# Physiological factors on sports training and performance

**Sport & Tourism** 



Describe the effects of physiological factors on sports training and performance In all, there are 4 physiological factors that may affect someone's sports performance; Motivation, arousal, anxiety, personality and concentration.

Motivation-Motivation is the foundation all athletic effort and accomplishment. Without your desire and determination to improve your sports performances, all of the other mental factors, confidence, intensity, focus, and emotions, are meaningless. Personally, I believemotivation is one of the most important factors as it gives you the mental ability to maximize your physical abilities and reach your full potential in performance.

Short Term Effects-Short term factors such as winning a competition or scoring a goal can motivate someone for a short period of time to do better. Another method of a factor that can trigger short term motivation aregoals. Goals are something that we set to achieve our targets, for example big goals such as, getting a gold medal in the Olympic power lifting, or something smaller such as, improving your 400m running time by 1second.

# **Long Term Effects**

There are many factors that can impact performance in sport for a long period of time. Examples of these factors can be sporting role models, parental pressure and prizes. In particular, parental pressure and being rewarded for your actions play a big part in creating long term motivation for an athlete. Some parents can push children into play sports for many reasons; they share the same passion for the sport, the parent never

succeeded in the chosen sport so wants their child to do so and to keep kids active and in goodhealth.

Parental pressure can be both good and bad depending on the personality of the parent and the child. This would mean that motivation for the child should be high because he/she has great support from people close to them. Prizes are also a good way of getting younger people as well as older people to get motivated and perform well. E. g. if a child is playing a football match and their parents said if you score a goal today we will buy you a treat for doing so, well then the child will think that he/she can get something extra out of this and put in a better performance and work harder.

### Arousal

Arousal is to do with your personal level of excitement and your eagerness to perform. Arousal can have both positive and negative effects on your performance, hence your performance will be at its best at an optimum level of arousal. There are even graphs which demonstrate this decline/increase of performance in proportion to your arousal levels. Short Term Effects- There are many factors that can rapidly increase/decrease someone's arousal levels. An example of this could be types ofmusicsuch as 'Rock/Pop Music'.

The combination of loud and fast beats can increase someone's levels of motivation. This is commonly referred to as a 'Sike-Up'. This and many other forms of a short term increase in arousal levels can affect someone's motivation and thus determine the overall impact in a game situation.

Long Term Effects-There are many factors that can rapidly increase/decrease someone's arousal levels. In general, long term effects tend to have the

biggest effect on someone as they tend to come from past/future events that did/haven't already taken place.

Whereas short term effects are generally from more physical factors, long term effects are generally from within which provide a more direct form of motivation to the subject rather than physical forms of motivation such as a trophy ormoney. However, although arousal plays a key part in someone's performance and generally the higher the level of arousal, the higher the level of performance. Some sports are better performed at low arousal, mainly those which require small, precision movements and control, e. g. shooting and putting.

And other are better performed at high arousal, mainly those that require brash power with large movements. E. g. Ice Hockey.

Anxiety -Anxiety is a psychological state of mind where you get a worried feeling as you may think something bad might happen. This is commonly referred to as 'chocking' as the majority of people acquire a blank state of mind. This emotional state, similar to fear, is often accompanied by feelings of nervousness and apprehension. Generally a low anxiety level results in a better mental state, thus allowing the body to perform at its best in a game situation.

However, training athletes are mentally taught how to perform under huge amounts ofstressas anxiety can pose a huge threat to an athlete's performance. An example of this can be Olympic athletes who are exposed to huge amounts of stress, however it's their mental and physical training which prevents them from succumbing to these enormous amounts of

pressure. Short Term Effects- Sources of anxiety can range from many things, no matter how small or big, almost everything you do plays a part in altering your anxiety levels.

Unlike motivation or arousal, anxiety has sources that can be both a short term and a long term factor. For example, in football when you are set up to score a goal that could potentially put your team into the lead and win the game could be house to an enormous amount of anxiety altering factors which could inevitably could lead to over arousal in an athlete for a short period of time. Other examples could be not training to the best of your ability hence, you are not able to improve your skills or understanding of the dynamics of the sport.

## Long Term Effects

Sometimes when a player e. g. doubts or underestimates his abilities, he/she may start to lose interest in the sport as a whole, this is triggered by what's known as cognitive anxiety, this is when an athlete is nervous about his/her ability to perform well, which can certainly reduce his or her concentration levels. This can lead to the athlete to stop coming to training sessions and overtime may even stop playing the sport all together.

Personality- Personality is the unique trait of someone, which determines behavior.

Athletes are constantly separated in terms of ability, most athletes who rank at the top are those have 'a good personality'. Personality plays a colossal part in an athlete's overall performance. If the athlete is dedicated and a patient person, then he/she will be more dedicated and patient in training

which will affect how fast or slow the athlete's skills will progress. In general, football is the best example of this divide between lazy, arrogant athletes and the indomitable, modest athletes in teams.

### Short Term Effects

If you have a good personality in training and in game situations, you will be more likely to progress as an athlete faster and you will carry on performing at 100% of your abilities every match. Long Term Effects- If you have a bad personality in training and in game situations, you will be limited to how fast or how well you improve as a performer. This will affect you technique/skill and overtime you may even stop coming to training which could even provide a knock on effect resulting in you dropping out of the sport completely.

### Concentration

Concentration is the physiological ability to focus on the task in hand. If an athlete lacks concentration then their abilities may not be effectively applied to the task. E. g. if a footballer is about to shoot the ball but isn't concentrating on theenvironmentaround him, another player from the opposing team may be able to tackle him/her and prevent him/her from scoring a goal. Concentration is very much linking to someone's motivation, if a player is focused on the task at hand, this may motivate the player to take shots or pass to players far away, and this can all affect the outcome of the game.

Although different sports require different levels of concentration, all require an athlete to concentrate on the task at hand to perform to the best of his/

her ability. Short Term Effects- If you have a high level of concentration in e. g. formula 1 racing, you are able to perhaps avoid obstacles in the distance or even perform quick maneuvers and over-takes that could result in winning a race. Long Term Effects- If your concentration levels are too low in training, your skill may not improve. This may result in using the wrong technique in a match, resulting in losing the game.