

Connecting Some Important Dots

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What is optimal? How many times during your entire career will you reach that optimal state in performance? Think back to the greatest game you ever played... it didn't just happen, there was a reason it happened. When you study high level performance and optimal physiological capacity in human performance, begin with your central nervous system. Take it a step further, and begin with your brain. Ultimately, your brain controls everything you do as a field hockey player. Every muscle impulse, contraction, reaction, reflex and movement. I have studied heart, lung, muscle, blood chemistry and energy systems for three decades. In the past ten years I have begun to realize that in those thirty years I greatly overlooked the single most important factor in performance in any sport, skill based or not... the "Central Nervous System".

Without any doubt, the majority of your game and the skills and capacities required, are absolutely dependent upon the CNS. In the studies that I continue to conduct on the effects of social drugs on high level physical performance, I have come to realize that the brain and CNS is perhaps the best predictor of condition and recovery and potential on any given day.

When we try to attribute success or the difference between winning and losing to one single factor, it would have to be the brain /CNS. Under the highest levels of fatigue, the signals (neuro -muscular impulses) are sent from our brain to our muscles. It has been determined that the impulses reach the muscle, but within the nerve, the nerve junction or actual muscle there is a breakdown in the transmission, resulting in many less than optimal conditions and outcomes. (sloppy skills, slower reactions, weaker force of muscle contraction, decreased function of heart, lungs and muscle). The myriad of factors involved in this failure of course, are complex and interrelated. During my presentation at the NFHCA National Convention, I asked the attendees to think about "how many games you have lost in your career as a coach and athlete, by one goal?" What was the difference? When did it come apart? What went wrong? As coaches and athletes that is what we think about, long after a game is over. We have used for many years, a simple analysis with elite athletes after every workout and competition, that helps to assess and improve the quality and outcomes of what we do.

Simply ask and answer 4 questions:

What went right?

What went wrong?

What can I learn?

What is next?

I believe many athletes and coaches fail to learn after important experiences, or we get stuck on one channel, for instance the kid, who for days or weeks beat themselves up, dwelling on the negative or what has happened and is over. Think of getting your team together right after every practice or game and as a team answering those four questions, whether you win or lose. (State or NCAA Championships included)

The 1% factor...

What is the determining factor in a one goal loss or a one goal victory? It is unlikely that you can attribute either scenario to one single event or reason, however we look back to analyze what happened. I have always taught my athletes that the possibility exists to gain an advantage over opponents by having what many call the 1% factor. Beyond the X's and O's and game strategies are smaller and less considered variables that come into play when all things are equal. The level of competition in playoffs or championships, determines on most occasions, a leveling of the playing field as far as the level of competition or the competitiveness of an opponent. Never forget that famous saying "It is the little things that make big things happen." Many decades of sport science research have examined the most intricate of physiological, psychological and biomechanical variables. We have studied the variables of the elite teams and individuals, establishing a profile of sport specific, position specific and skill specific requirements. This of course greatly levels the playing field when two highly talented teams, with highly trained and skilled individuals square off on the field. Ironically, someone will win and someone will lose. It is at this exact moment any coach should be thinking about the 1% factor. What advantage have we gained as a result of leaving no stone unturned. How about peaking workouts in the last month of your competitive season, or a greater level of recovery between the semifinals and finals, immediate reloading of depleted muscles with fresh muscle fuels, rebooting the brain and central nervous system by getting maximal REM sleep, maximal hormonal recovery, these are the mysterious variables that many coaches have heard about but do not deeply understand. All are 1% factors. Add them up and it is bigger than any coach or player can imagine.

How you live your life...

I have over the past eight years, started to realize that there are many areas to look for answers. Begin with lifestyle. What you eat and take into your body, how much sleep and rest you get is to a great degree what influences many important timeline factors, including how quick you recover which determines when you can again train at a high level or even outplay an opponent. The entire quality of your training program can be influenced by the smallest of things. I have begun to study many of these simple and often overlooked variables that without any doubt are the cornerstones of the life of any athlete. There is no way to discount basic lifestyle as one of the most determining factors in the success formula in any sport. The most overlooked aspect of reaching elite level in anything is often LIFESTYLE.

I leave you with the following quote to share with your athletes.

"Talent takes you only to the crossroads of opportunity... it is the rest of the journey from which champions are made."