

Thinking Errors & Biases

Martine Bolton

The quality of any outcome is traceable back through the actions and decisions that were taken, to how the individual was feeling and thinking, building up to it.

Being human, our thinking isn't always perfect. In fact, sometimes it can be far from it, and is affected by all sorts of variables, including the filters through which we see the world – for example, our values, beliefs, mindset, attitude, past experiences, and so on.

A multitude of different thinking errors and cognitive biases have been identified and classified over the years, highlighting how we frequently delete, distort and generalise the information that comes to us. To follow is a selection of some of the most common. As you read them, identify any you may have found yourself doing personally, and consider the implications for yourself, others and maybe the wider world:

Filtering

Filtering is the term used to describe how we pay attention to certain details, but filter out others. An example of this is noticing someone's negative qualities and failing to see their good ones (or vice versa). Also, most white van drivers and BMW owners on the road are courteous, but if we have a reference in our brain that suggests otherwise, we may only notice those that aren't.

Think of a situation where you are (or have been) prone to making filtering errors. What are the potential risks in this?

The next time you catch yourself noticing selective details and making judgements, ask yourself: "Might I be selectively filtering here? Am I failing to notice (this person's good or bad points / the courteous drivers all around me?). Am I believing a story or myth that I've heard? What else might I notice or observe if I opened my mind?".

Personalisation

Personalisation is when we assume that something negative that happens is about us personally - seeing ourselves as the cause, and taking the blame when it wasn't our fault.

One example of this is when someone is snappy or rude to us and we take it personally, wondering what we've done to upset them, rather than concluding that they're perhaps a bit stressed or unhappy in that moment.

Another example is when someone's child experiences a failure, and the parent believes it's a failure on their part, that perhaps they didn't help their child enough, rather than concluding that maybe there's just a bit more learning for their child to do before success can be theirs.

When was the last time you took something personally, when it might have been nothing to do with you at all?

To overcome personalisation, understand that other people's behaviour is generally more about them than it is about you. When you find yourself taking things personally, ask yourself: "What assumptions am I making, and is this really about me? What else could have caused this?". It is also helpful to focus on strengthening your self-esteem, so you don't automatically assume that you are the cause of everything negative.

Polarised thinking

Polarised thinking is the term given to believing that things are either black or white, good or bad, right or wrong, or taking an 'all-or-nothing' approach to life. When our thinking is polarised in this way, we fail to notice the grey areas, variations or full spectrum of possibilities. It's as if we have a preference for wanting things to be simple and straight-forward (rather than nuanced and complex, as they often are).

One example of polarised thinking is avoiding the sun completely because you've heard it's really bad for you. Another example is believing that if someone isn't a friend of yours, they must therefore be an enemy.

What examples of polarised thinking do you have from your own life? Are there some people or things you have categorically defined as all-good or all-bad?

Ask yourself "Is it really a case of (black or white / good or bad / right or wrong), or are there more dimensions than I'm noticing?"; "Is it always that way, or are things sometimes situational?"; "Do people really either love or hate Marmite, or could some people be a bit indifferent?!".

Over-generalising

Over-generalising is when we jump to an overly general conclusion about something, based on limited experience. This can have the effect of limiting our lives and making them less rich and varied.

Maybe you have your heart broken twice in your teenage years. You make a generalisation that men/women can't be trusted, and vow never to give your heart to anyone again. Or perhaps you go for a few interviews for promotion, but don't get the jobs. You decide that you'll never become a manager because you're just not made of the right stuff.

What over-generalisations have you formed in life? They're the kind of statements that include the words always..., never..., everyone..., all..., etc. How might you be losing out because of these over-generalisations?

When you become conscious of your generalisations and sweeping statements ("Young people today..."; "Americans always..."; "Things never go right...), ask yourself: "Is it really all (young people/Americans/things), or just some?"; "How many aren't like that?"; "Which things have gone wrong recently, and which have gone ok, or even well?".

Catastrophising

Catastrophising is a form of negative, irrational thinking where we believe situations are far worse than they actually are.

For example, we may fail an exam and believe that our life is over... we will never amount to anything and will end up living under a bridge sleeping on cardboard. Or maybe when we look into the future, we worry about everything that could go wrong: "What if [this] happens, and I end up looking a fool? What if [that] happens, and I have a terrible accident, and can never walk again?"

These examples are a little extreme, but what are the ways in which you have imagined situations to be far worse than they really are? Maybe there's something happening right now that feels like the end of the world, but that actually heralds a wonderful new beginning that, in retrospect, you'll be thankful for.

When you become aware that your thoughts are running away with you, ask yourself "Am I seeing things in perspective here? How likely is that to happen, and if did, would it really be as bad as I'm imagining?". Allow the sensible, rational part of yourself to calm the concerns of the part that tends to imagine the worst.

Emotional reasoning

This is when we feel a certain way about something, and assume that we must be right ("I feel... therefore it is...").

For example, thinking: "I really don't like that person, therefore there must be something wrong with them"; or "I feel worthless, therefore I probably am worthless"; or "I really think my partner's cheating on me. The feelings so strong, that I must be right".

Our emotions can be an excellent guide in life, helping to inform our decisions, and it can be foolish to ignore a strong, intuitive feeling. However, it's wise to employ both head and heart when making decisions, as our emotions can be influenced by our past history and our fears, rather than any real danger or risk.

What ideas and beliefs do you hold that are purely based on how you feel? Can you be sure that how you feel truly reflect how things are?

Before taking any action that's driven by emotion, ask yourself: "Am I sure about this? Could my 'logic' be faulty?"; "What facts haven't I considered?"; "Are events from my past (that have no connection with this situation today) influencing my emotions?"

Labelling

Labelling is where we take one characteristic of a person, place or thing, and apply it to the whole. Labels can be positive (clever, pretty, etc) or negative (stupid, lazy, etc), but whether they are positive or negative, they can limit us, as we might not see beyond those labels to everything else that the person, place or thing is.

An example of a negative label is when someone makes a silly mistake in the first few weeks of us knowing them. We label them an idiot, and consider them as such for the rest of time, failing to recognise their other great qualities and attributes.

Another example is driving through the back streets of a city on our way to somewhere else, and labelling it a dump. It will forever be a dump in our mind, despite its many amazing buildings and beauty spots, which we remain ignorant of.

What are the labels you have attached to people, places and things (maybe even yourself)? Remember that 'what you see is what you get' (acronym: 'Wysiwyg!'). When we open our minds to seeing things in a better/broader light, it improves our experience.

When you catch yourself applying labels, remember that this is just your subjective opinion, based on limited information. Ask yourself (or others): "What are the other aspects of (the person / place / thing) that I might be missing out on?".

Finally, don't just accept the labels that you've been given. You are much more than someone's limited perception or description of you. Surprise yourself and others!

Always being right

This is where we believe that our beliefs and opinions are always the right ones. It's unthinkable that we might ever be wrong.

An example is having a disagreement with someone about something, and going to ridiculous lengths to search for information that proves them wrong. If it transpires that we were wrong, the feeling is so unbearable that we'd do anything to avoid it and save face - even continuing to uphold our faulty position in the face of evidence to the contrary.

On what matters do you tend to think your opinion is the right one, or that you know best? Sometimes that might be the case, but you won't be right all the time, because no-one is (including the 'experts').

Being wrong occasionally doesn't diminish you, or make you lesser in any sense - it just makes you human. Practise saying things like: "I'm sorry - I can see now that I was wrong", until it feels ok.

There's a little bit of magic in admitting when we are wrong, and interestingly it tends to make us rise in people's estimations, rather than fall.

Mind-reading

This is when we think we know what other people are thinking without checking it out with them.

For example, imagine someone is studying your face intently. You might think they must be finding faults with your appearance (or maybe you assume they're thinking how good looking you are).

Another example would be when you say something in a meeting, and can almost 'hear' a person that doesn't seem to like you thinking: "What a load of rubbish!".

What examples do you have of times when you've read people's minds (i.e. assumed that you knew what they were thinking)?

We are often guilty of (mis)reading faces and making assumptions about what they mean, but some people just have unfortunate facial expressions or features (RBF – a.k.a. resting bitch face!), and sometimes our mind-reading assumptions are just paranoid delusions.

Next time you make an assumption about what someone's thinking, realise that you might be wrong, and consider what else they might be thinking instead. Try asking a simple question to test your theory, for instance: "Mark, I might be wrong, but you look like you don't agree with my point. Would I be right?".

We never really know for sure until we ask.

Control fallacies

Control fallacies are where we assume we have an inaccurate amount of control, maybe believing we can control everything, or believing we can control nothing.

For example, we may think we can make someone change their behaviour, when the truth is that we can only ever hope to influence them; or we might feel unable to help ourselves out of a bad situation, believing that life is something that happens to us, and we just have to roll with it.

In truth, some things happen to us outside of our control - they have an external origin and we can't do anything about them; there are some things that we have some influence over, but only limited control; and there are other things that we have total control over (even if it doesn't always feel like it), such as our choices, decisions, actions and behaviours. We really only have full control over ourselves, and attempts to control external events and people can prove very frustrating, when things don't go as we'd like.

What are the kinds of things you try to control, or perhaps feel powerless over, and don't even bother trying to influence?

If you're trying to control something external and feeling frustrated, or feeling hopeless because you perceive you can't change influence a situation, or change your behaviour, check out your locus of control and ask yourself; "Am I trying to control something that in truth is outside of my control?", "Am I assuming there's nothing I can do to influence this?", or "Am I forgetting that I have a choice, and can choose to do something different to get a better result?".

In truth, we can influence most things, with the right approach and support.

Blaming

This is when we hold other people responsible for our feelings, actions and/or results.

For example, we might blame our manager for always making us feel bad about ourselves; we might lose patience with our children, yelling: "Don't make me shout at you!"; or maybe we blame our partner for making us fat, by feeding us too well.

Who do you blame, and for what specific feelings, actions and outcomes that you experience?

Whilst other people can provide us with a strong invitation to feel or do something, we are all ultimately responsible for our own feelings, actions and outcomes. No-one else can make us feel or do anything - only our own thinking can do that. This means that we need to give up all blame and excuses, and ask ourselves: "What thoughts am I thinking that are making me feel or act this way? What can I take responsibility for, and what can I do to improve things?"

Whilst it's sometimes tough to take responsibility, it is also very freeing. When we change how we think, how we feel and what we do, it gives us the personal power to create new and better outcomes.

Fallacy of fairness

The fallacy of fairness is when we believe that life is always supposed to be fair. When it isn't fair, we feel angry, cheated, or maybe even envious of others who seem to be having more luck.

An example would be when someone else gets a job that we were interviewed for. We feel sure they got it because of their connections rather than their experience and qualities, and we feel really resentful. Or, we develop a nasty illness, and feel angry that we got it, when we can think of lots of other people who deserved to suffer more!

Have you or someone you know been guilty of assuming that something would be fair, and getting angry or upset when it wasn't? What impact did that have?

Many of us have a very strong sense of fairness and justice, and believe that life should be equitable and fair. Yet when we look around us, it seems that life doesn't always work that way. We can feel a greater sense of peace with the things that happen if we simply accept that things aren't always fair, deal with them as best we can, and trust that everything is ultimately happening for our greater good (whether we can see it now or not).

Heaven's reward fallacy

We tend to have an expectation that if we work hard and/or give selflessly to others, that we will be rewarded for it. This is known as the 'Heaven's reward fallacy'.

We might, for example, do a lot of wonderful work for charity, and believe this will act as insurance against bad things happening in our lives; or maybe we expect to receive praise and awards for the work that we do, and feel disappointed if our efforts seem to go unnoticed or unacknowledged - especially if an opportunity is given to someone else who doesn't appear to work as hard as we do.

Have you ever expected to be rewarded, and were disappointed when it didn't happen? That's just your natural sense of justice and fairness in operation.

Whilst it often follows that the harder we work, the luckier we get, and the more good we do, the more good comes back to us, there are, unfortunately, no guarantees in life. We should therefore aim to do what we do for the intrinsic pleasure and reward that it brings, rather than for external rewards or recognition. In this way, we can never feel disappointed or resentful, and any rewards that we do get are just a lovely bonus.

Shoulds

We tend to hold a lot of beliefs about what we, and others, should and shouldn't do, and how we should and shouldn't behave.

Different people from different backgrounds can have very different ideas about this. Some of these ideas are linked to laws and ethics, and can therefore be deemed reasonable; however other ideas may be much more subjective, and are therefore not necessarily valid for everyone, in all circumstances.

An example would be feeling that we should always exercise every day, and that we should never have treats (inducing feelings of pressure, and guilt/shame when we break our rules). Another example is believing that other people should always hold themselves up to the same standards and behaviours that we do, inducing feelings of irritation, frustration and negative judgement when they don't.

What 'shoulds' do you place on yourself and others, and what effect do they have?

Try thinking in terms of 'coulds', rather than 'shoulds', offering more flexibility and choice (and we do always have a choice). Laws notwithstanding, it is best to accept that people are free to choose their own actions and behaviours, whilst not being free of the consequences of doing so.

Confirmation bias

In life, we tend to see what we want to see, and disregard the rest. The tendency to search for, interpret, favour and recall information that confirms our existing beliefs, is known as the 'confirmation bias'.

One example of this would be that, whether or not we believe vaccines are safe or dangerous, we will tend not to search out evidence to the contrary. Another example would be preferring to spend time around people who think like we do, because their beliefs don't challenge our own. When we hear something about a subject that goes against (or even supports) what we know already, we sometimes press a metaphorical 'I know' button in our minds, and stop listening fully, thus blocking any potential new learning.

Can you think of a time when you've done this? It's very easy to think that you know all there is to know about something, and that you have nothing else to learn about it.

In situations where the validity of information is yet to be proven (or where research may have been biased), it's useful to ask ourselves: "Am I certain this is true?", "Have I considered all angles?", "What if it's wrong?". Remember that it's good to keep an open mind in most things.

The Halo and Horn Effects

This is about evaluating someone's overall character based on one feature or aspect. In the halo effect, this might mean assuming that someone who looks good is good; in the horn effect, this might mean assuming that someone who doesn't look good isn't good.

An example of the halo effect is, when recruiting for a job, you believe the good looking, articulate and smartly dressed person is the best person for the job, based on those factors alone. An example of the horn effect is, when helping out in a workplace investigation, you believe that the employee accused of wrong-doing is probably guilty, based solely on their caginess or seeming inability to make eye-contact.

Have you made these kind of thinking errors in the past? What was the outcome of that?

Whilst appearances can give clues to character, it's dangerous to make assumptions. Better to ask yourself questions like: "Does this person have the skills, knowledge, experience, character (etc.) needed?"; "Could this be a decent person who's just lacking a few social skills?"; or "Is my overall perception being influenced by one characteristic? What else might I need to consider?".

Status quo bias

This is a preference for sticking with the way things are rather than changing them - even when it's not in your (or everyone's) best interests to do so.

Examples include doing things the way you've always done them, even when there's an easier/better way; staying with an employer or partner when things are less than ideal, because "It's better the devil you know"; or even sticking with the same energy supplier or insurance provider year after year, when there are significant gains to be made from switching.

Where might you be guilty of maintaining things as they are, rather than making changes that would benefit you and others? Is fear holding you back, or perhaps apathy or something else?

If you catch yourself feeling inclined to maintain the status quo, ask yourself "What do I have to lose, and to gain, by a) keeping things as they are, and b) doing something else?". Many of us fear loss more than we welcome gain, so consider what it is you're afraid of losing, and how likely that is to really happen. Change generally tends to bring progress and, ultimately, work in our favour.

Groupthink

This is when a group or team of people are (or become) so similar in their outlook that they lose the ability to think in creative and divergent ways.

In this situation, a random divergent thinker may feel highly uncomfortable offering thoughts that go against the grain, hence perspectives can go unchallenged, meaning outcomes become compromised.

Groupthink can lead to those involved believing that, because thinking within the group is in alignment, the proposed idea or decision must be right. It includes things like the unquestioning acceptance of what is popularly considered to be 'Best Practice' - even when it might not be.

When putting groups and teams together, it is tempting to choose people who we know will have things in common and who'll get along, when it's often more beneficial to seek out diversity and individuality - particularly regarding thinking styles. It's also essential to encourage employees to respectfully question, challenge and disagree with things they don't feel are right, with no negative consequences to them for doing so.

Self-serving bias

This is the tendency to give ourselves credit for our successes, but lay the blame for our failures on external causes. This enables us to maintain self-esteem.

An example would be hitting all our work targets for three months in a row, and putting it down to our hard work; we then fail to hit our target the following month, and put it down to market forces. Another example would be getting a 'Good' rating in our work's annual review, and assuming it's because we're great at what we do; we then get an 'Satisfactory' rating the following year, and put it down to the new manager, who we think doesn't like us.

When might you have blamed external forces for a result that you played a part in?

Most of us have a tendency towards the self-serving bias. Feeling good about our successes is healthy, as long as we appreciate the other factors that contributed. However, if/when we catch ourselves blaming others for a failure, we should ask ourselves how our own actions may have contributed. Nobody gets everything right all of the time, and failure can be a large part of how we learn. When we are honest with ourselves and mine our experiences for the learning, we rapidly improve and grow.

Bandwagon effect

This is the tendency to buy, do or believe things, just because other people buy, do or believe the same. The more people there are doing something, the more inclined we are to jump on the bandwagon - regardless of the facts.

Fads and trends in America never take too long to filter over to us here in the UK, and a similar effect can be seen UK to Australia. Also, celebrities are often paid a pile of money to be seen wearing or using a particular product, after which many people will rush out to buy the same thing, despite often absurd price-tags. Gerry and Kate McCann very tragically fell foul of the bandwagon effect when following their friends on holiday, who were leaving their children to sleep unsupervised whilst they ate dinner nearby (albeit whilst checking in on them periodically). This probably gave

them a false sense of acceptability and security, leading them to believe it would be ok to do the same - with the result that their young daughter Madeleine was abducted.

Where might you have hopped on a band-wagon, and with what effect?

We are all influenced by others, even if we don't realise it. We often wait to see what others do before taking action ourselves, and whilst this isn't always a bad thing, it can provide a false sense of security, as sometimes the crowd can be wrong.

When we feel inclined to jump on a bandwagon, it's helpful to check in with ourselves first, asking, "If no-one else was buying/doing/believing this, would I still want to?"

Negativity bias

Most (if not all) of us pay more attention, and give more weight, to information of a negative nature than that of a positive nature. It's to do with our survival instinct, and being on the alert for danger or anything that might prove to be a threat. Having an awareness of what could happen somehow makes us feel more prepared and in control if it was actually to happen.

One example of negativity bias is that 90% of the news presented by the media is negative, when this is not proportionately representative of reality. This is because we listen more to the negative, and therefore bad news sells newspapers and attracts viewers. Another example is remembering every insult we've ever received, whilst having forgotten most of the compliments.

Where might you be aware of paying more attention to negatives than positives? If you catch yourself doing this, try asking yourself, "What are the positives in this [situation/person/thing] that I could choose to focus on instead?"; "Are things really as bad as I'm thinking, or am I just dwelling on the negatives?"; "Is the larger part of my life pretty great, but I'm obsessing about one small aspect that isn't as I'd like it to be?".

That's not to say that we should ignore the negatives - just that it's helpful to see them in perspective, and approach them from a more constructive, solutions-focused mindset.

Optimism bias

The optimism bias is where we overestimate the probability of positive events happening, and underestimate the probability of negative events. This includes believing that we are at a lesser risk of negative events, illness, etc. than other people are.

One example is continuing to smoke or eat really badly because "Cancer is something that happens to other people, and not to me". Another example is not building in contingency time (or money) for things that might go wrong, because we think it's so unlikely that will happen.

Optimism feels much better than pessimism does. Believing that we're likely to succeed, and that things will go well for us, may lower our stress levels and lead to greater feelings of well-being. Many people believe that optimism increases the likelihood of good things happening through the law of attraction or power of the mind, and this might be true. However, it is possible to be too

optimistic, and this could lead to poor risk management. We will probably all experience a mix of 'good' and 'bad' events in our lives, hence swapping blind optimism for a more balanced outlook could be more sensible.

Where might a healthy dose of balanced optimism (or realism) serve you well right now?

In-group bias

This is the tendency to trust and value people within our social circle (or those we perceive to be like us) more than we do other people.

As an example, cliques are commonplace, often side-lining those who they see as different. In the workplace this can create dysfunction, impacting on collaboration, performance and results. Outside of the workplace, some political and religious groups view other groups with distrust and dislike. Bias can lead to preferential treatment, exclusion and discrimination. In the extreme, this could result in resentment, hatred and even terrorism. Another example is when people from rival towns and cities are biased against people from their rival town.

Have you experienced, or been involved in, any in-group bias?

We can sometimes feel uncomfortable or unsafe with those we perceive to be different to us, when generally, most people are good and trustworthy. Consider if you have a bias towards or against certain types of people, and how this might impact you, them and even the world at large. Experiment with getting to know people who are different to you. Despite our many differences, we are really all much the same.

Assuming that perception is reality

We think that what we see and hear is representative of how things really are. However, perception can be influenced by multiple factors, and as writer Anaïs Nin is quoted as having said, "We don't see things as they are – we see them as we are".

Because 90% of news portrayed by the media is bad news, we may perceive that it's an unsafe world that we live in, and that there's no hope for mankind. In fact, we're probably safer now than we've ever been in history, and wonderful things are happening every day - they just aren't always reported in the news.

If most of our friends think similarly to us about political or similar matters, this could lead us to believe that our thoughts are representative of the wider country. Election and referendum results can therefore be very surprising when it turns out that that wasn't the case.

Author: Martine Bolton. Taken from the forthcoming book: "Your Thinking is Your Superpower" – out Autumn 2019.