

Critical perceptions for optimal performance in sport

'All our knowledge has its origins in our perceptions.' – Leonardo da Vinci

'There is no reality, only perceptions.' – Phillip McCraw

'The map is not the territory.' – Alfred Korzbyski

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In a sports psychology practice clients frequently ask the question: Where is a proper or effective starting point to make a significant change in my life or to improve performance? In these kinds of questions you can detect a curiosity and search for a starting point or a foundation from which you can orientate yourself and explain the world around you. Perceptions can be the most profound starting point to introduce significant changes in your life. When you are working with perceptions, you are working with core mental adjustments that can change an individual's universe in seconds and can lead to a total re-alignment of mental capacity. Staples underlines the power of perceptions by stating: 'Individual perception is all-encompassing and all-powerful. How you perceive the world defines for you the environment you live in. It defines your hopes and your fears, and sets upper limits on your expectations in life.'¹

Perceptions can be the most profound starting point to introduce significant changes in your life.

In essence the meaning of perceptions is the fact that every individual creates his own reality he lives in with his own perceptions of life. The implication for the athlete is that he/she can create his/her own performance-boosting perceptions as well as his/her performance-blocking perceptions.

Perception refers to the way the individual organises the information and sensations that he or she receives from the world. It also refers to the way in which an individual understands, interprets and assigns meaning to situations, a phenomenon, experiences, people and life in general. The neurolinguistic programming framework of human behaviour focuses heavily on the importance of perceptions. The concept of internal representations of the outside world refers to the mechanism of how perceptions operate. Hill summarises the essence of how perceptions actually operate in the following statement: 'Our personal perceptions of "the world" or "reality" are the result of mental processing that depends on selective attention, sensory interpretation, and contamination or alteration by past experiences. These and other elements of sensation and perception

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shape and distort our internal representations of the outside world. Some of these distortions are advantageous and some harmful.² The importance of Hill's statement is that perceptions can create advantages or harmful limitations.

Perceptions can be compared with the working mechanism of filters that allow us to filter only certain stimuli that can enter the mind and block out other stimuli. If we change perception, we also change the filter with which we look at the world.

Perceptions that block and boost performance in sport

Let's use an example in sport to explain the power of perception. For example, two athletes who find themselves in exactly the same circumstances with the same coach, same team mates and same sporting set-up can differ radically in terms of their perceptions in sport. The first athlete perceives the competition situation in the following way: Competitions are in essence a major threat, because it is a place where the participant is critically evaluated by family members, the coach, spectators and maybe selectors. There is no room for mistakes and this zero defect tolerance towards mistakes creates tremendous pressure that eventually leads to the experience of distress (unpleasant stress). The chances that this athlete will choke under competition pressure are obviously quite high, because of the participant's debilitating perception of the situation.

The second athlete perceives the competition situation in a radically different way: Competitions are a privilege and a major challenge. Competitions are in essence a special place that is created to demonstrate your talent and level of proficiency in the

sport. Competitions are the ideal situation where you can risk performing at your best. Although you are not deliberately trying to make mistakes, you view mistakes as investments and turning points in your experience.

A mistake can only be a mistake when you refuse to correct it. Mistakes can be used constructively to intensify your focus and become more task orientated in your performance. Mistakes need not be a distracter that can derail your performance. This performance-facilitating perception leads to the creation of a eustress (pleasant stress) state and the athlete reduces the competition pressure to a level where a playful and creative attitude can prevail.

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It is clear that athletes can create two different competition realities for themselves through the power of perceptions.³ The pleasant or unpleasant experience of stress itself is dependent on the perception of stress. When an athlete informs me that he has a stress problem and that he cannot handle stress well in the competition situation, I usually ask the following: Do you see the symptoms of stress (for example dry mouth, butterflies in the stomach, and sometimes jelly legs) as symptoms of weakness or indicators that your body is getting ready and activated for competition? The client may be astonished by the question, because the question makes him aware that stress is not all bad and that there are different options in viewing the symptoms of stress, as well as a freedom of choice in the interpretation of the symptoms of stress. Using the idea that stress, in essence, is energy that can facilitate performance and you can either fight or join it. If you perceive and interpret the stress symptoms as constructive and necessary to be properly psyched up, it will certainly facilitate your performance and the eustress or the enjoyment of the stress can boost your performance optimally. However, if you perceive the stress symptoms negatively and interpret them as indicators that you cannot handle stress, you will obviously experience distress or unpleasant stress that will debilitate your performance.⁴

Filter effect

The filter effect of perceptions can also be illustrated by the athlete's perception of the opponent. If the opponent is perceived as an enemy and opposition force, all the distracting information associated with the opponent as a performance block, an obstacle, an irritation and psyching-out force will be filtered into the mind. This perception and the negative information associated with the opponent will automatically block the athlete's opportunity to reach his goals. With this set of task-irrelevant cues and information, the chances of an optimal or reasonable performance are quite slim.

In contrast, a more constructive perception of the opponent will improve the athlete's chances of having a peak experience, when he/she perceives the opponent as a constructive force that can boost and facilitate performance. With this constructive perception of the opponent, all the task-facilitating cues such as:

- the better the opponent performs, the better the chances that he is going to get the best out of me,
- I need the opponent to compete, without him there is no competition,
- the opponent reminds me of my own unique style and unique strengths that I must focus on to compete with myself and to master myself in my sport, will filter into your mind.

The filter effect of perceptions can also be easily demonstrated by the following visual exercise. The first instruction is to look at all the black blocks in the picture and try to make sense from it. Give yourself one or two minutes.



The second instruction is not to look at the black blocks but rather look at the open spaces between the black blocks and see if you can find some meaning in it. More specifically, see if you can find a hidden word written in between the black blocks. You will find the word FLY written in between the black blocks. Now do the same with the second picture.



You will need far less time to find the word LET written by the open spaces in between the blocks. The reason for this rapid increase in speed is first of all the fact that you know exactly what you are looking for and,

secondly, your perception of these kinds of pictures has changed instantly and forever. In the same way, other major perception shifts can change as quickly and permanently. Whenever you see one of these kinds of trick or illusion pictures, you will be able to filter the right and relevant information through to give it sense and meaning.

The most common performance-blocking and -boosting perceptions in sport are summarised in Table I. Remember that the spectrum of perceptions in sport is rich and multidimensional. Table I represents only a fraction of the spectrum of possible perceptions, namely the ones that are regularly encountered in sports psychological settings.

References

1. Staples WD. *Think Like a Winner*. Cape Town: Human & Rousseau (Pty) Ltd, 1991: 78.
2. Hill KL. *Frameworks for Sport Psychologists*. Champaign, IL: Human Kinetics, 2001: 157.
3. Steyn BJM, Potgieter R. Direction and intensity differences in performance anxiety among elite and novice athletes. *African Journal for Physical, Health Education, Recreation and Dance* 2005; 11(3): 315-325.
4. Jones G, Hanton S, Swain A. Intensity and interpretations of anxiety symptoms in elite and non-elite sports performers. *Personality and Individual Differences* 1994; 17(5): 557-663.

In a nutshell

- Perceptions are in essence your map, representations, paradigm of the world and life in general. It is the way you interpret, understand and perceive a situation or phenomenon.
- When you work with perceptions you work with core mental adjustments. Perception shifts can have a profound effect on our mental universe. Changes can be fundamental and radical, and quantum leaps in performance levels are possible.
- The primary function of perceptions is the filter function that allows certain information to filter through and blocks out irrelevant information. This is a basic function of a perception that is either debilitating or facilitating. It all depends on the nature of the situation and the constructive and enriching quality of the perception in the situation.
- Perception shifts can be swift, silent and permanent. They can occur over a period of time, but can also happen in a few seconds. Luckily, perceptions can be altered and perceptions are also coachable.

Table I. Performance-blocking and performance-boosting perceptions in sport

Performance-blocking perceptions

Competition is a threat: family, coach, selectors, spectators, critically evaluate me, I have to be perfect and I have zero defect tolerance where I have no room for mistakes in my performance.

Stress is unpleasant and debilitating for my performance.

The **opponent is an enemy** and an opposition force that prevents me from reaching my goals and winning.

Success equals winning and I only experience success when I beat the opponent with the least effort.

Success can only be measured by the outcome. Winning is not the only thing, it is everything.

I see criticism as an unnecessary and painful experience and I usually take it personally.

I see setbacks and injuries as bad luck and unnecessary; they can only obstruct and prevent me from reaching my goals in my sport.

Success comes from the way others evaluate and see me. I have to keep my family, coach, and everyone else happy (other-referential). It is important to have the approval of others.

Sport is very important for me. I invest so much time and effort in my sport and I experience a lot of pain if I lose. I cannot afford to lose or fail.

Performance-boosting perceptions

Competition is a challenge: wonderful opportunity to demonstrate ability and level of proficiency, ideal to risk and give my best, mistakes are used constructively as an investment experience and as a tool to intensify focus and performance.

Stress is pleasant and facilitates peak performance.

The **opponent is a constructive force** that will bring out the best in my own unique performance.

Success is more than winning. I measure success when I improve in my mental, technical and strategic game, as well as my fitness level. The final success is to master myself in my sport.

Success is measured by the refining and constant improvement of the process of participation.

I see criticism as a source of information and select only relevant criticism to work with. I ignore the irrelevant criticism and never take criticism personally.

I see setbacks and injuries as a normal part of high-performance sport and believe that I can transform setbacks and injuries in a constructive way. Setbacks can provide the time to re-orientate in sport and can offer an opportunity to improve my mental toughness.

Real success and satisfaction come from satisfying and pleasing myself in my sport (self-referential) and by keeping myself happy in my sport. If I am happy I can overflow and satisfy other people as a secondary by-product.

Sport is a bad master but a good servant. I always want to stay the boss and the master of my life. Sport is one of the many places where I can discover and enjoy myself.

Single Suture

Faulty gene to blame for pre-eclampsia

Raghu Kalluri, of the Beth Israel Deaconess Medical Center in Boston, says that mutations in a gene that helps to produce the chemical 2-methoxyoestradiol (2-ME), which helps to control blood vessel growth, could cause at least some cases of pre-eclampsia. Pregnant mice that lack this gene have protein in their urine, showing kidney failure, and elevated levels of two proteins that are present in the blood of women with pre-eclampsia. These mice are also more likely than ordinary mice to have premature births, high blood pressure and problems forming blood vessels in the uterus and placenta. Extra doses of 2-ME reverse many of the symptoms.

If 2-ME has the same effect in humans, detecting low levels in the blood could help to diagnose the condition, and giving extra doses could help to treat it. 2-ME is already present in high doses during pregnancy, so extra doses would probably not harm mother or baby. The researchers have already found that 13 women with pre-eclampsia had lower levels of 2-ME in their blood before giving birth than women who had normal births. The team now plan to study pregnant women with genetic mutations that hamper 2-ME production.

Kalluri R, *et al. Nature* 2008, published online 11 May 2008.