parts of the brain—the neocortex, which is the most recently evolved and rational part of our brain and the primitive brain that controls our emotions. All conflicts where one struggles to exercise one's will can be seen to be constituted between a logical decision versus a desire for some form of instant gratification that results in an emotional feeling of satiety.

The prefrontal cortex, or PFC, is the part of the neocortex at the very front of the brain, which is involved in “executive functions” such as planning, goal allocations, and actions. The amygdala, on the other hand, is part of the primitive brain and is responsible for processing base emotions that come from sensory inputs like happiness, anger, avoidance, defensiveness and fear.

So, if we have set ourselves the goal of eating healthy and find ourselves

being offered a cheesecake, our PFC, being logical, tells us to avoid it. However, our primitive brain being the repository of emotion simultaneously prompts us towards satiating our desire at the expense of the PFC's logic.

As seen in the earlier chapter on Decisions and Biases, the primitive brain, also termed System One is an automatic, intuitive and effortless side of the brain, whereas the PFC, also termed System Two is the deliberative and effortful side. Due to the difference in the effort required by each part, we tend to naturally lean towards using our emotional, primitive brain rather than our rational PFC. It is why despite our very best intentions, we often see ourselves losing the battle.

TEMPORAL DISCOUNTING

As mentioned before, the brain tends to push us towards reward systems that are immediate and therefore more appealing rather than towards those that are distant or abstract. This tendency of the brain is called temporal discounting. In trying to address temporal discounting, four methods come very handy:

1. Avoid the Temptation

The first method to address temporal discounting is very intuitive—simply avoid the temptation!

In one study, children in the age group of 4 to 5 years were shown a marshmallow. They were told that if they successfully managed to resist eating it for five minutes, then at the end of the five minutes they would be given not just one, but two marshmallows to eat! Each child had been spoken to alone and was not in competition with the others. The children were kept alone in a room with the marshmallow before them and were observed from behind a screen. The intention of every child was to wait out the five minutes, as was seen from their hesitation to eat the marshmallow immediately. Yet, most succumbed to the temptation and ate it within minutes of being left to themselves in the room. The few children who successfully managed to resist displayed a common behaviour. They either closed their eyes or looked away. By avoiding the sight of the enticing marshmallow, they had avoided temptation.

Researchers believe the mere presence of temptation makes us behave in ways we do not expect ourselves to behave in normally. This tendency is explained by the fact that we construct our resolutions in the absence of temptations, oblivious to the strength of their magnetism and seduction. When we actually face the temptation with their full force, we are unprepared for the intensity with which they attract us. Avoiding temptation is thus the strongest means to address temporal discounting. It is effective because it serves to remove the duality of motives, making it easier to concentrate on the originally intended action.

2. Visualize the Euphoria of Success

When the children in the experiment mentioned above were interviewed later about what they had done to help them in those five minutes, a few went on to mention what they thought about while they looked away or closed their eyes. Some had busied themselves with thoughts completely dissociated to the marshmallow—thoughts of friends or toys and the like. In doing so, they had truly adopted the method of avoiding the temptation—even in their thoughts. Others specifically tried to concentrate on the happiness of getting both the marshmallows. In fact, one boy went on to describe how he had visualised himself stuffing both marshmallows together into his mouth!

This brings us to the second method of addressing temporal discounting—visualising the successful completion of the originally intended task. This works because reinforcing such a thought repeatedly in the mind helps to move the distant and abstract motive into a more immediate and tangible zone and helps it compete with the immediate temptation at hand.

When using reinforcing techniques, care must be taken to note that reinforcement works more deeply with visualised thought as compared to verbalised thought. This is because images, even those that are just created in the mind exude a stronger sense of tangibility and actualness to us than words.

3. Stay Aware of the Tendency to Succumb

It is easiest to tackle a temptation when its presence can be avoided altogether, but what when avoiding it is not in one's hand? To illustrate an

example, we have a system at my workplace of placing cookies at the centre of the table during group discussions. This is especially adhered to when the meetings are expected to be fairly lengthy. The idea is to enable anyone who is hungry to instantly grab a bite rather than leaving him to confront a rumbling stomach, veering his mind away from the discussion. This works splendidly at maintaining involvement but, as you must have guessed, it makes the temptation of cookies very difficult to avoid! What can one do in such a situation?

The third method to tackle temporal discounting is employed when avoiding the temptation is just not possible. It needs one to do just the opposite of avoiding—staying conscious and aware of the tendency to succumb to temptation. So in the example above, consciously staying mindful of one's tendency to reach for the cookies can itself be a deterrent to reaching out. True, this is much easier said than done, but it is easy to see several instances when one may be forced to employ this method. Consider situations when you may have successfully avoided unhealthy meals for weeks at home by simply not stocking them and by choosing healthier alternatives. What would you do when called to a party? Or consider the necessity of using a smartphone in today's day and age. Without completely avoiding the use of the smartphone, how does one hope to tackle the tendency of spending hours browsing through the mostly irrelevant web pages or media? It is only by staying conscious of the temptation that it can be overcome in such cases. Of course, visualisation techniques employed in parallel can make the task easier to deal with!

THE ROLE OF SOCIAL SUPPORT

Widely, social support has been seen to be very effective in strengthening one's will. Think about the social groups one may exercise in—gym partners, yoga groups or regular sports buddies in tennis, squash, badminton and the like. Alternately, consider the various online chat forums where members often relate personal accounts of the strong and meaningful support they receive from the group. Social support can prove to be an extremely strong positive influence, making one better both at conducting difficult one-off tasks or sticking to a new challenging routine.

The reason they work is that sharing one's experiences with others in a similar situation provides reassurance from knowing they too are undergoing the same tests, trials and temptations as you are. For the more rationally inclined person, such a group serves as a great source of information on tactics to cope. For the more emotional person, it serves as the perfect forum where people encourage you in case you slip up a few times. For the competitive person, a little healthy competition goes a long way in staying the course and not giving up before the next guy. Thus, irrespective of the sort of support different people may need, social support groups serve as an invaluable resource.

There is one aspect of social support however that manifests differently in different people—that of having oneself accountable on a personal task to someone else. In one scenario the act of reporting serves as a driver—either because the individual derives satisfaction from sharing his progress or because he simply keeps himself on track so as not to fail in someone else's eyes. The act of reporting strengthens his will to complete the task. In another scenario, the personal pride and pleasure of watching oneself stick to an arduous routine are overshadowed by the very impersonal obligation to report to an outsider. The intrinsic activity done for the satisfaction of meeting a personal goal becomes an extrinsic activity done to satisfy someone else, thereby draining motivation and weakening the will.

Ultimately, having social support groups to fall back upon is immensely beneficial in strengthening the will for multiple reasons—they are informative, lend emotional support and provide healthy doses of competition. Yet, the specific nuance of reporting progress to a person or to a group that knows us well can raise diametrically opposite reactions in different people.

BUILDING WILLPOWER

Certain research circles view willpower as a limited amount of self-regulatory resources that a person owns. As we go about our day, we begin expending this fixed amount every time we engage in tasks that challenge our will. Just as a series of many simple activities can together drain us of our energy, similarly engaging in many tasks that each need just a little willpower can

drain our overall self-regulatory resources. As a result, our ability to exercise self-control reduces as the day passes.

Consider this list of situations that are commonly experienced and tend to test our will:

- *Waking up in the morning, leaving the comfort of a warm bed*
- *Pushing oneself to exercise when it hasn't yet become a cherished habit*
- *Avoiding food that may be junk but is also our favourite*
- *Avoiding conflict with rash drivers we may find on the road*
- *Controlling the speed limit at which we drive*
- *Tolerating unreasonable attitudes, say from clients whose business is needed*
- *Moderating our time on social networks*

The list can go on! Isn't it striking to note how many of these tasks are mundane and routine? In their routineness, we often overlook their capacity to deplete our will! So if there are these and several other mundane situations that deplete our daily reserve of willpower, how do we keep our will strong as the day progresses? And how can we hope to face the larger challenges we seek to take on?

The key lies in realising that even though in the short period, our self-regulatory resources are fixed, it is possible to expand them over time by training. This is much like a person's body strength—even though from day to day, one's strength barely varies, it is definitely possible to strengthen one's body over time through regular training.

Even the manner of training is similar—just as exercising a muscle needs us to begin with a few simple exercises and gradually increase them, so it is with strengthening willpower. One needs to start small and learn first to tackle just a few simple challenges. Starting with just a few reserves more willpower for each of the tasks and improves our ability to overcome them. Like a muscle must not be strained by overworking it too soon, the will must not be broken by overworking it at one go either. Over time, once success is regularly seen in the simple tasks, the next set of challenges can be taken up. As time progresses, the ability to tackle multiple challenges is built, and the power of our will is strengthened for life!

Knowing the reasons that cause us to slip up—the Dual Motive Conflict, temporal discounting and the manifestations of these between the younger rational part of our brain and the primitive emotional part—helps us understand that controlling the will is difficult and that we mustn't be too hard on ourselves if we fail a few times. Importantly, practising slowly and regularly to strengthen our willpower starting with the small, mundane and seemingly inconsequential tasks is essential to mastering our power of will and readying us to take on any of life's challenges head-on! It is hoped that practising the techniques mentioned in this chapter—avoiding temptation, visualising success, staying conscious of our tendency to succumb and relying on social groups will make your endeavour in controlling your will easier and help you on the path where you are more in control of the trifle and profound circumstances in your life!

KEY TAKEAWAYS FROM THIS CHAPTER

1. *Dual Motive Conflict: Every instance of asserting our will is a choice between two different motives—one with immediate and tangible gratification, the other with delayed and abstract gratification.*
2. *Temporal Discounting: Our brain tends to urge us to choose the action that results in immediate and tangible gratification. It tends to discount the action that provides a long-term and abstract gratification.*
3. *The Conflict in the Brain: The task yielding immediate gratification is processed in the emotional, primitive part of the brain which functions intuitively and effortlessly. The task yielding delayed gratification is processed in the evolutionarily younger and rational part of the brain which is deliberative and effortful. As a result of the lesser effort needed in the former, we easily yield to the immediate temptations before us.*
4. *Countering Temporal Discounting: Three methods are helpful—avoiding the temptation, visualising success and in cases where temptations cannot be avoided, staying conscious of the tendency to succumb to the temptation. Relying on a social support group is also beneficial to keep one on track.*
5. *Building Willpower: Willpower depletes as we go through the day and is used up even on the most mundane and routine tasks that test our resolve. Strong willpower is the result of continuous practice starting with the small (and few) seemingly inconsequential tasks and steadily graduating to more (and many) demanding ones.*

Chapter 7

EMOTIONS

What role emotions play in our lives

“If your emotional abilities aren’t in hand, if you don’t have self-awareness, if you are not able to manage your distressing emotions, if you can’t have empathy and have effective relationships, then no matter how smart you are, you are not going to get very far.”

– Daniel Goleman



My niece Emma is an exceptionally sensitive and expressive child. A few years ago my brother came down to visit us from the States and Emma tagged along too. She was about six then. My son Kevin, then five, was happy to have a new companion to play with, and they were soon inseparable. Unfortunately, a few days into the vacation an intense fight erupted. It began with a simple dispute centering on their unwillingness to share a toy. After several minutes of haggling to play with it, Kevin snatched the toy. Emma’s protests went louder and louder until at last Kevin refused to acknowledge Emma anymore. Emma suddenly burst into tears. On being asked why, she said painfully, “Kevin really hurt my feelings.” Emma had not been hurt when the toy was snatched. She had not been hurt when they had argued. She was hurt when Kevin had stopped speaking to her.

In another incident at work, a young reportee shared a personal story with me. Inter-caste marriages still cause contention in large sections of Indian society. This young man had gone against his family’s wishes and married a girl of his choosing from outside his caste. Although he had expected an upheaval from his family, they meted out what he considered was the most hurtful punishment. They had cut off from him completely. The poor young man was left so deeply hurt, he nearly shook with emotion while narrating his story.

The sense of being ignored or isolated can be very painful for child and adult alike. Even our expression for it is “hurt feelings”—similar to a bruised elbow or a scratched leg that you can feel hurting. This expression is not too

far from reality—neurophysiologists have found a much closer link to emotional and physical sensation than we'd imagine. Not only do emotions lead to physiological changes in the body, but emotional duress causes real physical pain. This is why a feeling of excitement can get your blood rushing and why stress, even emotional and not just physical stress, can result in a headache.

But it isn't just a matter of perception. We don't just perceive physical and emotional pain in a similar manner. Physical and emotional pain are processed in exactly the same regions of the brain! This was concluded in Dr. Naomi Eisenberger's experiments that compared regions showing neural activity during social isolation versus during physical pain. Social rejection may, therefore, not just be figuratively but be literally "painful". The next time we consider ignoring someone or losing our handle at them, we might do well to remember that our act is equivalent to a physical assault! It is terribly unfortunate then that our social norms, that correctly advise restraint rather than letting-go at hurtling physical abuse on someone, rarely meet the same standards of advocacy against non-physical assault.

EMOTIONS AND EVOLUTION

Compared to the rest of the animal world human beings possess the capability of higher brain functions such as thought and decisioning. Yet, the primal evolutionary responses that we share with much of the animal world control us more often than we'd like to admit. Our brain is essentially designed for a singular objective—to help us survive. Emotions are an integral part of this evolutionary mechanism. They are an instant clue to us of our physical and social well-being. Our emotional perception, let us call these our emotional antennae, are always on, scanning the environment for threats. Their purpose is to make us aware of the threat (or its waning) quickly so that we can be instantly stirred up (or wound down) into an act that overcomes the threat (or conserves our resources) thereby ensuring our survival.

Emotions enable our body to react to situations. For example, anger or fear sets your heart and breath racing so as to prepare you for a fight-or-flight response—a natural response to threat built into us from prehistoric times and retained through evolution. This response allows us to assess the extent of the

threat and choose to either fight it or run away from it, either way improving our chances of survival.

If we consider the origins of this mechanism in prehistoric times, when ferocious predators were a common threat, the importance of the fight-or-flight response becomes evident. Similarly, positive emotions, such as the intense gratification felt at the end of the habit loop serve us in an important manner by making the habit stronger. This not only helps to make habits stick but enables efficiency by leaving the habitual task to the intuitive, nearly-auto part of the brain and releasing mental resources for other cognitive tasks.

While emotions are part of our primitive responses built in evolutionarily over millions of years, evolution has also granted us the higher abilities of scrutiny and thought. Emotions play out moment after moment, day in and day out without pause and have the ability to raise us to our best or bring us down to our lowest depths. Therefore it becomes important for us to learn to be in control of our emotions by watching them closely and scrutinising them. Emotions also have the ability to affect others around us and in turn to stir up their emotions. Being the social animals that we are, it is important for us to be attentive to other's emotions to be able to foster a sense of belonging effectively. Let us therefore in the remainder of this chapter try and understand more about the working of this extremely important survival and social tool—how our brain processes emotions, how they benefit us, and lastly how at times they can be brought under our control rather than being controlled by the environment we find ourselves in.

THE PHYSIOLOGY OF EMOTIONS AND THE LIMBIC SYSTEM

Most of us find it difficult to think of emotions beyond an expression of our mood. We identify it through its several specific categorisations—being happy, sad, angry, jealous, scared, etc. or through different shades of these categorisations—feeling elated versus feeling calm, feeling livid versus feeling irked and so on and so forth. But what exactly are emotions? Neuropsychologists view emotions as a psychophysiological phenomenon experienced while interacting with internal or external biochemical influences and environmental stimuli. Quite a mouthful description, isn't it? Let us break it down:

Emotions, unlike the general perception that they are felt solely in the mind, are experienced psychophysically, i.e., in mind and body alike. They are formed in reaction to a stimulus or trigger. Some stimuli may be environmental, such as the sensations of sight, hearing, smell, taste or touch. Others may be biochemical in nature, such as through the intake of chemicals in food and drink like chocolate and coffee that contain caffeine or even complex biochemical phenomena such as memory and thought. Biochemical influences are also released by the body itself in response to the environmental stimuli. This is where some neurotransmitters play an important role, for instance,

- **Dopamine** – *The neurotransmitter responsible for various functions such as how we move, what we eat, how we learn and what we get addicted to.*
- **Noradrenaline** – *The neurotransmitter which is also called norepinephrine is responsible for mobilising the brain and body for action. It increases alertness, promotes vigilance and gets released in high quantities during situations of stress and danger.*
- **Serotonin** – *The neurotransmitter popularly thought to be a contributor to happiness and well-being. Some researchers believe that this chemical is responsible for mood balances and the lack of it can lead to depression.*

THE LIMBIC SYSTEM

The limbic system is the area of the brain most heavily implicated in emotion and memory. Let us look at a very basic overview of the processes of the limbic system (rather than all its component structures, of which there are several).

Within the limbic system, there is a minuscule structure shaped like an almond and hardly any larger. This is the amygdala, and though tiny, it is considered most central to the functioning of the limbic system and the processing of emotions.

The amygdala processes all emotions but is especially sensitive to processing fear and anxiety by identifying and assessing potential threats. It evaluates emotions and helps categorise them as pleasant or unpleasant.

Based on this categorisation, neurochemicals such as dopamine, noradrenaline, and serotonin increase or decrease in the body causing necessary changes to control bodily functions and movements.

The amygdala also helps in habitual conditioning and in attaching emotional value to learning processes and memories. Emotional arousal following a learning event influences the strength of the subsequent memory of that event. So, higher emotional arousal results in better memory retention.

The amygdala connects to another part of the brain (the hypothalamus) that regulates the nervous system's autonomic reactions, i.e., involuntary processes like heartbeat, pulse rate, etc. The autonomic nervous system, in turn, activates the adrenal glands required to produce adrenaline, which results in the fight-or-flight response explained earlier.

Through a connector (called the thalamus) the amygdala connects to the sensory areas in the brain lying outside the limbic system that process sight, hearing, taste, touch and smell. The hippocampus, also part of the limbic system, integrates emotional experiences processed by the amygdala with memory—especially long-term memory and spatial memory.

Thus, we see that emotions are a complex system that intermingles sensory perception, biochemical processes, autonomic bodily functions, thoughts, feelings and memory.

THE BENEFITS OF EMOTIONS

The overarching purpose of emotions is to help us survive. Let us see how this purpose can be viewed in terms of the three key benefits it provides:

1. Emotions Scan for Danger

Imagine you are driving your car with your friends keeping you company. There aren't too many other vehicles on the road. Maintaining a certain, though lowered focus on the road, you are enjoying the conversation in the car. Suddenly, a truck turns into your lane from the opposite direction and is very close. There follows a surging sense of alarm in your mind and body. You focus all your attention on the best possible response so that you can move your car away from the path of the truck while avoiding traffic plying

alongside you.

What enabled your response? The sense of alarm you felt were your emotions jolting you into waking up from a relaxed state to make you urgently aware of the peril you were in.

As mentioned earlier, our emotional “antennae” are always on. They scan for clues from the environment. And while they notice a wide variety of things, they are especially alert about making you aware of any danger at hand. In their need to scan the environment and serve as efficient lookouts, emotions also make us perceptive to other environmental clues. It is mostly emotion in play, for instance, that allows you to instantly realise the mood of the conversation even though you may have just walked into a room. Emotions, therefore, play an important role in scanning our environment to allow assessing it, especially for any clues of danger.

2. Emotions Create a Compulsion to Act

Almost every emotion we feel compels one strongly into action. For example, anger creates a strong desire to overcome a perceived injustice. This may either manifest as an urge to lash out or as a strong motivation to overcome the injustice. Similarly, a sense of fear triggers the flight-or-fight response. Happiness creates a positive disposition towards the act itself, thus compelling us to perform the act over and over again.

This connect between emotions and their ability to compel action is seen in the concept of advertising. In fact, it forms the very basis of advertising that aims solely at impelling a consumer into adopting a brand by creating positive emotions which resonate with the brand.

3. Emotions Enable Bodily Changes to Help Overcome the Challenge

Marie “Bootsy” Payton was working the lawn mower at her home in High Island, Texas when it slipped away. Her granddaughter Evie ran towards the mower to try to help stop it but was knocked underneath the still-running machine. Payton, in a state of extreme concern and shock, reached the mower, lifted it off her granddaughter and pulled the child back to safety. When

Payton later tried to lift the mower again, she was surprised she was unable to lift it more than a few inches.

The inexplicable rush of energy that had enabled Payton was a result of surging emotions. Emotions possess the ability to create powerful physiological changes in order to assist us in the completion of an act, especially one of survival like in the case above. Even in less extreme cases, the effect is noticeable. The rushing of blood, the faster pumping of the heart and the increase in frequency and depth of breath when one faces a challenging environment (picture yourself being part of a sporting event or hotly competing for an award at your workplace) are results of emotions working hard to assist us in overcoming the challenge at hand.

THE COGNITIVE APPRAISAL THEORY AND ITS SOCIAL RELEVANCE

Most of us easily identify with the notion that life events cause us to feel a certain way. We might hear ourselves say, “The rain makes me feel so gloomy.” or, “Darn it, Sarah’s late. She makes me so angry!” or, “I love the smell of fresh jam! It gets me all cheery”. The view taken here is that the rainy weather, Sarah’s delay and the smell of fresh jam were responsible for rousing the feelings of gloom, anger and cheer. That external events caused internal feelings.

Let us look at another example. Consider you were trekking along a treacherous path and were to suddenly lose your footing. Your mind would instantly register fear. Here, the sense of alarm you feel, before you grab a vine for safety, is indeed caused by the momentary peril you were in. The treacherous circumstances caused your internal registration of fear.

It might seem surprising to know that we are responsible for our emotions more often than not and emotions are generally not as dependent on external factors as we tend to believe. In the first set of examples given, the same rainy weather make have roused a happy or romantic feeling in another person. Sarah’s delay may have triggered anxiousness instead of anger in another, and the smell of jam may have turned someone else off, simply because they didn’t like jam!

Now consider differing tastes in music. How is it that the same music arouses different feelings in different people? If we think about the generational differences in music taste, we get a clue to the real causative factors that stir our emotions—conditioning. It is our beliefs, thoughts and conditioning that tend to influence our emotions more than the environment we find ourselves in.

The Cognitive Appraisal Theory states that apart from a handful of circumstances (such as those that kick in our survival instincts), most are triggered not by our environment but by our belief systems, thoughts and memories. How we evaluate, i.e., cognitively appraise the situations we find ourselves in, strongly influences our emotions and our reactions. What logically follows is that it is possible to be in control of our emotions by simply being aware of the role of our thoughts in shaping our emotional responses.

It is also interesting to note that humans are possibly the only animals that have the ability to feel apprehensive about the future. These self-generated emotions are unique because we provide the stimuli ourselves. We not only imagine a future event but also appraise it to be threatening, beginning endless loops of anxious chatter in the mind. Focusing on the present, consciously choosing to appraise events only as they come and observing ourselves as we appraise them has the ability to free our mind of these unnecessary loops. This is likely why several proponents of spirituality advocate “living in the present”.

In his book, *The Power of Now*, Eckhart Tolle stresses the importance of staying and living in the present. He describes how the simple act of observing one’s thoughts tends to reveal their repetitive nature. The constant and repetitive chatter in our minds is mostly unhelpful but often even harmful. The compulsive thinking wastes time and effort and drains us of our energy. Eckhart states, “The greater part of human pain is unnecessary. It is self-created as long as the unobserved mind runs your life. The more you are able to honour and accept the Now, the more you are free of pain, of suffering. When we concentrate on the ‘now’ we draw consciousness away from mind activity and create a gap of no-mind in which we are highly alert and aware

but not thinking. This is the essence of meditation.”

What we learn from the Cognitive Appraisal Theory and Eckhart’s philosophy is the need to walk the line that balances being conscious of the thoughts that shape our emotional reactions and being diligent not to let our thoughts run amuck. We also learn from the Cognitive Appraisal Theory of the range of emotional diversity that can be expected in a group reacting to the same event. Being aware that emotional responses can be so varied calls for us to be more open and accepting of our differences with others. It should encourage us to strive to understand their views better, just as we would wish others did in trying to understand our standpoint. In organisations, this takes the form of providing an inclusive environment that supports emotional expression. It requires a leader who can create in his/her team a strong sense of thriving on collaboration—a leader who stresses inclusivity, rewards teamwork and encourages the understanding and appreciation of each other’s points of view.

KEY TAKEAWAYS FROM THIS CHAPTER

1. *Our brain processes emotional pain and physical pain in a near identical manner. Thus pain caused by emotional isolation or emotional altercations is comparable to the pain of physical assault.*
2. *Emotions are a complex system that intermingles sensory perception, biochemical processes, autonomic bodily functions, thoughts, feelings and memory.*
3. *Emotions are an evolutionary response and the strongest tool in our set of survival skills. Despite the higher cognitive functions of thought and decisioning that humans are capable of, we are susceptible to the primal evolutionary responses of emotions more often than we know.*
4. *Emotions continually scan for danger; they rouse us from a relaxed state to an alarmed and attentive state to bring the danger to our attention, they create a strong urge to act (fight or flee) and enable remarkable bodily changes to help us respond to the danger.*
5. *Our emotions are not merely a result of the circumstances we find ourselves in. They are more a result of our beliefs and thought processes. They are therefore controllable.*

Chapter 8

SURVIVAL & STRESS

What survival means in the modern world

“The greatest weapon against stress is our ability to choose one thought over another.”

— William James



It was a Friday evening, and I was set for a relaxed weekend, that is, until the phone rang. A client from work was on the other end of the line. He needed me to turn around a presentation over the weekend for a meeting his boss had unexpectedly scheduled with him on Monday morning. He seemed in a bit of a pickle, and his frantic tone suggested he was anxious he'd be unable to tackle the presentation alone.

Reluctantly, I pushed my weekend plans and got on to the job at hand. I took care to consider all of the different aspects—the project idea, the thought process, the measures being taken, the impact expected and finally rounded it up with the progress and the impact seen thus far. I also tried to put myself in my client's shoes and think about the angle from which he may want to present the information to his boss. I was quite pleased with how the presentation had come together and shot it off to the client. He called back within minutes—with a list of things I had missed putting in! Thankfully, the list was short. But it was there. For all the care I had taken, not only had I missed something but what I missed had been detected by my client within minutes! I winced. How had that happened?

When presented with information, humans have a natural tendency to focus on things that are missing from a whole. We tend to be keener on noticing things that are missing than what is available. This is what makes it difficult for us to ideate solutions in any situation but much easier to poke holes in a solution at hand. No, this isn't a shielded complaint about my client's ways (though considering the weekend, I had other aspects to complain about!)—it is simply a behaviour ingrained in every one of us. This tendency stems from our survival instincts.

Evolutionarily, it was always more important to quickly identify something wrong, missing or threatening than something perfectly normal or even good. Our survival in the times of predators depended on it. This is why we see ourselves fretting about the things that can go wrong in our day rather than thinking of the several wonderful things that can happen. It is not the most rational manner to think in, but it is ingrained in us and is a part of nature's design.

OUR BRAIN AND BODY ARE DESIGNED TO HELP US SURVIVE

Evolution takes things still further—not only are we designed to hone in on things that are wrong or threatening, but many of the threats we perceive, are evolutionarily entrenched in our psyche. So even when we have no prior exposure to the threat, we recognise it because our ancestors did. This is why infants often express fear on seeing scary expressions. They “recognise” the danger even before knowing what danger itself is.

Another example, from a class on human behaviour conducted by Prof. Mark Leary, stands out: Imagine yourself getting into your car and driving away to some place you need to be. How would you feel? What are the chances you would experience fear or anxiety? Little, right? Now imagine you are sitting on a park bench enjoying a perfectly splendid day when, about fifteen feet away from you, you spot a snake. How would you feel now? Extremely fearful is an easy guess, isn't it? Since you aren't really provoking it, the snake will in all likelihood just slither away. But knowing that doesn't help lessen the fear much, does it?

If I were also to tell you that statistically, the chances of death by vehicular accident are significantly higher than death by snake bite, would that make you fear the second scenario in the park less? Quite unlikely. In today's day and age more of us have seen road accidents than we have seen snakes, let alone seen people suffer snake bites. Why then are we still compelled to fear snakes more? Take yet another example of looking at merely a picture of a snake. That picture poses no harm whatsoever. It can't bite you. It can't hurt you. Yet most of us recoil and shudder. The brain instinctively processes the image, not caring whether the object is real.

Neuropsychologists believe that the experience of extreme danger and fraught etched in the brains of our ancestors on encountering snakes (and in fact all predators) has been passed down through the ages. This is why we recognise and feel the same fear—even in cases like those mentioned above when it is utterly irrational. The brain processes certain emotions as an evolutionary hand-me-down feeling, even before it processes rationale—and as the infant’s examples suggest, even before it processes recognition.

Other examples abound—the perception of physical beauty, for instance, is almost universally accepted (though not articulated exactly this way) as the absence of imperfections. These may be any imperfections that show, say imperfections in symmetry or blemishes on a face—everyone prefers smooth, clear skin, isn’t it? Evolutionarily, the absence of imperfections suggests a healthy body more capable than others at procreation, and hence, more effective for the survival of the species. So before you can even rationalise why, you see yourself appreciating a pretty face or a handsome body.

Our brain and our body are in every way built to that one end—survival. Neurological and physiological studies focusing on the ability of survival have proven the hardwiring of our brain and bodily systems for it. They have been hardwired from ancient times to aid our subsistence and guard us against extinction. In an earlier chapter on *Emotions*, we saw how registering fear and anxiety also roused bodily changes like an increase in heart rate, breath and sweating. These changes help bring the body into a more active and agile state to counter the menace at hand. We also saw through the example of Marie “Bootsy” Payton, a grandmother who experienced a sudden rush of energy, how her body assisted her in overcoming what could have been a fatal incident. Marie had successfully lifted a massive, running lawnmower off the body of her granddaughter despite her inability to budge it by more than a few inches on prior occasions.

There are many further examples that can be given of the body’s amazing design and abilities to aid survival. Consider for instance what we share with most other invertebrates—having a pair of eyes rather than a single one. It is designed to enable the perception of depth. Our ancestors did after all need to know how near or far that hungry lion or that juicy apple was, and not just in

which direction it sat, right? The human eye also has what are called ‘M cells’. These are special cells in the retina that are sensitive to fast movement and therefore enable spotting a moving danger, even if it is hidden behind some camouflage.

The eye and the brain also allow what is known as “tunnelling vision”—an acute sensitivity and processing of only the region or area of vision where threat is assumed, rather than processing the entire visual span. It allows for efficiency and narrowing of visual attention. The anatomy of the ear and its ability to help you hear have survival attributes too. It is your ear’s anatomy, and not your eyesight, that determines how you sense your body’s balance. Your hearing perception, as you’re aware, is only lessened to a certain extent during the depths of sleep. The fact that hearing cannot be entirely shut down and the fact that your ears give you your sense of balance means your body can quickly awaken you from sleep if there is a danger of a fall or another impending, and helpfully noisy, peril. Hearing is, in fact, processed in the brain anywhere between twenty to one hundred times faster than the processing of visual input. So even if your eye’s M cells were yet to notice a camouflaged predator, your ears would likely register the noise of its breathing and ready you for fight or flight.

Navigational understanding is another essential need enabled seamlessly by the brain. Our ancestors used it to navigate through the wilderness, just like you might use it to navigate an urban neighbourhood. The hippocampus, a region in the brain, stores and processes spatial memory. It helps you create a mental map of your route. The brain’s entorhinal cortex composes of grid cells, almost like graph paper, that fit your understanding of the environment into a regular pattern.

STRESS

Encountering threat puts our body in a state of duress. The heart pumps faster, the breath is deeper, sweat glands speed up, a mix of neurochemicals build up in the body, and sometimes, there may even be signs of pain—say a headache or a backache. These are all typical signs of what we call stress.

Contrary to general perception, stress can be beneficial. It is the heightening

of your senses during periods of stress that alert you and enable your body to respond forcefully to overcome a perceived threat. Unfortunately, our bodies are only designed for the sort of threatening situations common to the several examples stated above—short periods needing an intensive and urgent response.

Like for all members of the animal kingdom, our bodies are designed to experience stress as short reactive bursts—an enabling mechanism to help overcome a perceived menace. Our ancestors lived for several hundred thousand years experiencing stress much like the rest of the animal kingdom does. Like animals, they lived in what can be called an ‘immediate return’ environment—they ate when they were hungry, they drank when they were thirsty, they fought in situations that necessitated it—forever attending to their immediate needs and not worrying about the future. This changed with the coming of the agricultural age. Man transitioned his environment from one of immediate returns to that of delayed returns. So what he sowed today would only yield him benefit tomorrow. This brought with it an uncertainty over whether the benefits would actually be received in the future. The uncertainty caused further agony over imagined events that could be detrimental to receiving those benefits. Thus began mankind’s first tryst with extended periods of stress!

Even though experiencing extended periods of stress began as far back as the start of the agricultural age (about 130 centuries back in 11000 BCE) this is still a fraction of time in the history of evolution. As a result, the human body has not yet adapted to it. Unfortunately, our experiencing extended stress is continually increasing through the years.

Mankind has, of its own making, placed itself firmly in the grip of continued and extended stress. The challenges of our modern-day world are many and constant—we struggle to stay relevant, add value at our workplaces, stress about meeting deadlines, turn around results quickly, shun compromise in quality, strive to secure a financial future—all this while trying our best to maintain and hold on to meaningful relationships and fighting every moment of the day against the clock. Sometimes even the interim routines like commuting to work are laden with the strife of persisting

for hours through congested and polluting traffic. The constant battering of events raises our stress to levels that the human body has never, through the several hundreds of thousands of years of evolution, been prepared to tackle.

Stress itself can be categorised into three different types—Acute Stress, Episodic Acute Stress and Chronic Stress.

1. Acute Stress

Acute Stress is an intense experience, but one that is short lived. It is the sort of stress that our bodies have been built to handle. It is sometimes experienced simply as a thrill or a rush of energy that is vitalising or enabling. Imagine yourself competing in an event. Acute stress is the tension your body undergoes as you strap yourself firmly into the situation, aiming for a win.

At times, acute stress can be overwhelming, such as to cause the clouding of reasoning controlled by the prefrontal cortex of the brain. But where it discounts rationale, it enables an immediate and urgent response. It allows for the very quick flight-or-fight response—a response that accelerates bodily processes that help a person either fight or flee a perceived threat. Examples can be, as seen before, the case of aged Marie “Bootsy” Payton finding the physical strength to rescue her granddaughter from a potentially fatal accident or experiencing your skin go cold when you sight danger—a condition when your body diverts blood from your skin to your muscles to allow your legs to carry you swiftly away to safety.

2. Episodic Acute Stress

These are short bursts of acute stress that come along in close succession. This is the sort of stress that the earlier description of modern-day stresses sketched out. It is characterised by a constant barrage when separate stressful events occur one after the other without giving your body enough time to recover from the stress of the preceding events fully.

3. Chronic Stress

Finally, there is what is called Chronic Stress. Chronic Stress is long term. It results from stressors that are a permanent or a near-permanent factor of one's life. The loss of a long-term partner, living in a bad relationship, stress arising

from poverty, battling a chronic illness, working at a despised job are all examples of situations that can cause chronic stress.

As is evident, these three types of stress have increasingly debilitating potential because they are experienced over increasing durations.

All stress results in the release of hormones in our body. Hormones like adrenaline and its “back up” hormone norepinephrine jolt the body into a responsive mode. This manifests as the pounding of the heart, fastening of breath, tensing of the muscles, sweating, etc. Another hormone released during stress is cortisol, also called ‘the stress hormone’. It is a steroid hormone which, in small amounts, can be life-saving.

Almost every cell in the human body has receptors for cortisol. So, depending on the particular cell it acts upon, cortisol can achieve a variety of different bodily actions. It controls much of the body’s metabolism such as controlling the release of sugar into the blood, controlling salt and water balance, memory formation and anti-inflammation, to name just a few.

The problem arises when an extended duration of stress, such as Episodic Acute Stress or Chronic Stress, forces the body into releasing cortisol over prolonged periods. This renders most metabolic activities into over action and imbalance. The long-term effects can be the cause of severe health issues like depression, migraines, chronic pain due to muscular tension, persistent skin breakouts like psoriasis, anxiety disorders, heart palpitations, cardiac arrests and presumably even cancer.

HANDLING STRESS

So how must we go about handling the potentially crippling and debilitating phenomenon of prolonged stress? Why is it that some people are capable of handling stress better than others? What makes them adept at it and how can we emulate this behaviour?

Laurence Gonzales, in his 2008 book *Deep Survival*, presented an account of several modern-day instances of people surviving against great physical odds. He spoke to survivors of events as drastic as plane crashes, being lost in the wilderness, buried under earthquake rubble or being stranded at sea in

nothing but a raft. He asked them for detailed accounts of these events and what had enabled them to survive the extreme circumstances and physical and mental challenges. He searched for patterns in the several interviews he conducted in an attempt to find some common link in the thought, behaviour, perception, personality, motivation or other trait of these people that could explain why these survivors were different from the masses of other people who had not pulled through similar or even less excruciating circumstances.

According to Laurence, four shared traits stood out in the people who successfully overcame the odds. Their chances of survival were of course never sealed, but seemed to improve greatly based on these traits:

1. *The survivors tended to be realists who quickly recognised the seriousness of their situation, rather than staying stuck in denial.*
2. *They focused on what they needed to do to survive, rather than complaining about their plight.*
3. *They held a realistic view of their own physical limitations and knew when to rest or when not to try something that might be beyond their abilities. At the same time, they were independent thinkers who would break the rules and push boundaries if they thought it was necessary.*
4. *Most reported having a strong family bond and were motivated to endure an ordeal because of their desire to see loved ones.*

Although the examples Laurence studied were limited to adventurer, life-threatening scenarios, the learnings he surmised are translatable to the relatively simpler stressors you and I encounter on a daily basis. Stressors that still manage to take their toll on our mind and body.

Acute stress, as mentioned before, is most common, occurs in short bursts, is manageable by the body and is usually even beneficial. It is the more severe stresses —the repetitive Episodic Acute Stress and the prolonged Chronic Stress that we must pay full attention to in order to manage them well. To control these stresses, it is important to begin by wholly accepting that they exist. Unfortunately, our typical response is either to ignore them (in the hope that what we don't acknowledge won't harm us) or to shrug them off and

push through. Such methods may sound brave and laudable but are of little actual help. We must recognise that attempting to simply power forth full throttle, this way only serves to be an additional stressor and cannot be a solution. Instead, what is required is a realistic attitude such as that displayed by the survivors in Laurence's study.

Episodic Acute Stress, defined as closely successive instances of Acute Stress, tends to occur from unplanned or over-planned days fitted with too many time-bound or intensive tasks back-to-back. It is typically a result of disorderly lives that are abundant with self-inflicted demands. An effective tool in tackling Episodic Acute Stress is prioritisation—not just in terms of which tasks to tackle first, but also which tasks to give up in order to regain a sense of balance and control.

It is important to recognise one's limited availability of time and energy as well as one's need for periods of recess. As mentioned before, repetitively ignoring the body's need for periods of rest only serves to keep the level of cortisol continually high in the body, creating an imbalance in the body's metabolic processes and setting one up for serious health risks. Rather than waiting for an external stroke of luck to provide a period of free time, we must learn to schedule our time-outs proactively.

Episodic Acute Stress is noticed equally in people living disorderly lives as in people displaying certain personality traits. When seen in relation to personality, people frequently caught in such loops of stress tend to be either anxious or aggressive by nature. The former tend to worry often and extensively about myriad things and expect the worst as the outcome of any event. Each task, event, decision or thought is seen as having great potential for downslide. The aggressive types, on the other hand, are often over-achievers, always pushing the envelope and their bodies in trying to get the most out of their day. They may often be harried and irritable and may, even when not meaning to, come across as hostile. Noticing other's perception of one's hostility and at times receiving real hostility in return can become a further cause of stress.

To cope with Episodic Acute Stress, therefore, one must: acknowledge the stressors, know one's limitations, practice prioritisation, schedule time-outs

and be aware of whether one's personality is a contributing factor or not.

Chronic Stress results from a person staying in the grasp of a prolonged stressor for such long periods that life without that stressor is either unknown or has long been given up. Examples could be the stress of poverty when another type of lifestyle without the pain of poverty has never even been known, or in some form of extreme loss or extreme lack. The loss may be tangible like the loss of a dear one or may be intangible like the lack of a loving, fulfilling relationship or the absence of the freedom of choice in a long-term personal or professional relationship.

Reasons for not resisting Chronic Stress are many. At times, the long exposure to the stressor may become such a familiar setting that a sense of comfort is derived from the stressor itself. At other times, its constant prevalence renders it entirely invisible. Countering Chronic Stress is the most difficult among all stresses. While it often needs medical and psychiatric intervention, the two biggest helpful factors are the willingness of the self in going down the difficult path of opposing the stressor and the willingness of a loved one in sharing this journey.

In arming oneself with a bunch of effective anti-stress strategies, the role of scheduling frequent periods of rest cannot be overemphasised. A restful break can take several forms—a good night's rest, a bout of exercise, meditation, focusing on a hobby or simply spending time in the presence of caring and supportive friends and family. The increasing pervasiveness of stress in our society and its prevalence even in younger age groups is alarming. Proactive measures taken both on personal and organisational levels are the need of the hour. Stress causes not only the loss to an individual of his chance at living a healthy, happy life but also of him contributing meaningfully to society.

The wastefulness of resources lost to burn-out and the lowering outputs of a workforce that experiences continued stress has not gone unnoticed in the corporate world. Thankfully, organisations have begun to understand the importance of providing a nurturing environment. Such an environment would seek to support work-life balance as much as providing an atmosphere of trust and inclusiveness. While such initiatives are needed and are more than welcome, the strength and contentment derived by being responsible for and

keeping the reins of one's health, happiness and contentment firmly in one's own hand are immeasurable. Hopefully, the strategies mentioned in this chapter will serve to help you in your pursuit of a stress-free, balanced and fulfilling life.

KEY TAKEAWAYS FROM THIS CHAPTER

1. *The human mind has a tendency to quickly identify something wrong, missing or threatening as compared to something perfectly normal or even good. Being aware of this tendency helps enable a proactive search for the positive side in a situation.*
2. *Our stress response is one of several survival tools. Our bodies are built to handle short, intensive and reactive bursts of stress that serve as an enabling mechanism to overcome an immediate challenge. Unfortunately, man's persisting worry about his future has created long-term stress that the body is unable to handle. Long-term stress has debilitating effects on our health.*
3. *Coping with long-term stress requires acknowledging the stressors rather than blindly pushing through them. Knowing one's limitations, practising prioritisation and proactively scheduling time-outs go a long way in reinstating a state of balance.*
4. *Being aware that personality traits—aggressiveness or excessive worrying—can become contributing factors helps check these tendencies and aids further in reducing stress.*
5. *It is important for organisations to help their employees tackle the increasing levels of modern stress. Equally, there is strength and contentment to be derived from being responsible for and keeping the reins of one's health, happiness and contentment in one's own hand.*

Chapter 9

HAPPINESS

What makes us happy

“The true secret of happiness lies in taking a genuine interest in all the details of daily life.”

– William Morris



It was the last semester of my second year in college and just a month or two before we'd have to break for the holidays. To mark the end of the academic year, a few of my batch mates got together and decided to celebrate over a campfire near the hostel. Word had it that the warden would be out over the weekend and it'd be safe to venture into something of this sort. So the following night, a few of them got together, lit a small campfire and circled around it, happily singing and chattering away. I was not at the hostel that night, as I had preferred to step out with a few close friends instead.

What began as a small group of people soon became a large gathering. One of the boys took it upon himself to organise entertainment for everyone. Playing music over the stereo would be a good idea, he reckoned. I was one of the only boys in the hostel who owned a cassette player, and without much hesitation, he decided it was okay to borrow it. So it was that a bunch of wild 19-year-olds began dancing and singing along to their favourite songs playing over the stereo, making the most of the night.

At one point, the campfire was neglected and began to get out of control. A commotion ensued as a few of the boys quickly tamed it, but by then, the commotion had already called the attention of the warden of the neighbouring hostel block. He came over, looked as aghast as one could expect and promptly reported our activities to our own warden.

Three days after the incident, a few of my friends—and I—were handed instructions to permanently move out from the hostel. I tried my best to reason with the warden, but my cassette player, which was found at the site of the campfire, was a clear validation to him of my involvement.

Very upset and hurt by this entire episode, I went about in solitude for the next few weeks. I felt helpless and in a way betrayed. I spoke to a few elders including my church priest, but nothing they said made me feel any better. Reluctantly and bitterly, I decided to accept my fate and searched for alternative accommodation for the next year. It was only after many months into my final year that I realised that living independently with a few friends and away from the hostel was one of the most cherished and rich learning experiences that I had been fortunate to experience. It had all worked out for the better.

We all go through similar experiences that seem to throw us emotionally into a deep and dark pit, climbing out of which seems impossible. Yet in retrospect, the incidents seem less daunting. The opposite is also true. If for instance, you were to win a huge sum in a lottery, chances are you would be ecstatic and deem the win as the solution to several of your life's most pressing needs—no less than the door to your dreams and happiness. But a few studies done on the long-term effects of such sudden windfalls have shown this is often not true. For every individual or family that successfully uses unexpected, large windfalls to their betterment and long-term happiness, there are several more that head towards catastrophe.

With the large sum of money, one inherits not only a solution to a current set of problems but also a new set of issues to deal with.

Take for instance the case of Lara and Roger Griffiths. Before they won a \$2.76 million lottery jackpot in 2005, Lara and Roger Griffiths led a modest life that they described they were happy and content with. The win allowed them to indulge together in life's pleasures that had thus far been out of reach. They travelled to exotic places, bought themselves a classy new Porsche and moved into an upscale neighbourhood into a mansion that cost them over half of their newfound fortune. They were happy and excited about the turn their lives had taken.

But six years after their win, Lara confronted Roger with copies of his emails suggesting he was in an affair. Their 14-year marriage was over. Roger drove away in the Porsche. A freak fire gutted their house, and every penny of their fortune was gone. While the Griffiths' fall from a position generally

considered to be fortunate was extreme, it nonetheless falls into the pattern noted in the sudden acquisition of wealth.

The general conception of happiness is one of achieving either a milestone or a destination—if I achieve such and such a goal or address, such and such an issue, I will be happy. But can that fleeting moment of joy experienced on achieving the goal or combating that issue really provide long-term happiness? How much do we really know about this universally chased state of being? Let us look at how the concept and understanding of happiness have changed over the ages.

HISTORICAL INTERWEAVING OF HAPPINESS WITH RELIGION

Happiness is a concept that has been closely entwined with religion through the ages. Religion itself, some archaeologists believe, has existed as far back as the Neanderthals—conflictingly thought to be either the predecessors or the close cousins of the human species, Homo-Sapiens. This is suggested by the archaeological evidence in the form of carvings in caves of rituals of animal worship carried out before a hunt.

If we consider slightly more recent developments, i.e., predecessors to modern religion, these would be the organised religions of the Ancient Greeks in Europe and Egyptians in Africa to Vedic Hinduism and Confucianism in the East. A common path to the achievement of happiness in these early forms of modern religion was through completely submitting oneself to the God, Gods or Goddesses of the said religion.

The concept of happiness in relation to religion has not changed much till date in most modern religions, other than probably in Buddhism. Buddhism preaches contemplating the self rather than a God as a worthy pursuit in the search for happiness. It stands apart in its teaching by laying the responsibility of happiness on oneself, an idea that finds wide acceptance among atheists and even finds mention in the sections below.

HAPPINESS IN EARLY PHILOSOPHY

The oldest accounts of happiness, dissociated with the concept of religion are in the philosophical teachings of Socrates, Plato and Aristotle.

After the ousting of the Persian invaders (479 BCE), Athens emerged from a gloomy past to witness a sustained period of thriving art, culture, philosophy and life in general. The improved standard of life after years of persecution by the Persians set the stage for changing beliefs when one could think of the possibility of happiness being possessed by humans (thought to be unattainable before).

Socrates emphasised that happiness was the ideal pursuit of every human being. Happiness was described by the Greek word 'eudaimonia', that translates commonly in English to 'happiness' but is more accurately described as 'flourishing', i.e., Eudaimonia was the aspired perfect, flourishing state of being. Socrates and his student Plato proposed that attaining eudaimonia was possible by practising and honing virtues and morals.

In later years, Aristotle added that it would be virtuous to attain perfectness, excellence and effectiveness (all three being contained in the Greek quality of 'arete'). Since reasoning was the unique ability of man, he deemed it followed that man could only flourish, be happy and be perfect through his capacity for perfect reasoning.

So perfect happiness came to be equated to perfect reasoning.

In the Roman-Greco age, the philosophy of Stoicism (that later became a religion), stressed the idea that happiness was to be found in accepting the present moment along with transcending the need for pleasure and the dread of pain.

UNDERSTANDING HAPPINESS

There are few studies that come up that present ideas on happiness separate from a religious or spiritual explanation (which we will not get into as it is not possible to validate these ideas). Of those that do come up, there are many that present the related ideas of general well-being and even of success with the flavour of contentment—widely considered a form of happiness itself. Unfortunately, what these sources lack is stating the extent to which the particular framework suggested has or has not had an impact on the happiness or well-being of people who adopted the framework. Sort of like a pill to cure

an illness, whose effects have not been validated.

Dr. Sonja Lyubomirsky, a professor of psychology at the University of California has dedicated most of her life and career towards understanding what makes us happy. She presents her work as a result of the compilation of several types of research on the nature of happiness, where it stems from and the several means of achieving it.

According to Sonja, there are three areas that dictate the amount of happiness one can experience:

1. *Life's circumstances*
2. *Genetics*
3. *Behaviour*

What is surprising is that her research indicates that on an average, across the sizeable representative sample of people she studied, only 10% of each person's happiness rose from life's circumstances—a drastically lower percentage than the widely held notion. Of the remaining happiness, 50% is derived from an individual's genetics, and 40% was related to a person's behaviour and was therefore entirely in their own hands. This is not to say that these are the exact percentages for every individual (after all for someone living in a warzone possibly 90% or more of his happiness will relate to the life-circumstances that place him in that warzone), but on a general note these percentages are an acceptable approximation for large sections of people.

Even for a person experiencing extremes, where a heavier influence of life's circumstances contributes to that person's happiness or unhappiness, the share of genetics and behaviour is sufficiently large so as to put the reins of happiness back in that person's hand.

Let us try and understand more about each of these three areas:

1. Life's Circumstances

We all chase our various dreams. These are dreams of achieving different life goals—getting a particular degree in education, probably from a particular college, working towards a desired profile at work, being in the perfect

relationship, earning a desired amount of money, owning that perfect house or short-term goals like affording a desired holiday at or even purchasing a stylish new shirt. We chase these and many other goals believing that when we finally achieve them, we will find our happiness. Truly, we even do derive pleasure and happiness from achieving these goals.

Sometimes, we find ourselves in situations that make us happy, from no particular effort on our part—a surprise from a loved one, a smile from a stranger, our favourite song playing over the radio, the chance meeting with a long lost friend, a huge windfall that we may suddenly receive. At other times, we may face situations that bring us down—small glitches like a bout of bad health, a bad outcome on an exam, an unhappy client at the workplace or more profound glitches like a serious illness, a relationship turning sour, loss of a job, etc.

Irrespective of whether the circumstances we find ourselves in are self-construed or not it is widely perceived that it is these situations that are responsible for our happiness or lack of it. Sonja Lyubomirsky directly contradicts this perception. Her studies have shown that barely 10% of a person's happiness stems from these circumstances that we place such overdue importance on. Isn't it an irony then that we spend most of the time focusing on these very circumstances in our pursuit of finding happiness? Why does this happen? How is it that the happiness, or sadness we feel so acutely as a result of our circumstances is just a mere 10%? Psychologists attribute this to what is called Hedonic Adaptation.

Hedonic adaptation is our adaptation to feelings of pleasure and pain. It is why sufficiently long after experiencing a certain level of happiness or pain we go back to feeling not particularly happy or sad. That is to say we have come back to our baseline happiness set point—the natural level of happiness or lack of it that we perceive on a day-to-day basis.

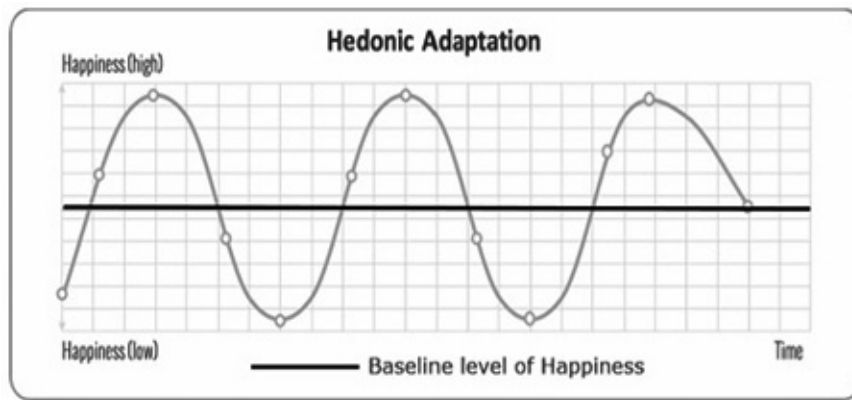


Image Credit: Blog post “5 criteria of a successful mobile game” by Igor Matrofalio

Going back to my initial examples—the desolation I felt as a teenager at being booted out of my hostel or the ecstasy experienced by the Griffiths at winning millions in a lottery—neither of the feelings really lasted. Try and recall how excited you were with some big or small purchase you made in the past—was it a new pair of denims, a smartphone, or even a car or a house? You really were ecstatic, weren’t you, but two months after buying your smartphone or a few years after purchasing your swanky home, did the purchase continue to contribute to the same level of joy to you daily? Likely not.

Hedonic adaptation not only causes you to drop back to your baseline level of happiness but has deeper effects on your mind. The mind remembers the excitement it felt in a particular circumstance and tries to re-create it. This is why a person who feels happy possessing things will want to possess more and even more—the excitement of the last purchase has died down, so the excitement of the next purchase is sought. This is not necessarily to say it is always negative. Hedonic adaptation is also why people pursue hobbies and keep at it. It is why a person feels the need to create newer and newer goals for himself in his personal and professional life.

It is not possible to live a life where we cease to be either concerned with or responsible for the various circumstances of life we create or find ourselves in. We will, in a later section, discuss more deeply on the manner in which we can approach these circumstances. For now, let us remember that the time, effort and importance assigned to chasing activities that will invariably be

affected by Hedonic Adaptation cannot guarantee our permanent joy or happiness. Know that we will be compelled to constantly search for newer and newer sources of comfort and happiness. We must, therefore, bear in mind that there are also other areas that provide much larger contributions to our happiness. Let us look at these other areas.

2. Genetics

Different people derive different levels of excitement or anxiousness when exposed to the same incident. Some of us are naturally more wary and nervous while others are naturally and frequently carefree, easily excited or generally happy. This difference in temperament is easily noticeable even from early childhood when some infants are observed to be generally and naturally happier than others.

Sonja Lyubomirsky's research suggests that 50% of the level of happiness an individual experiences is derived from his or her genetic disposition. In psychology, this relates to the baseline level of happiness in Hedonic Adaptation. This level is different for each person.

In order to validate that the differing disposition among people was indeed a factor of their genes, the disposition of twins was compared to different pairs of family members, including other normal siblings. Even in cases where twins may have been separated at birth for long lengths of time, it was noticed that the similarity in their disposition was starkly higher than between members of other pairs observed. Researchers attribute this to the much higher overlap in their genes.

Twins are not necessarily equally happy. After all, the other factors of life-circumstances and behaviour too contribute to the overall level of happiness experienced, but the underlying commonness in their genes and the related increased commonness in their perception of scenarios and the feelings elicited from those scenarios increase the chance of experiencing more or less similar levels of happiness.

So does the contribution of genes mean that a person at a lower baseline level of happiness is only capable of experiencing lower overall happiness than someone else who has a higher baseline level? No. It only means that the

first person will have to try harder to reach the same level. This brings us to what a person can do to keep the reins of his happiness in his own hands—he must take full control of his behaviour.

3. Behaviour

Considering that 60% of overall happiness is derived combined from life's circumstances and genetic predispositions, we're left still with a substantial 40%. It is very reassuring that this large chunk is entirely rooted in our behaviour and is therefore completely under our control. Adopting the right behaviours and even making them habitual behaviours (the path to which has been described in an earlier chapter on habits) is, therefore, the most crucial area we can devote our lives to in our eternal pursuit of happiness.

A question that may be asked is, 'Behaviour towards what, exactly?' Well, towards life's circumstances, of course! It isn't what happens in one's life that dictates how happy or sad we feel (not more than 10% anyway), but what we **do** and how we **respond**—to whatever it is that happens, whether it is the most insignificant or the most profound of circumstances!

Subjective well-being is a concept in positive psychology that encompasses one's own assessment of the quality of one's life. The evaluation includes assessing one's emotional state and making rational assessments of the quality of one's life. Studies show how the behaviours of people with higher subjective well-being differ from those with lower subjective well-being. To this end, Sonja Lyubomirsky compared people in the two extremes of subjective wellness and found that individuals who were happier construed life events and daily situations in ways that seemed to maintain their happiness, while unhappier individuals construed experiences in ways that seemed to reinforce unhappiness. Some such behaviours seen were:

1. *Happier individuals tended to reinforce positive memories by recalling them again and again as opposed to indifferent or unhappy people who did this less often.*
2. *Happier individuals tended to contrast negative memories rather than merely recall them, i.e., they reinforced an internal belief that 'life is so much better now'.*

3. *Not only did people on the lower end of the subjective well-being spectrum not contrast negative memories, but they also tended to dwell on them. This drained them and further reinforced their unhappiness.*
4. *Happier people chose more intrinsic goals for themselves than extrinsic ones.*

Intrinsic goals are those where an individual perceives an activity and the goal to be one and the same. For instance, reading for the love of reading and not for the completion of an assignment, though the completion of the assignment may be a useful byproduct of the activity. Extrinsic goals are when the activity undertaken and the goal are separate. For example, reading for the sake of earning a desirable grade on the assignment. Here the act of reading is not enjoyed for its own sake but only serves as a means to achieve something else. The same activity may be intrinsic or extrinsic for different people.

It is not that happy people only have intrinsic goals. It is not possible to lead a life only by indulging in intrinsic activities. However, it is possible for people to move towards having higher subjective well-being by the simple act of cultivating more intrinsic goals. Sonja construed this is why happier people in the study seemed more inclined towards living life “in the moment” and cherished simple pleasures like savouring their food or enjoying even a random walk down the street. They tended to spend more time on cultivating their hobbies and tended also to have deeper relationships, whether many or few. Some had wider social connections—not just more people who were acquaintances but a larger number of people that they genuinely cared for.

SURVEYS AND GENERAL PERCEPTION

As mentioned before, Sonja Lyubomirsky’s research suggests that as much as 40% of our happiness stems from our behaviour during life’s circumstances rather than the circumstances themselves. Clues to the significant areas of our life, that we must inculcate the best behaviours in, can be found in the results of mass surveys.

The World Values surveys of 1981 and the recent World Happiness Report that was published in 2017, showed a great deal of commonality when

respondents were probed on factors that make them happy. The top factors that emerged in the surveys were:

1. *Family and Relationships*
2. *Financial Situation*
3. *Work and Activities*
4. *Health*

Let us consider each in detail:

1. Family and Relationships

The strong attachment most of us feel towards our closest family and friends and the joy we experience from their company is very intrinsic in nature—i.e., we spend time with them for the sake of spending time with them itself—not for any other external goal. This is in accordance with Sonja Lyubomirsky’s observation of happy people spending more time and energy on intrinsic goals, including those of developing deeper familial and friendship bonds. This makes putting in an effort to nurture and develop our closest relationships an important recourse to happiness.

We also tend to believe that the strength of our bond with our closest family and friends can stand the test of time. This is true. Unfortunately, many of us take this as permission to neglect those very relationships on the basis of that very strength, knowing that the bond will endure. It is important to remember the significance of our relationships and that nurturing them and not neglecting them is the path to both our and our loved one’s happiness.

2. Financial Situation

One of the largest studies on the correlation of money with happiness, conducted by the University of Princeton, involved studying a group of 450,000 adult respondents. The study indicated that for respondents whose yearly income was below \$60,000, earning a higher income would bring them more happiness. The increase in happiness was not large but was statistically significant.

However, on studying respondents who earned slightly higher, \$65,000–\$75,000 a year, there was no correlation found between earning an additional income and their level of happiness. Having higher incomes did not make them happier.

It was further noted that having incomes significantly larger than \$75,000 also did not increase happiness. So even a multi-millionaire was not particularly happier than someone who earned \$75,000 annually.

These observations reveal the general belief that having more money equates to being happier is a misconception. It is true that being happy when one lives in poverty is not possible. Yet, as long as a person's financial capacity is at a particular threshold—one that is large enough to take care of his (and his family's) basic needs, provide a slight buffer as well as cover the occasional small pleasures—that is all that is really required. Any additional income above this threshold does not provide lasting happiness. One will, of course, be excited at earning higher and higher paychecks but as the concept of Hedonic Adaptation indicates, the elation dies down, and one will eventually return to his baseline level of happiness.

Thus, in our quest for happiness, we may consider pursuing higher responsibilities at work for other reasons, but it must be remembered that climbing the ladder in order to earn more and more will not provide us any happiness beyond the initial, fleeting excitement of the fat, new paycheck.

3. Work and Activities

We have seen how happy people find time and joy in setting intrinsic goals—pursuing activities simply because they cherish them as against doing an activity for the purpose of achieving another goal.

The more our work life makes us engage in activities and tasks that are intrinsic in nature, the more satisfaction and happiness we will derive from our work. Often, it is only possible to achieve this to varying degrees because our choice of work must balance three crucial aspects—our talent for it, pleasure derived from it and its earning potential. Yet, if we employ at least a few intrinsic activities in our work life, as well as take proactive steps to add intrinsic activities in our daily routines, such as a hobby or other passion, we

will set ourselves in the right direction for improving our overall subjective well-being.

4. Health

No sense of happiness can be found if we are not of sound health physically and mentally. Just as people suffering from chronic illnesses experience lower levels of happiness, there have been several cases noted of people emerging stronger with a higher sense of well-being after successfully battling a terminal illness. Thus, focusing on health through exercise, investing in a sound sleep and following a balanced diet greatly increases one's sense of happiness.

Our pursuit of happiness is as old as our species. We have sought it through our submission to Gods (from the time of our Neanderthal cousins to the modern religions of this day), through the practice of virtue and morals (teachings of Socrates and Plato), our capacity of reasoning (Aristotelian philosophy), contemplating on the self (Buddhism), transcending pain and pleasure (Stoicism) and through the more modern methods of empirical research (like the study by Sonja Lyubomirsky). Such a fervent pursuit through the vastness of time and the variety of approaches underlines the extreme significance that achieving happiness has always held for mankind. We have seen in the previous chapter on stress how our modern-day life and its constant barrage of demands drains us of our energy, peace and happiness more than ever in evolutionary history. Thus, the significance of happiness only increases. This increasing focus is seen not just in individuals but also in organisations adopting inclusive practices to ensure a happy workforce. More and more organisations worldwide are rightly realising the importance (and better productivity) of a truly happy workforce.

Knowing that true happiness is achievable is comforting. It is hoped that the ideas presented in this chapter will serve to put the reins of your happiness firmly in your own hands.

KEY TAKEAWAYS FROM THIS CHAPTER

1. *Life's circumstances, contrary to general perception, account for merely 10% of the happiness we experience. It is important to stop thinking of ourselves as being at the mercy of our life's circumstances.*
2. *An individual's genes create his "happiness genetic set point"—a predisposition to a particular level of happiness each person gravitates to after the highs and lows of life wear off. Genes account for 50% of our happiness.*
3. *Any of life's experience only affects us for a short amount of time making us feel either more or less happy than our genetic set point. This return to baseline is called Hedonic Adaptation. It is the reason life experiences contribute to just 10% of our happiness.*
4. *To sustain higher levels of happiness, we must concentrate on the area that governs the balance 40% of our happiness and is entirely in our control—our behaviours. The following behaviours of happy people help sustain higher levels of happiness:*
 - *Recalling positive memories often*
 - *Contrasting negative memories to reinforce that the present is better*
 - *Not dwelling on negative circumstances*
 - *Inculcating intrinsic goals*
5. *Inculcating positive behaviours in life's major circumstances especially keeps us happy. These are:*
 - *Family and relationships—nurturing them*
 - *Finances—earning enough to attend to life's basic needs, few simple pleasures and slightly added buffer and not feeling the urge to chase additional riches*
 - *Work and activities—choosing ones that are more intrinsic in nature*
 - *Health—safeguarding it through adequate exercise, sleep and*

diet

Chapter 10

BRINGING IT ALL TOGETHER

Connecting with yourself and with others

“Success is liking yourself, liking what you do, and liking how you do it.”

– Maya Angelou



It was late and well past our usual office hours. My boss Unny and I were having a casual chat, and the conversation turned towards a discussion on a life-altering decision he had his heart set on. He had spent nearly 11 years with the company and had been pondering moving on, into the Social Development sector. It was a decision he had been contemplating for a few years now. He had finally decided to take the plunge. Even as I tried to understand where he was coming from, I was slightly anxious knowing I would miss him immensely.

“Are you sure, Unny?” I asked.

“Yes,” he said with a smile.

“What makes you so certain you are ready for the plunge?”

“Not any one particular thing, really. But it’s mostly my need to find more meaning in what I do.”

At the time of that conversation with Unny, I had already spent a few years going down the long, arduous and fascinating path to connecting with myself. A journey, the essence of which, I have hopefully distilled into the book you now read. As Unny and I conversed through the evening, it struck me how his own journey to connect with himself was still ongoing. After as many years as he had spent, leading and nurturing his teams and excelling in a field he was so passionate about, he was still discovering himself, still willing to do more and add more meaning to his own life. I realised then that the journey never really ends.

One connects with oneself by observing and assessing every aspect, good and bad, of his own being, learning about himself along the way, tweaking

this and tweaking that, holding on to the best and letting the weaker bits of himself breakaway. And this journey never ends. There is always more to add, and more to leave behind.

Trying to relate to his decision, I replied, “I suppose somewhere deep down, we all want to do things that will make a meaningful impact on the world we live in.”

“Yes, but I am doing it so that I can make **my world** a better one. I am doing it for **myself**.”

That’s when it struck me for the first time.

Everything we know of this world is based on our individual perception of it. Sometimes, it matches the perceptions of others, at other times it doesn’t. Each of us builds our own little version of reality, and that is the world we inhabit, as expounded in the very first chapter on perceptions. Everything we do, every decision we take is to make this personal version of the world a better one.

As we go about our lives, some may argue that. ever so often, we put other’s needs before our own. We act selflessly for the sake of others. Yet, if we were to dig deep, we would find at the very core a motivation that is meant to serve, foremost, our very self. Don’t get me wrong; I’m not saying that we are vile, selfish beings, but motivation is a very personal emotion. At the root of it is the need to satiate a very personal hunger—even when we seem to put others before us.

Unny was primarily looking to improve his own version of the world; his means was to endeavour in improving the versions of others.

The realisation that everything we do is aimed at improving our very individual, very personal version of reality must lead us to ask how we can go about improving this reality. Surely our solution too must be very individual and personal! Unfortunately, most of us go about life rarely attempting to look inward for our answers. A standard, one-size-fits-all approach is more commonly applied. In the sections below let us outline a better solution.

A CENTRED LIFE

Everything we do at every moment is our constant endeavour at improving our individual version of reality. Bringing to life this very perfect, personal world is but a means of successfully achieving our individual version of happiness.

As seen in the previous chapter, happiness is not about finding oneself in a perfect state of life-circumstances but a constant inculcation of certain behaviours that create happiness in those life-circumstances. The behaviours, as we learnt, that provide lasting happiness in the four main life-circumstances are:

- **Family and relationships:** Learning to nurture them.
- **Finances:** Earning enough to attend to life's basic needs, a few simple pleasures and a slightly added buffer. Not feeling the urge to chase additional riches.
- **Work and activities:** Choosing ones that are more intrinsic in nature.
- **Health:** Safeguarding health through adequate exercise, sleep and diet.

Living a Centred Life, i.e., one that balances our satisfaction across these four areas of life equally is the crux of happiness. When our behaviours shortchange one area for another, we go off-centre and wonder why our happiness is no longer within our grasp.

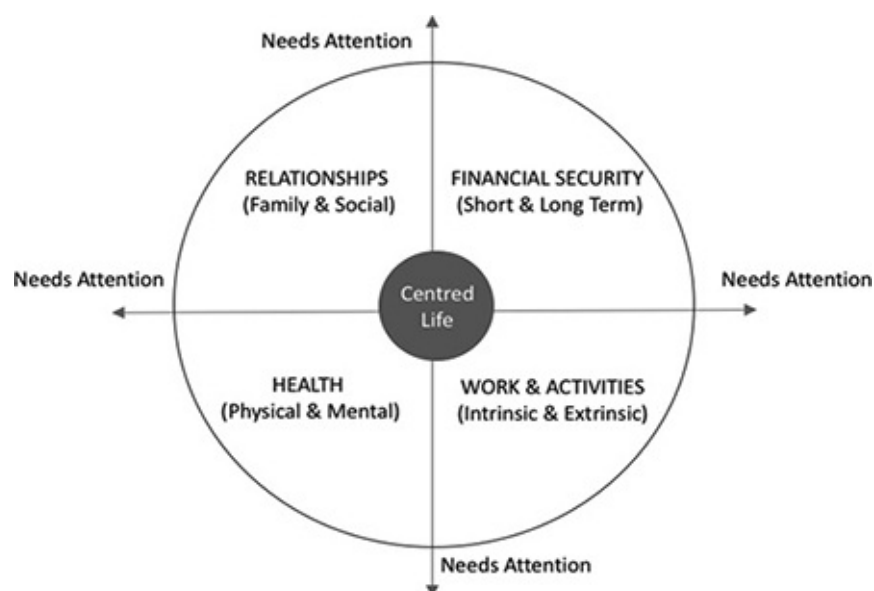


Figure: *A Centred Life – Balancing our Relationships, Finances, Work and Health.*

Quaintly, our satisfaction in these four areas of life is connected and disconnected at the same time. While our happiness depends on ensuring satisfaction in each separately, our unhappiness in one easily pervades into unhappiness and dissatisfaction in the others. The more extreme the original challenge, the more pervasive its effect on the other three.

So a person struggling in his close relationships may not be in the best frame of mind to derive contentment in his work life even if his work-related circumstances are exceptional. Extreme challenges in his personal relationships can also easily cause depression or other health issues. Another person may find himself battling with a serious and chronic health problem. The extended time and effort needed to attend to the health issue over months or years may take a toll on his financial circumstances. It may even take its toll on his relationship with caregiving friends and family if he grows to resent his dependency on them. The relationship of each with the others is easy to see. While challenges in one or more areas of life create a sense of being off-centred and dissatisfied, it is their ability to pervade into other areas of life that can cause serious and lasting damage to one's well-being. It becomes crucial to learn how to get back on track quickly before the domino effect can play out.

But how does one get back on track?

Our analysis of a challenge in any area of our life can only begin by assessing our thoughts, feelings and actions in that area—the thoughts and feelings that motivate us as well as those that hold us back; the actions that we take as well as any that we fail to take.

OUR INTERCONNECTED THOUGHTS, FEELINGS AND ACTIONS

It is easy to see that a person's actions are borne out of his thoughts and his process of assessing and rationalising them. What we are sometimes aware of but do not always consider during this process, is the significance of the feelings our thoughts provoke.

We have seen in an earlier chapter on Survival and Stress how experiencing challenges triggers our evolutionary fight-or-flight response. In the absence of an extreme challenge, such as a threat to our physical survival, this fight-or-

flight response is not very acute. Therefore, it does not significantly heighten our senses, emotions and bodily processes or make us particularly aware of them. Yet, the fight-or-flight response does play out, continuing as always to keep our best interests centre stage. It often manifests itself in the form of unending mental chatter.

Often the thoughts are clearly one way or the other—evoking a fight response by urging us to accept the challenge and meet it head-on or evoking a flight response by compelling us to evade it. At other times, the thoughts oscillate between the two responses, leaving us uncertain of our assessment and our choice of the best course of action. Such thoughts that accompany the fight-or-flight response tend to be steeped in feelings of either security or insecurity. Fortunately for us, these feelings can give us a clue as to which choice is a better one.

Similar to Unny's case, consider a person about to make a considerable change late in his career. The shift is not easy. So his mental chatter urges him alternately to either accept the challenge at hand, i.e., find his footing in the new vocation or to continue in his prior profession, i.e., avoiding all new trials and challenges. Let us suppose his thoughts lead him towards **not** switching his line of work. He can ask himself, "What do I **feel** when I think of my reasons for not going ahead?" There may be several reasons. The chatter in his mind may make him think, "The change sounds exciting but will not earn sufficient income," or "I am switching too late in my career," etc. Asking himself how he **feels** can give him a clue about whether his reasons are genuine or not.

Genuine reasons tend to be accompanied by a sense of security even when they hold us back. They only mean to help us assess if a challenge is worthwhile. On the other hand, a feeling of insecurity relates to the flight response. The objective is no longer to assess the viability of the challenge but to relinquish it altogether.

So when facing feelings of insecurity, like in the case above, we must always ask ourselves one more question, "Am I relinquishing the challenge only to save myself the pain or do I really have valid reasons?" If one is honest, more often than not, the feeling of insecurity lays bare the fact that it

is only pain that is being avoided. It marks a personal challenge we *should* overcome but are afraid to.

Thus our thoughts, feelings and actions are closely interlinked. Furthermore, being aware of our feelings while we go about assessing our thoughts can help us clear our mind of mental chatter.

CONNECTING WITH OUR SELF

We have established so far that to successfully create our perfect, personal version of the world we must achieve our individual version of happiness. This, in turn, is achieved by leading a *Centred Life*, i.e., balanced in the four major life-areas. Furthermore, challenges in any of those areas must be met by appropriately analysing our thoughts, feelings and actions. To this end, we have already seen the importance of listening to our feelings. But beyond this, which tools can we use? What are the tools that can guide us to look inwards? And how can we understand, assess and improve our thoughts, feelings and actions?

Each chapter in this book explains in great depth these very tools. It is through continually analysing the elements described in this book that we may arrive at clues to understanding ourselves and prepare ourselves for the challenges we face.

These elements are our:

- *Personal Perspectives*
- *Strengths and Intelligences*
- *Learning Techniques*
- *Existing Habits*
- *Ability to create new habits*
- *Decisions and Biases*
- *Emotions*
- *Stress Coping Mechanisms*
- *Power of Will*
- *Happiness Enabling Behaviours*

Many of life's challenges stem simply from our inadequate handling of one or more of the above elements. As we walk down the path of self-introspection

and assess each of these elements, we must ask ourselves a host of difficult questions. For instance, do our challenges stem from the dissonance between our perceptions and other's world-view? Does this call for a correction in our perceptions or are they justified? Alternately, do our challenges find root in our tendency to favour certain biases? Are there other faults in our decisioning mechanism?

In our personal and professional lives, are we overlooking our fiercest strengths and intelligences and resorting to operate only within those that find acceptance from others? Are we allowing ourselves access to the best environment for our growth, one that enables our personal styles of learning? Have we failed to hone the best habits? Or must we course correct and adopt new ones?

Are we operating based on certain emotions? Are these emotions valid or just steeped in certain beliefs? Are those beliefs valid?

Do our challenges stem from our inefficiency in tackling stressors? Have we strengthened our will to actualise the life we dream of for ourselves? And finally, have we ingrained the right behavioural practices that open the doors to our happiness—the simple yet profound practices that encompass a well-rounded, meaningful and content life?

Connecting with oneself requires, at its heart, a willingness to observe ourselves and evaluate each of the constituent facets that shape our thoughts, feelings and actions. Such an evaluation helps us stand up to the challenges we may face in the core areas of life. It thereby moves us closer to a well-balanced, centred life and, in fact, towards our happiness itself!

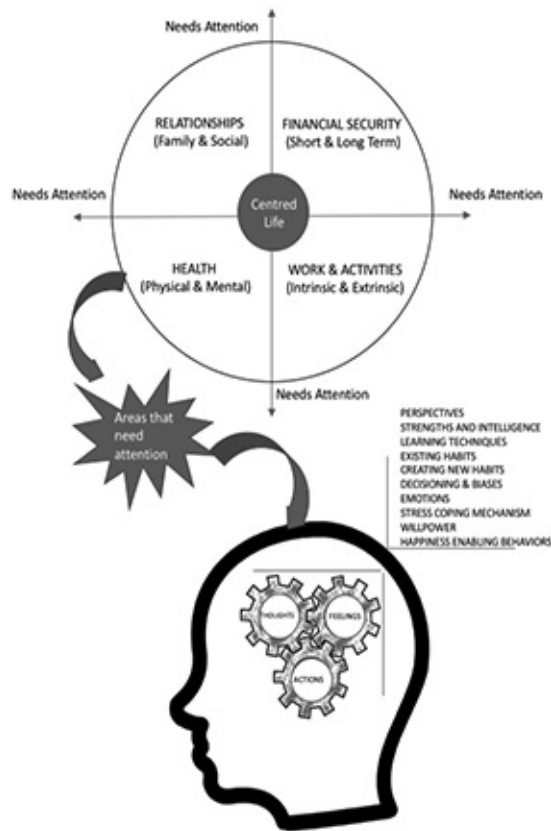


Figure: *CONNECTING WITH ONESELF—A Centred Life combined with the ability to address one’s Thoughts, Feelings and Actions adequately.*

THE EVENT, RESPONSE AND FEEDBACK LOOP

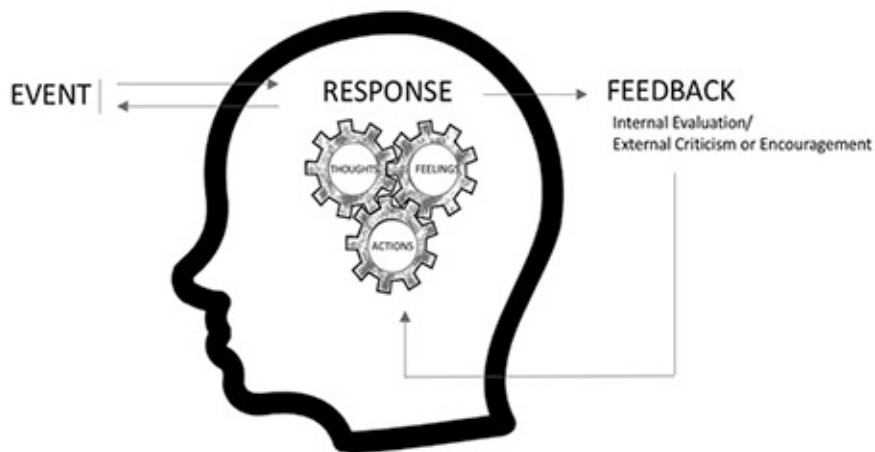


Figure: *The Event-Response-Feedback Loop.*

The diagram above reflects the continual loops in which an event elicits our response, i.e., evokes a combination of thoughts, feelings and actions from us.

The feedback we receive about these thoughts, feelings and actions, based either on our internal evaluation or on external criticism or encouragement from someone else, creates another response of thoughts, feelings and actions. This new set of responses then affects how we react to a repeat instance of the same event. The reaction elicits further feedback, and the loop plays on over and over again.

Let me illustrate this with an example.

Consider a young child who notices a box of chocolates but remembers he has been asked not to touch them. His initial response can be broken into several parts—he first refrains from touching the box and walks away (action), but he realises he really wants those chocolates (feelings), and there begins in his mind an analysis of his options (thoughts) that may go something like—“Mum gets angry if I am disobedient, but Dad usually takes my side. Maybe I can eat a few chocolates and then apologise.”

This is followed by an internal or external evaluation and feedback on the response:

The child may himself evaluate the solution thinking, “Yes, this is a good solution,” or “No, this is not a good idea.”

This is followed by one more response with a second combination of thought-feeling-action: “I’m feeling guilty, but I’ll have just a few chocolates anyway,” or “No, it isn’t right. Besides, Mum and Dad will give me the chocolates themselves if I tell them how much I want them.”

This second response will lead to how he behaves when he sees the chocolates again—he either takes a few or rushes to his parents to ask for permission.

The evaluation may instead have been external feedback from his parents—the mother’s criticism of eating the chocolate or the father’s disregard of the slight misconduct or the parent’s approval on the child’s decision of first taking permission.

Every situation in our lives and as illustrated, even the simplest scenario that a child may find himself in, is an enactment of the Event-Response-

Feedback loop. This goes on perpetually, every moment of our life, intertwining our thoughts, feelings and actions and evoking internal or external assessments. Knowing that this loop plays over and over unceasingly through our lives, isn't it important that we learn to use the measures at our disposal to master our understanding of it? Isn't it essential that we connect deeply with ourselves leading a well-centred life and understanding the several building blocks that shape our thoughts, feelings and actions—elements central to the enactment of this loop?

As we go about observing these thoughts, feelings and actions, we will find that this path of self-examination is long, twisting and arduous. It involves constantly evaluating ourselves and questioning our motives. For the thousands of people who walk down this path, there are tens of thousands who do not. But, as I have tried to show you in this book, this is also an exciting journey full of marvellous and breathtaking experiences, not much unlike Alice's adventures in Wonderland! The mysteries of the human mind, the impeccable design of the human brain, the evolutionary mechanisations that run it, the blurring lines between physical and emotional sensation, the overlay of emotion on rationale, the complex web of biases, their ease in misleading the rational mind, the commonness and uniqueness of different individuals—each of these and many more aspects astound the avid traveller as he makes his way down this fascinating path. And indeed, what makes taking this path most satisfying of all is the destination at the end of the journey—one gets to meet the most significant person who shapes his/her life – the self!

I hope that by writing this book, I have made it at least slightly easier for you to analyse the several building blocks, the several facets that make you, uniquely **you**! I hope that I have made it easier for you to **connect with your self**!

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- [4.](#) *IIT: Indian Institute of Technology*