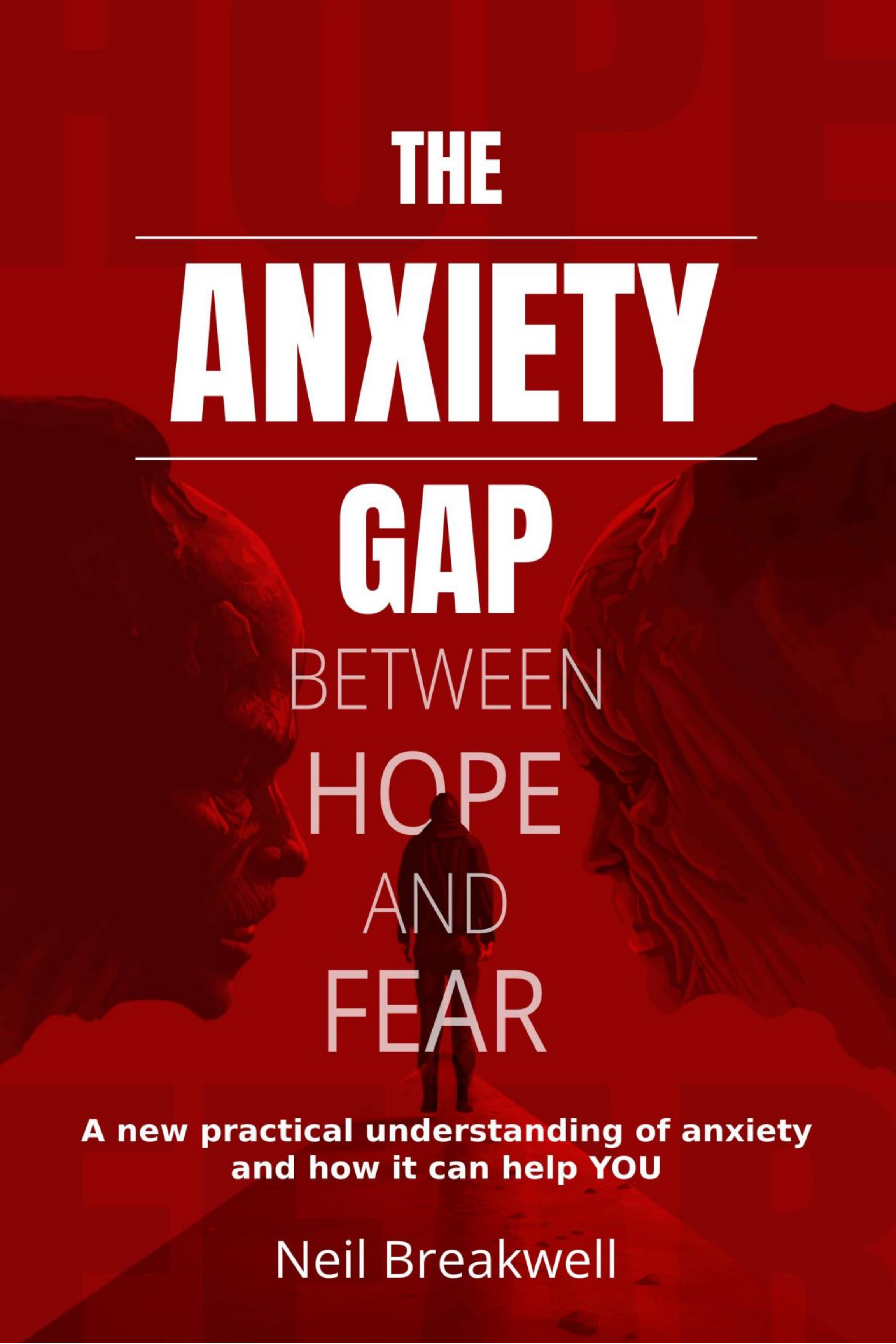

THE ANXIETY GAP

BETWEEN HOPE AND FEAR

A new practical understanding of anxiety and how it can help YOU

Neil Breakwell

THE ANXIETY GAP

Between Hope & Fear

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ISBN:

The information in this book is true and complete to the best of my knowledge. This book is intended only as an informative guide for those wishing to know more about anxiety and health issues. In no way is this book intended to replace, countermand, or conflict with the advice given to you by your physician. The ultimate decision concerning care should be made between you and your doctor. I strongly recommend you follow their advice. The information in this book is general and is offered with no guarantees on the author's part. The author disclaims all liability relating to the use of this book.

To my Mom, my Dad, and my Brother. And their families.

Family is always important.

Contents

Preface

We all know when we are scared. We also usually recognise what scares us. Fear is easy. It's a built-in protection mechanism that makes us freeze or run away from something that we expect to harm us, and, if needs must, prepares us to fight for our lives. But we always know what we are running from. Whether it be a pack of wild dogs, an axe-wielding maniac, or a tsunami, anything that we perceive to be a clear and present danger to our safety, or to that of our family, we have learned to automatically fear.

But anxiety is strangely different. Anxiety is more anonymous. While many of us may recognise similar physical feelings within anxiety as we find in fear, they are not the same, and there are always odd subtle differences that we find difficult to put our finger on. Very often it is a gnawing sense of dread; a fear without fear and no obvious cause; a sense of doom with no purpose. Anxiety creeps up on us from the shadows and seeps into our bones. It is insidious and subtle in a way that the brash drunken frat boy of fear is not.

Fear hits us hard and then leaves. It leaves nothing behind. It does exactly what it says on the tin. But anxiety? Well, anxiety is anything but straightforward. Anxiety can lie patiently for hours eating away at our minds, trying to warn us of hidden dangers, speaking a language too obscure to understand. We know it is there for a reason, but it is a reason that is impossible to fathom when its grip is tight.

The problem with anxiety, then, is that it is difficult to see what stirs it. Unlike the jack-in-a-box of fear that leaps into action every time a trigger is pushed, anxiety often seems to lurk in the background attacking whenever it feels like it. Any triggers, if present at all, seem impossible to find. So, what is it that drives anxiety? Are there specific things in our lives that provoke anxiety to bite, or is anxiety just the rabid dog of emotions?

Much of the consumer content that I have read about anxiety (including some of my earlier work to be honest) implies that anxiety is based on ancient fears that are being applied to modern-day society—fears that have become misplaced and misdirected onto the mundanity of our lives where they fester and grow as anxiety. Some mention that anxiety is a future-based fear where anxiety grows as a fear of the unknown, a fear of potential future events. Others lay the blame for anxiety on unseen adversaries, where our brains conjure imaginary fears onto imaginary foes and the dangers are anything but clear or present.

While these are all plausible, and possibly even accurate, descriptions of anxiety, they are, in my view at least, inherently flawed as explanations to anyone who has suffered from excessive anxiety. They are just not useful. No explanation is offered for the reason for any specific episode of anxiety. There is never anything that an anxiety sufferer can pinpoint as the true cause of their problems. People just want to know: "What are the triggers of MY anxiety, why are they there, and what can I do about them?"

Abstract ideas about anxiety are too often purposefully left hanging in the air like a cloud of smoke, engulfing sufferers and giving them just enough knowledge so they know the cloud is there, but not enough for them to break it down into anything useful. If I were a cynic, I might say that this was done by design, but it is more likely the lack of a useful model or a true understanding of anxiety. This lack of real understanding of what is causing anxiety creates this amorphous enemy which can be blamed for everything that goes wrong. Trying to predict what it might do next is a catalyst for generating even more anxiety. This limited understanding, and lack of details, is often more dangerous than complete ignorance. As they say, a little knowledge is a dangerous thing, and with anxiety, this is true.

This is the reason I decided to take what I had already learned about anxiety, a subject that I have been researching since 2012, and try to build upon it to form a coherent model for the average anxiety sufferer. A model that could provide a better understanding of an individual's anxiety rather than the generalisations that are most often pushed upon us. I wanted people to be able to "see" their anxiety. This is what the anxiety gap is—a visual representation of anxiety.

Very few of the fundamental ideas in this book are mine. I'm certainly not the first to use the idea that anxiety is based on conflict and uncertainty, as this has been around since the days of Kierkegaard, and even the conflict being formed between positive and negative drives is nothing new and is based on a popular modern scientific theory. All I have done is group these ideas together in a form that I hope is more useful to anxiety sufferers than the usual abstract ideas that are thrown around, and I have tried to create a visual model that I hope will make the whole concept of anxiety more tangible and more practical to people who experience it every day.

This model is based on modern-day scientific theories of personality and motivation that simplify anxiety by distilling it into a basic form that everyone can understand and hopefully can explain every single form of anxiety experienced. It is a model that exists to give anxiety a face—a visual representation—in the hope of breaking down the intimidatingly amorphous cloud of anxiety into a series of simple pictures. I wanted to find a way that any Tom, Dick, or Sally could explain their anxieties, specifically in graphical form, to themselves as much as to anyone else, without the need for a psychologist to translate it. That is where this book came from.

I hope it will be clear, that the models that I have developed for this book are intended solely to help people visualise and tackle their anxiety and are in no way intended as scientific or medical theories of any kind. It is simply a bringing together of other scientific theories and ideas about nature and the human condition into a form that might be of more use to us.

This book is not intended, unlike many anxiety books, to give you techniques to cope with individual anxiety episodes. There is plenty of literature out there that will help with calming the mind during anxious episodes and coping with serious anxiety attacks. This book is not that. This book is aimed at providing a framework with which you can view your anxiety and be able to see the problems involved. It is aimed at trying to overcome the base causes of out-of-control anxiety and show you a possible way out. There are no tricks or tips that will help you quieten your anxiety at any given time, there is only a model to help you re-evaluate what you think your anxiety is and ways that you can use this knowledge to help you bring your anxiety back down to manageable levels. It is recognised that this will take time and effort to achieve, but in the long run, I am very confident it will be worth it.

I want to warn you ahead of time about the first part of this book: The chances are that you're reading this book because you, or someone very close to you, is suffering from an anxiety disorder of some description or anxiety levels that are way above those that you find acceptable and you are looking for help, and so when you read the first few sections of the book that discuss the anxiety present in all people, you may feel that this is not addressing the problems that you face daily. I assure you; I am not trying to make light of anxiety disorders in any way at all, but I feel it is important to discuss the anxiety that is present in all of us, and what it is for, before we can delve into what makes anxiety disorders different. I also think it is important for anxiety disorder sufferers to see that anxiety is everywhere and is essential for our well-being and development and helps us grow as people, as many sufferers view their anxiety as a monster that is ruining their lives. Of course, anxiety disorders do ruin lives, and it is not your run-of-the-mill anxiety in these cases, but we must start somewhere, so I hope you will indulge me a little as I think it will all become clear later. And I think it will even help.

The book also contains a little of what some people might call mathematics and some simple equations that might seem daunting to begin with. I believe that applying numbers to this system helps to explain it better and to make it more robust as a theory, and therefore more helpful. I have tried to keep the numbers to a minimum and keep it as simple as possible, but if you are math-averse then you might find it a little overwhelming to start with. I ask that you stick with it and not let it put you off the main concept of the book. It might be worth re-reading the more number-heavy parts several times if you find it difficult, as I think it is important in fully understanding the gap model. I believe assigning numbers makes the model more concrete and practical and removes the traditional abstract nature of most anxiety theories. I also believe that once you understand how it works, it will be more helpful to you. Which is, after all, the whole point of this.

Part 1: The Anxiety Within Us All

“To venture causes anxiety, but not to venture is to lose one's self.... And to venture in the highest is precisely to be conscious of one's self.”
Søren Kierkegaard

Chapter One: The Beginning

Hedonic Motivation

Since the beginning of time in the early primordial waters of the Earth, life's single goal has been to survive and reproduce and ensure that the genetic code of each species is passed on. To do this, all living things have developed ways to solve the problems that stand in the way of their survival—they must obtain food and nutrients, regulate fluids and temperature, and of course avoid harm. This is as true for bacteria and amoeba as it is for insects, reptiles, and humans, and it is essential for survival.

It can be observed in microorganisms, insects, and fish, as much as it can in mammals that living organisms will move towards things that they need for their survival, such as food, water, or a possible mate, and will move away from things that could jeopardise their survival by causing them harm, such as a predator, fire, a superior aggressive rival, or a passive-aggressive friend. It is important to note that, contrary to common belief, a brain is not needed for these behaviours. Bacteria have no brain, or even a nervous system, and yet they will still move towards things that they need and move away from things that will harm them, although passive aggressiveness does seem beyond them. But who am I to judge?

These are the basic behaviours of survival and are automatic and innate. This is one reason why the behavioural scientist Theodore Schneirla wisely stated that behaviour is "a decisive factor in natural selection." Without these basic survival behaviours, living things would not survive to reproduce and therefore only those that had these behaviours could pass on their genes. How well an organism can approach positive things and avoid negative things plays an extremely important role in the survival of that species and is a driving force of evolution. While the mechanics and sophistication of how such behaviours are instigated differ between organisms, the basic outcomes are the same.

Even in humans, with our supposedly "superior" brains, the motivation to approach the things that we need is innate and non-conscious and driven by chemicals such as dopamine, serotonin, and oxytocin, while the equally innate motivation to avoid harm is driven by other chemicals within the brain, such as cortisol.

These drives are so powerful that they have been the fundamental building blocks of behaviour and personality research for decades, and while the methods of approaching and avoiding are different between the species, and most certainly learned behaviours in humans, the basic drives to move towards or away are in-built and ubiquitous in living things. As Theodore Schneirla also pointed out, *approach and avoidance are the most fundamental and universal classes of behaviour*.

Even before Schneirla, though, the idea that pleasure and pain, or reward and threat, play major roles in human motivation has filled history: From Epicures of Samos (341-270 BC), who contended that to achieve tranquillity and freedom from fear we must seek out modest pleasures and avoid physical pain where possible, through to a more contemporary Jeremy Bentham (1748-1832) who formulated his theory of "utilitarianism" and said "Nature has placed mankind under the governance of two sovereign masters—pain and pleasure. It is for them alone to point out what we ought to do as well as to determine what we shall do."

The idea that we are hard-wired to approach things that we deem good for us (pleasure) and avoid things that we deem bad for us (pain) is not a new one, then, and it has been backed by some of the greatest thinkers in history. These two fundamental behavioural drives have been the bedrock of behaviour and personality research throughout the last century. Hedonic motivation, as it was called, argued that a person's personality was built around their predisposition to pleasure and pain and how fervently they would move towards things that brought pleasure and move away from things that brought pain. With hedonic motivation, the drive to move towards things that will benefit us is often called "approach motivation" while the drive to move away from things that could harm us is often called "avoidance motivation". These two motivations are incredibly powerful in sculpting our overall behaviour, but while hedonic motivation is still a very intriguing and persuasive theory, it is incomplete when it comes to describing more complex responses such as anxiety. For that, we need to look at a more modern scientific theory built on the foundations of hedonic motivation.

Should I Stay or Should I Go?

The Revised Reinforced Sensitivity Theory

I hate fairgrounds! I have always hated fairgrounds. Every year, when I was young, the travelling fair would come to my hometown and camp out for a week or so on the town sports field. The kids in the area would get excited when they saw the Waltzer and Big Wheel rides being built on-site and the tired, old, haunted house being constructed. There was always a buzz in the air. My stomach, however, would sink. The weekend would roll around and my friends would be building up to head to the fair. I would feel sick. I'm still not sure why, whether it was the tightly packed crowds, the screams, whoops, and sirens of the rides, or just the rides themselves, something about the fairground scared the life out of me. And yet I still went. The longing to be with my friends, part of the group, and to share the "fun" they had there was stronger than my fear of the fair itself, and so I went along. (As we will see later, there is a little more to it than this, but it will do for now).

Once at the fair, I had a churning in my stomach somewhere between excitement and fear and I could never quite decide which it was, or which would win out. It was often a battle to remain with my friends and not make up some excuse to run home, but remain I always did. I can't say I ever really enjoyed fairgrounds, but I endured them and felt better afterwards for going.

This, then, is a simple modern-day example of what psychologists now call an approach-avoidance situation: The lure of some reward that makes us want to approach a certain thing (fun with friends), while at the same time offering a possible threat that we would like to avoid (fairgrounds. I can't be alone in this surely). If the reward is much greater than the punishment, then the decision is for an easy approach. Likewise, if the punishment is far more severe than the gain from the reward, then the decision is for easy avoidance. What happens, though, if the reward and the punishment seem almost equal? What happens if the possible reward is so good that it has us positively drooling, but to get it we must endure an unimaginable pain? How is the decision made? What is the deciding factor?

This question was answered by Jeffery Gray in 1982, when he proposed his theory of personality that he called the Reinforcement Sensitivity Theory, and again in 2002 when he updated the theory to fit more in line with the behavioural experiments of the time and renamed it (rather unimaginatively it could be said) the ***revised*** **Reinforcement Sensitivity Theory**[1], or rRST. The basis of Gray's theory was that the personality was mainly shaped through the motivations of approach and avoidance, which he assigned two conceptual networks of the nervous system that he called the Behavioural Activation System (BAS) and the Fight, Flight, or Freeze System (FFFS).

Whenever a possible reward was detected, the BAS would activate, and the subject would be motivated to approach the reward. If, on the other hand, a threat to survival was detected, then the FFFS would be activated, and the subject would be motivated to escape the danger. This we already knew, as it has simply given us names for systems in the brain that cause the approach or avoidance that constitute hedonic motivation. The interesting bit, though, is what happens when the approach and avoid motivations are activated at the same time, which hedonic motivation does not address. What happens when the BAS and the FFFS are activated together?

[1] Gray & McNaughton, 2000

Place a hungry mouse at one end of a laboratory box and place food at the other end of the box that has been laced with cat odour and you will see a demonstration of inner conflict. The mouse can see the food, and cannot see a cat, but his olfactory senses are ringing bells that a cat is near. The mouse is torn between the motivation to approach and ease its hunger, and the obvious fear of being a cat's lunch that is motivating avoidance. There is a standoff between the BAS and FFFS.

This conflict that arises from approach and avoidance being in impasse requires us to introduce a third conceptual neural system that Gray called the Behavioural Inhibition System (BIS). This system is the arbiter, the judge, that decides upon the next move when the BAS and FFFS are in stalemate. The BIS puts things on hold while it performs a full risk assessment of the situation—scanning the current predicament, along with the options and the environment, and comparing it to memories of any similar situations or related cases that may have occurred in the past. It may even promote careful and slow approach behaviour to try and gather more information.

Once the BIS has its decision, then either approach or avoidance will be set in motion. In the case of the mouse in the feline-smelling box, the BIS may motivate the mouse to slowly inspect its surroundings until it is sure that no cat is present. Once the mouse is sure it is alone in the box, then the FFFS will diminish, and the BAS will promote approach to the food. If, however, the BIS finds no previous examples from experience with which to make a decision, and careful investigation yields no answers, then it will err on the side of caution and plump for avoidance. After all, it doesn't really matter how good the reward is, if the mouse is going to get eaten when it goes to get it, it won't last long as a species.

This is a rough overview of the rRST, and the differences in the way that each system performs were suggested to be a basis for different personality traits. It should be noted that the rRST is not an obscure theory that was proposed and never used. The theory has been a mainstay in modern motivation and personality research for years, and it has been backed up in many scientific studies[2]. It has been used to develop many personality tests within psychology and is, without a doubt, a heavy-hitting and mainstream theory within the motivation and personality areas of psychology.

What interests us here, though, is Gray's idea that the BIS, in its duties as conflict negotiator, brings with it anxiety, and the weighing-up and evidence-sorting of the risk assessment process can lead to the worry and rumination that we associate with it. This means that the rRST has also become a major player in modern anxiety research and the BIS, itself, a prime suspect in the creation of all anxiety.

It is easy to see how a mouse that is torn between a meal and possibly being eaten by a cat is going to be filled with anxiety as it tries to decide its best course of action, and there is no doubt that a human in a similar situation (but with a slightly bigger cat) would also feel anxiety, but it is very unlikely that you or I, or anyone else for that matter, will ever be put in the situation where we have to choose between going hungry or possibly being torn to pieces by an oversized cat. Our anxieties aren't typically based around real life-threatening situations, they tend to be based on our finances, our security, and our social positioning. Can the

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[2] Corr, P. J., & Cooper, J. E. (1998). The revised reinforcement sensitivity theory of personality. Personality and Individual Differences, 25(2), 303-312.
Harmon-Jones, E (1998). Behavioral approach and behavioral inhibition systems: Neuropsychological evidence for two independent motivational systems.
Gray, J. A. (1987). The psychology of fear and stress.

rRST explain where these anxieties come from? Can the approach-avoidance conflict, or something like it, still be the basis of our modern-day anxious thoughts and feelings? Well, I'm hoping to show that it can, but to do so we must begin at the beginning with a deeper look into the systems of the rRST.

Behavioural Activation System - BAS

The Behavioural Activation System (or BAS) is a conceptual brain system that deals with reward. The reason we call it conceptual, is that it is highly doubtful that there is a single brain system that deals with reward. After all, we have many kinds of rewards that motivate us, and many different chemical incentives are released by our brains to give our bodies the actual physical "reward" that motivates us. It is highly doubtful, then, that there is a single neural system in the brain that deals with these processes, and it is much more likely that there are several different areas of the brain and processes involved. This is why, for the sake of simplicity, all these different motivating systems are grouped together in this conceptual system that we call the BAS. It is both elegant and easy.

The BAS, then, is the conceptual system that leads mammals towards goals. It makes us strive for the necessities in life and the things we need to survive. It makes us search for food and shelter, social bonds, financial success, and cheesecake. Everything that we deem good and important and useful in life is achieved through the activation of the BAS. When a lion feels thirsty, it is the BAS that makes it search for water. When a human needs more financial security, it is the BAS that will lead him to the job interview. When a cat wants to attack your feet for no reason whatsoever—yep, you guessed it—BAS. When our lives have a need to be fulfilled, it is the BAS that will motivate us to fulfil that need. While the BAS may not be a single system biologically, we can count it as a single system conceptually as the outcome is the same.

As with most things in the brain, the BAS does this through the release of chemicals: The main chemical used in motivation is dopamine, which is the bread and butter of the BAS and the chemical that is involved in most goal achievement, but other chemicals can also be involved. Dopamine is a neurotransmitter and is probably most famous as the "feel good" chemical that is drip-fed into the brain when we anticipate meeting a goal or satisfying a need, and then "fuel-injected" when that goal or need is about to be realised. Other chemicals that are used in motivation, and often in conjunction with dopamine, are oxytocin—the social bonding hormone, and serotonin—a neurotransmitter/hormone that, amongst its many roles, plays a part in social ranking and connection.

There are certainly more chemicals that play roles in approach motivation, but in this book, I am not going to dwell on the roles of the neurotransmitters or hormones beyond this, as I feel that they just complicate the issue unnecessarily, especially when the BAS has already been simplified so elegantly. All we need to know here is that when our brain detects a reward, it activates the BAS in order to approach the reward for our survival. How the BAS works, which chemicals are released, or which parts of the brain are used, would be overkill and would muddy the waters unnecessarily.

If the BAS is activated in the brain, and only the BAS, then the behavioural response from the body will be to approach the reward. Nice and simple.

It is a good idea, here, to take some time to get used to this overall idea and what it implies. It is not an idea that is easy for everyone to accept, but it is true: We are, none of us, truly motivated by the things around us. It is not money that motivates us, or security, or even love, it is the BAS, the drip of neurotransmitters and hormones in our brains, that is the motivation. Of course, things that we value trigger these chemical motivators and keep us moving towards them, but it is important to make the distinction: Without dopamine, oxytocin or serotonin, there would be no motivation. People don't check their mobile phones every 2 seconds because of the phone or its contents, they do so for the drip of dopamine that accompanies it.

Fight, Flight, or Freeze System - FFFS

The FFFS, or the Fight, Flight, or Freeze system, is the threat response system and is activated when our brains detect a threat. As the name implies, the response has three main actions: freeze - to stay still to avoid detection; flight - to run away and avoid the danger; or fight - to actively engage the threat for survival. In most situations, the action taken is not a choice but an automatic response to the situation and level of threat. The freeze is the first reaction and is to try and avoid detection. If an animal has already been detected and the threat is too close, then the animal will flee. If on the other hand, the animal has no opportunity to run, then it will also have no option but to fight. The cornered animal can be a dangerous thing.

This can be seen more clearly if we use an example of a cat and a mouse. When a mouse senses the presence of a cat, it will freeze in the hope that the cat does not see it and will move away without further action. If, however, the cat has already seen the mouse and is moving towards it, then the mouse will attempt to run to get away. On occasion of course, the mouse may well be cornered and have no possible escape routes. In this situation it might attempt to fight back against the cat. If the mouse deems none of these a plausible safety attempt, then it may choose a 4th option, which is fawn - basically to play dead in the hope that the cat gets bored. Fawning is not a response for every species though, and definitely not so much in humans, although I guess it is sometimes used during warfare where playing dead might have its advantages. It is usually a last resort anyway and not always successful against hungry predators.

All animals have some kind of threat response. Even bacteria and other single celled organisms have responses that will cause them to move away from predators or harmful chemicals, but of course their systems are not of the same sophistication as the systems in ourselves and other mammals. In mammals, when this fight or flight response is activated, hormones and neurochemicals such as cortisol and adrenaline are released that prepare the body for action. The heart starts pumping faster and the breathing increases all to get more oxygen to the cells and the muscles to make the animal faster and stronger (useful for running or fighting); the vision becomes tunnelled, to focus on the threat, and blood is drained away from the extremities to minimise damage to the limbs if attacked.

This is the physiological response of the FFFS system in mammals and is completely automatic requiring no mental cognition whatsoever. It is often called the fear response, and when it is activated on its own by a threat, it results in what we usually characterise as fear, with the most common behavioural response being active avoidance, or as it's known by most people, getting the hell out of there. As we will see later, though, what we know as the fear response is different from the feelings of fear that we experience, and it will be important to make that distinction.

Behavioural Inhibition System - BIS

There are, of course, occasions when a situation offers pure reward, like a glass of cold water after a long run on a hot day, and other occasions that offer pure threat, like a cobra spooning you in bed. Often, though, a situation will involve both a possible reward, and a possible threat, together, at the same time. This is where the Behavioural Inhibition System (BIS) comes into play. The BIS is the conflict resolution system and the decision maker in the BAS vs FFFS conflict. The BIS will instigate risk assessment, which will search through memory for similar situations to help in the arbitration of the conflict.

Sometimes the reward will far outweigh the possibility of threat, for example an animal seeing a delicious meal but noticing that it might have to walk over some precarious terrain to get it. In these situations, the BIS will easily award the BAS the result and instigate an approach but will also make sure that the animal treads with care. Other times, the threat will far outweigh the reward, such as if a cat can see a lovely fishy snack but it is laying in the middle of a burning building. In this case, the BIS will not take long to deem the fishy snack unworthy of the risk of being barbecued to a crisp and will award the outcome to the FFFS and prompt the cat to slink away and find a fishy snack elsewhere.

There are other times, however, when the outcome is not so obvious. Times when the reward and the threat hold almost equal sway. In these situations, one system does not obviously override the other, and a conflict between the two is created. In these situations, the BIS must work much harder to determine the best result, after all, the wrong decision could be disastrous for survival. The BIS must use all the tools at its disposal, from scouring the environment for clues, weighing up all possible outcomes and their probabilities, and scanning the memory banks for any remotely similar memories that could give a clue as to the most beneficial response. Once the BIS has a result, it will either instigate a tentative approach (while still on high alert for changes in situation), passive avoidance, which means that the animal will basically do nothing and will decide that the reward is not worth the risk, or it will activate the FFFS, which will result in active avoidance (running away, presuming it has legs). If the BAS and FFFS are equally matched and the BIS is unsure what to do, it will usually opt for avoidance of some description, as the old mantra of "he who fights and runs away, lives to fight another day" holds true for all animals. Sometimes it is not always as easy as that though.

The interactions between the approach motivations of the BAS, and the avoidance motivations of the FFFS and how a final decision can be made by the BIS is most graphically illustrated in real-life lab studies in mice that are caught between the reward of a desirable snack and the punishment of a mild electric shock. The mice are caught in the middle of the approach-avoidance conundrum as the motivations are balanced and therefore rely on the BIS to sort out the problem. But what is interesting in these scenarios is that the BIS originally opts for passive avoidance as it will often do as default in impasse situations, and the mice begin to walk away. But as they move away from the threat, the FFFS begins to diminish as the fear of the threat is reduced. The lingering smell of the snack leaves a robust approach motivation in place, and with a smaller avoidance motivation present, the BIS has a change of heart and makes the mice turn around and head back for the snack. Of course, as they get closer to the snack the electric shock generates a renewed FFFS response and the BIS once again promotes avoidance.

This cycle results in the mice being stuck in an approach-avoidance loop. It has been shown in the studies that the mice have no way to get out of the cycle as the motivations are unconscious drives and would keep the mouse walking in circles forever (or at least until the hunger got so bad that a mild electric shock was no longer such a deterrent).

This is much like the cute Facebook videos that show people running directly away from each other to see which of them their dog loves the most. Usually, this results in the dog almost self-destructing with indecision. The only difference with the dog is that its indecision is caused by an approach-approach decision, which we will talk about later, and the fact that the dog is being tormented by its humans for clicks.

The Conflict That is Anxiety

As you may have already guessed, the conflict between the BAS and the FFFS and the subsequent activation of the BIS to determine a behavioural response to this conflict, is the foundation of anxiety and is why anxiety is always associated with uncertainty. If a reward is certain, then the BAS alone will function, and approach will occur. If physical peril is certain, then the FFFS alone will function, and active avoidance will occur. This is what we call fear. Only when there is a conflict between the BAS and FFFS, and therefore uncertainty between hope and fear, will the BIS activate, and anxiety be brought into play. This is why anxiety is profoundly different to the emotion of fear.

While anxiety is often confused with fear because many of the same chemicals of the FFFS are still in play, the uncertainty surrounding the rewards and threats characterise anxiety and makes it different to fear alone. The BIS also gives rise to the characteristic rumination and worry that often accompany anxiety. When the conflict between the BAS and the FFFS is closely contested and the uncertainty high, the BIS must delve into memory, both experienced and learned, and weigh up the likelihood and impact of all possible outcomes to decide what to do. This decision-making process between approach and avoidance is a crucial factor in our survival but is also one that creates the common issues with anxiety that give rise to books like this one.

The Role of Adrenaline

I mentioned adrenaline in the FFFS section above, but I thought it important to give a few more words to this neurotransmitter as its importance should not be underestimated. Adrenaline, also known as epinephrine, is the chemical that makes all the other drives more intense. It is the supercharger that gets our hearts pumping and our lungs working overtime to make us stronger and faster. Adrenaline by itself is not linked to any specific motivation but can be combined with the other chemicals to tell our bodies how important the motivation is. For example, adrenaline can be pumped up in readiness for us to run or fight if a threat is detected, but it can also be released when we see a positive reward and the BAS is activated, such as in situations of excitement or exhileration. In this way, adrenaline never contributes to how good or bad something feels (the valence) but will determine the severity of that feeling (how aroused we are). This means, then, that adrenaline can be the difference between slight nervousness and abject fear, or mild hope and raging excitement. We will look more at how these emotions are formed later in the book.

The Problem

The rRST is a compelling and well backed scientific theory to explain the phenomenon of anxiety and has been used for years in studies about personality, motivation, mental health, and, of course, anxiety. The problem is that the rRST, as it stands, is still not very useful as an aid for individual anxiety sufferers to understand their own issues with anxiety, as it gives little insight into a person's real-life hopes and fears and how they are pitted against each other in order to trigger the BIS. This means that most anxiety sufferers would find no use for the theory and is probably why it has never gained any real traction in modern popular literature or the general anxiety field. But this doesn't mean it is wrong. Just not useful right now, in its current form, for the everyday anxiety conversation.

This is why I thought it important to take the main idea from the rRST and create a model that would be useful to any anxiety sufferer and give them the knowledge and know-how to apply this theory to their own individual anxieties.

This is why I created the Anxiety Gap.

To read more, please buy the book. It is available in both Kindle and paperback versions. You can find the links of where to buy it at: https://anxietyshift.com/