

Liverpool's demise - Central Nervous System overload

When working with clients I encourage them to let me know about the outside stresses in their life, not just in order to assist them with other elements in their life in addition to their physique, but to ensure that I am optimising their training routine based on the accumulation of training stress and those additional stressors. The human body only has one central nervous system (CNS) and one of the keys to optimising physique progress when writing a training plan is to find that ideal balance between training intensity and volume without overdoing the recovery demands. There is a reason why the top bodybuilders do not train every day or spend all day in the gym, more is not better as we have to factor in the recovery needs in order to ensure that we maintain the optimal hormonal environment for the body will respond in the way we desire; be that for fat loss or for muscle gain.

If we are overdoing the training intensity by way of too many heavy lifts to failure within their programme, or if we are overdoing the training volume, that is the total amount of work done, then we will hinder their results by way of upsetting that hormonal balance. If the CNS is overloaded for sustained periods of time we will see a cascade of hormonal response that will deoptimise it for progress and even prevent that progress from happening at all. This is partly why implementing deload or recovery weeks are key as they allows those recovery demands to be pushed to the limits for a particular period of time know that during a planned recovery week that follows the central nervous system is effectively given a break and a chance to recover.

Planning these weeks or lower workload periods is of paramount importance as the longer that hormonal balance is sent out of line with what is optimal for their progress, and indeed health, the harder it becomes to restore that balance at a later date. Thus, push the demands too much and for too long and it can, in the worst cases, take months for that CNS to recover before the hormonal environment returns to those previous or optimal levels. Once the CNS is overloaded those hormonal adaptions will include a reduced level of baseline testosterone and increased cortisol production as well as the cascading effects on other hormones and cellular activity throughout the body these changes initiate that result in a weakening of the immune system as well as an environment that is not suited to fat loss or muscle gain.

Whilst deload weeks serve that purpose too, another consideration is the shorter term recovery during the training periods. That is, a training plan with a volume and intensity balance

that may be optimal for an individual at one moment in time, may be too much once additional outside stressors are introduced. Stress is accumulative so the stress from training, stress experienced at work, or relationships and all other factors in life that produce emotional stress will all impact on that same central nervous system. This follows then that the training plan that is working great when there are few outside stressors may need tapering back in volume and/or intensity when the individual is going through a break-up or a stressful period at work.

It is here that we should consider that whilst of course the physical activity and response of football players at the highest level is closely monitored, Liverpool in particular had been in a unique situation over the last 12 months or so.

In challenging for every trophy right up until the final two games of the season there is a greater physical demand placed on the players due to the number of important matches, but more importantly in Liverpools case many of the first 11 were required to start in most of those games and therefore, losing the ability to rest and recuperate for more than a week as would otherwise be the case when playing in what may be considered to be less important matches. Mohamed Salah here would be a prime example here, for he is so key to the team that the opportunity to rest, and considering also his run to the African Nations cup final with Egypt, would have been few and far between.

But aside from the physical, it is important to also remember the mental stress that each player would be under throughout large parts of that season with every single game, and usually two games each week, feeling as important as a cup final. The mental intensity required, concentration in training and matches as well as the emotional stress of the highs and lows would have been huge! That therefore, would be added to the physical stress which they are placing on the central nervous system through both their training sessions and matches.

The style of play is another factor here too, the speed and speed endurance, the high pressing and high tempo which is key to Liverpools style of play is not only extremely demanding in matches, but the training methods required to be able to play in that style would also play a factor. This would mean that for large periods of the season and indeed pre-season training, the style of training required would have included frequent elements that are similar to high intensity interval training. When it comes to physique development we know that the high intensity style of cardio places recovery demands on the central nervous system much like that of an intense weight training session. That is, cardio activity of a much lower intensity can be completed with a

far greater volume and still not significantly impact the stress on the CNS when compared to higher intensity interval or sprint training.

It is therefore no surprise that when you consider the physical training and performance requirements in the pre-season of the 2021/22 season as well as throughout that season combined with the emotional stressors mentioned that without a substantial rest following the season there would be a drop off in the ability to perform in the season that has followed. Although largely down to other factors too perhaps, such was also the case for Liverpool in the season that followed their title winning campaign a few years previously.

This mental stress can not be monitored in the same way as physical performance can and whilst there may appear little the staff could have done to give adequate time to recover and thus be in peak condition for the start of the 2022/23 season, maybe a psychological approach with each player during the previous season to help them improve their management of thoughts that create mental stress could have been of great benefit.

Patrick Bamford - Confidence on the field relating to confidence in self

Whilst I do not know a great deal about Patrick Bamford personally, it did strike some thoughts when a friend of mine mentioned how he had always felt or was perceived as being somewhat different in character to many other footballers. For his talent and ability is well known however, it is that confidence particularly in front of goal that is flagged as the main issue that has perhaps prevented him from completely fulfilling his potential.

We can see a theme with many strikers to varying degrees, many of the top goal scorers may miss opportunities but as soon as the next comes they show no sign of their confidence having been affected by the previous chance or even a previous bad game. Yet others seem to show much more fragility in their confidence and may look like world beaters when their confidence is high, but a few missed opportunities see that confidence quickly dwindle and often take time for them to get it back. What can be the difference between these types of striker? The only answer would be their own character and personal psychology.

As human beings we are all different and respond differently to successes, failures, negativity or praise and what struck me with the case of Patrick Bamford was that it is likely to be psychological factors that can be addressed which relate not to his performance or ability as a footballer, but the confidence that he has in himself which are holding him back on the pitch.

I do not know him personally or his background and elements of life of the pitch, but taking the information I was given by my friends statement it is worth considering the difference between a person who walks into a room and instantly exudes confidence, has an energy that draws people towards them and on the other end of the spectrum someone who clearly does not appear comfortable in the situation and shies away in a corner whilst being overcome with anxiety. If we take that analogy to the extreme and imagine the difference between those two kinds of people when they walk into training every day, when they walk from the changing rooms to the training pitch, when they get on the team bus, walk into the stadium and out onto the pitch we are considering a huge difference in mindset throughout every element of their work.

What is the difference between those two types of people? The overriding factor is self love and confidence in who they are themselves as a person. This is not to say that the less confident appearing individual has a justifiable reason to be so, far from it, as it is simply their conscious or subconscious perceptions of themselves that will cause them to be more anxious

about what others think of them. Let's say that someone, particularly whilst growing up, has been bullied due to their interests, appearance or any other reason, then that will create insecurities that may stay with them if not addressed by appropriate means. This of course is something I am passionate about helping others with and I know that many have learnt to see the benefit to the traits that may have drawn these negative responses from others and thus learnt to love those traits simply from listening to my podcasts. If it is the case with Patrick Bamford that he has any lack of self love, then it is true that finding where those negatively perceived traits have massively served him and his life and how they are also a requisite of the parts of himself and his life which he does love the most would be the key to changing that. Once you manage to see where those areas that may have been considered flaws have served and the internal perception changes from, be it conscious or subconscious, resentment to a genuine love for those parts of your character too then you become completely confident in yourself. Of course that is easier said than done, but to any of my Leeds friends reading this, well, you are welcome to try to get this to Jesse Marsch and he reach out lol;)