

# Take Your Brain To The Gym

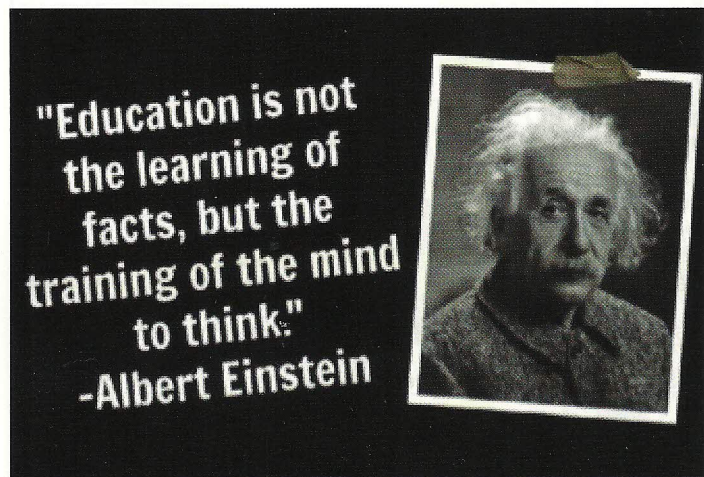
By Mandi Pour Rafsendsjani

Traders are constantly faced with challenging decisions – should they wait and let the trade run a little more but risk reversal and losing it all again, or get out now but risk missing out on another chunk of profits, or put a trailing stop – which means by definition the profits will be less than they could be. It is challenging because the trader has no advanced knowledge of the consequences of their decision and therefore have to operate with uncertainty. So traders pretty much find themselves constantly battling either the fear of missing out or the fear of regret.

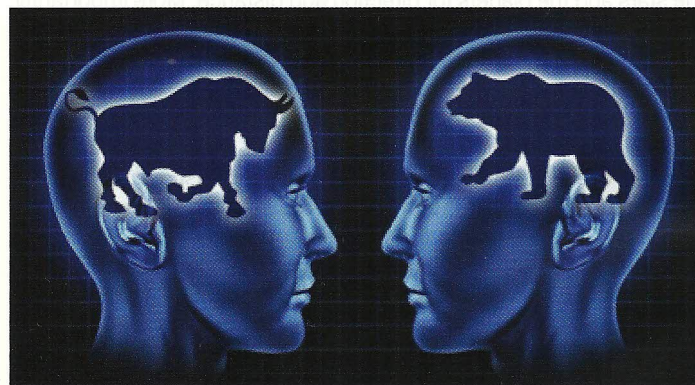
When successful traders are losing, they are able to stop themselves from trading and take time to carefully figure things out. They take

Good trading decisions don't happen by accident – they're a result of good thinking and strategies. Here lies the difference between profitable and failed traders: High performing traders simply think differently! They don't leave their thoughts to chance – they train them. They inoculated themselves against bad trading decisions long before they even started their trading career. It comes as no surprise that the most successful firms focus on teaching their traders sound judgment skills whilst retail traders are told to blindly follow a methodology without thinking!

When traders make a trading decision, which in retrospect is regrettable, they are scratching their head wondering, "Why on earth did I do that? What was I thinking"? The answer to that question lies



charge of their emotions and performance and dig themselves out of that hole swiftly. Lesser traders become caught up in discouragement and frustration, spinning their wheels forever by venting or acting out their emotions, thus digging themselves into a deeper hole.



in the field of behavioural finance.

Behavioural Finance is the study of how people make financial decisions and it comes as no surprise that people make the same mistakes in their day-to-day financial decisions like traders do as well.

Traders who find themselves unable to follow their methodology with discipline often believe that they have challenges with their trading psychology, when in reality the mental machinery that



performs the decision making process in the subconscious is not adequate to perform the task of financial decision making for profits in trading.

The untrained brain makes systematic thinking errors that can be classified in distinctive patterns. These patterns are called biases and explain why the majority of traders lose so much money. This is only a weakness because most traders are not aware that these biases exist. But once the trader learns what those thinking biases are, they learn to understand, recognise and anticipate those thinking errors that occur in their trading. Consequently they are able to recognise situations in which mistakes are likely and are therefore able to protect themselves from making detrimental financial decisions.

Evolution has equipped the brain with many automatic survival mechanisms. It applies mental shortcuts (called bias) as a subconscious automated survival mechanism to help the brain expedite its decision-making and information processing. Natural decision-making is massively influenced by the brain's habitual filtering processes of distortion, generalisation, filtering for sameness or differences etc.

If the trader is not aware of how the mechanics of their brain operate, they will be at its mercy. However, if they learn to understand the workings of their brain just like they would study the mechanics of the financial markets, they will be able to deliberately influence and use their brain to create profits. Following are examples of behavioural biases and how the choice of reference point can adversely affect the trader's decision making: (adapted from the article: Choices, Values, And Frames, Daniel Kahneman and Amos Tversky)

### 1. Mental Accounting

Consider the following experiments:

Problem 1: You are about to purchase a calculator for \$15. The calculator sales man informs you that this calculator is for sale at the other branch 10 min down the road for \$10. Would you make the drive? Problem 2: Now imagine you are about to purchase a calculator for \$125 and the calculator sales man informs you that this calculator is for sale at the other branch 10 min down the road for \$120. Would you make the drive? 68% were willing to go to the other branch to save \$5 on a \$15 calculator, but only 29% were willing to make the same trip to save \$5 on a \$125 calculator.

The brain performed this task by selecting an initial reference point (the price of the product) and then basing its decisions around that point. Traders who have problems with thinking usually choose a disadvantageous reference point and therefore make decisions that lead to losses instead of profits. In this case, an unconscious thinking error was made by evaluating the gain in context of the value of the product purchased. For sound decision making the reference point should be income. The income is usually fixed, the \$ saving amount is \$5 in both situations.

### How does this relate to trading?

When in a profit or loss position the brain naturally uses the amount of losses compared to the trade as reference point. However, in order to make better trading decisions, the reference point has to be the value of the trading account rather than the individual trade.

Lesser traders say "I don't want to take that loss"

Successful traders say "I don't want to lose my capital"

So, they consider each decision problem in terms of total assets rather than in terms of gains and losses.

### 2. Anchoring Effect

This bias influences the trader's willingness to take their profits / losses even though their system provided a clear exit signal. Let's assume a long trade on the AUD/USD went into profit by \$10,000 reaching the price of 0.9245 and just as the trader is about to take their profits, the price drops back. In that moment the trader's focus shifts automatically from rationally following the trading strategy to hoping to get back to that \$10,000 profit at that price point of 0.90245.

This is the moment where most traders are going astray. Their focus shifts from the process of executing their strategy and evaluating the probability of the trade to becoming outcome (= profit) focused, trying to 'will' the market to move back to the price that could have given them a \$10,000 profit. Even if the average profit has been \$50 in the past, suddenly anything below the \$10,000 mark doesn't seem to be good enough anymore and taking a profit at a lesser price, for example, \$9,000 is actually processed by the brain as a loss, even though the account banked in a nice profit.

Anchoring is also the reason why traders try to enter or exit at round numbers, or try to get their account up to round numbers, even if the market clearly doesn't have it. Plenty of traders have given back their whole day's profits by chasing just another 10 cents. It is important to trade the reality of what the market has to offer.

### 3. Regret Aversion Bias

Traders commonly exhibit regret aversion when it comes to not wanting to take a loss. They avoid taking decisive action because they fear that, in hindsight, whatever course they select will prove less than optimal. Basically, this bias seeks to forestall the pain of regret associated with poor decision-making. It is a cognitive phenomenon that often arises in traders, causing them to hold onto losing positions for too long in order to avoid admitting errors and realizing losses.

Regret aversion also makes people unduly apprehensive about taking positions after a string of losses, as they feel instinctively driven to conserve, retreat, and lick their wounds. This might cause them to hesitate at moments that actually merit aggressive behaviour.

This can also affect a person's response to winning positions. For example, traders might be unwilling to sell a profitable position despite exit signals, choosing to cling on to it because they fear that the stock might continue to soar even higher once they sell it.

People who are regret-averse try to avoid distress arising from two types of mistakes, (i) errors of commission and (ii) errors of omission. The former occurs when we take misguided actions, while the latter arises from misguided inaction, that is, opportunities overlooked or foregone.

### 4. Prospect Theory

Consider the following experiments (Kahneman)

Problem 1: Which do you choose: Get \$900 for sure OR 90% chance to get \$1,000? Problem 2: Which do you choose: Lose \$900 for sure or 90% chance to lose \$1,000? The great majority of people



are risk averse in problem 1 and chose the \$900 for sure bet. On the other hand, most people start gambling in problem 2, by choosing the 90% chance to lose \$1000. The sure loss is very aversive and that drives you from taking the risk. How does that apply to trading? The above experiments show that people seek risk when all their options seem bad.

Let's re-phrase those examples into the context of trading: Problem 1: Which do you choose: Take your profit of \$900 or a 90% chance to make a \$1000 profit? Problem 2: Which do you choose: Take a loss of \$900 for sure or a 90% chance to lose even more, i.e. \$1000?

Going back to the original problem a great majority of people chose the 90% chance to lose rather than the sure loss. Exactly the same decision making pattern occurs in trading. So, the successful trader is aware that they are in danger of their brain seeking risk and that it is economically a more prudent choice to take that sure loss and move on to a new opportunity with a higher probability of profit.

### 5. Framing

"The words you consciously or unconsciously select to describe a situation immediately change what it means to you and thus how you feel." Question 1: Would you accept a gamble that offers a 10% chance to win \$95 and a 90% chance to lose \$5? Question 2: Would you pay \$5 to participate in a lottery that offers a 10% chance to win \$100 and a 90% chance to win nothing?

About 30% of people rejected the gamble in question 1 but accepted the lottery win in question 2, even though both have the same outcome. Thinking of the \$5 as a payment makes the venture more acceptable than thinking of the same amount as a loss. Therefore, a helpful way to 'frame' a loss is to re-phrase it as a cost rather than a loss. A cost enables you to make more profits in the future. A further example for how framing can affect a trader's decision is that after having experienced a big loss, the decision making process subconsciously shifts to the goal of recuperating the losses rather than making profits. Lesser traders often believe that trading losses have to be recovered, not just eventually but immediately, preferably in the same contract at similar price levels and in one trade.

Successful traders are aware that their brain is naturally wired to think this way and take charge by consciously taking the account balance as the new starting balance to make profits from, stay away from contracts they have recently incurred a big loss in, and keep reassuring themselves that losses don't need to be reclaimed straight away. They understand that there are plenty of opportunities over the coming days, and only take the profits the market offers, instead of hoping for a single winning six trade where they recuperated the entire loss and more.

### 6. Confirmation Bias

Ending up in a losing trade due to undisciplined behaviour doesn't just come out of nowhere; it is preceded by a series of trades, which the trader maybe planned but didn't take (that would have been profitable), or profitable trades that have been exited too early thinking they are being cautious. However, the second-guessing of those trades build up frustration and impatience with a massive impact on

the ability to be disciplined. So the cost of those untaken or poorly executed trades are not just a reduced upside; they are "setting the stage" for a losing spiral. Let's consider the following scenario: Trader misses out on a, what would be nice profitable trade. They are trying to do the right thing and not give in to their urges and temptations to 'jump' in.

However, that willpower only lasts so long. Eventually, against better judgment because the urge is too strong, they release the built up energy by pressing that mouse button and entering a trade, which is inevitably when the market starts to retrace. So the trade gets stopped out on the retracement. Trader now reverses the trade, trying to make up for it on the retracement. The original move continues and this time the trader didn't put a stop loss in, thus resulting in a bigger loss than is permitted in their methodology. The trader now promises to exit the trade on the next retracement hoping to get out at a smaller loss or even break-even!

The downward spiral has started. Of course price doesn't retrace back to the original entry price (which has now become the reference point = anchor for the trader's decision making process) but keeps moving against the trader's position. Why would the trader not simply close out, reverse the trade and go with the flow of the market? Because now the confirmation bias kicks in. If the trader is long for example, his brain will filter only for confirmation regarding why the trade has to turn around and resume the uptrend.

Even though a big picture analysis would have clearly shown that the market has resumed a strong trend to the downside, every time there is a hint of a reversal, the trader now adds another long position thinking they can recover the losses faster because they got in at a better price. This repeats until the trader is hopelessly overleveraged and the account depleted.

The successful trader realises that they are at the effect of confirmation bias and expand their thinking from detail (looking for reversal candle) to the big picture (what direction is the overall trend, what does my methodology tell me?) and nimbly enter a new trade in flow with the direction of the trend, instead of fighting the trend.

Such problems illustrate that people have not learned how to think logically, which is then projected in their trading. Trading is so much more than charts, bars and moving averages. Knowing how to make the right financial decisions is in my opinion the main ingredient to be able to manage losses and not feeling emotional about it, because the trader who is trained that way, feels in control.

In summary it can be said that extraordinary trading performance is not a matter of IQ, it is simply a matter of knowing that these biases exist, how they adversely affect the decision making process. VTE