

“For What?” – Identifying the Reasons Behind Why You Do What You Do

Derek M. Hansen

www.StrengthPowerSpeed.com

@DerekMHansen

When I was a young track and field athlete, I had the opportunity to work with a very knowledgeable Slovakian coach who, at the time, had a very limited English vocabulary but significant experience in preparing athletes in field events. When we were going over possible exercises for improving long jump abilities, he was very adamant that I understood why we were performing a specific exercise at any given time. He would always encourage me as an athlete to ask, “For what?” when presented with an exercise. He was not telling me to be a pain-in-the-ass-athlete, but he was forcing me to think critically about everything we did. “For what” essentially meant ask “Why?” when presented with exercises that might not make sense for the intended goal of training. That goal, of course, is to improve in your event or sport of choice. This is something that is often overlooked in training programs believe it or not. When reflecting on this topic, I often think of trench warfare tactics in World War I, where soldiers were routinely and repeatedly sent out of their trenches toward their enemy to be ultimately mowed down by machine gun fire. My former coach’s question of “For what?” would have come in handy back then, but likely would have ended with a bullet in your back from your own commanding officer.

Inevitably, early in my development, I acquired a rather analytical approach to training scenarios and protocols that came to my attention. If we have to make athletes faster, there must be a good reason behind the methods we are using and, for the most part, it should involve high quality sprinting efforts. If we need to make athletes stronger, our workout plans will reflect the need to lift heavy loads with good technical execution. If weightlifting is not part of the program, then a suitable alternative must be selected to elicit gains in strength that will transfer to an athlete’s sport. If an athlete needs to be aerobically fit, the appropriate exercise modality will be selected with optimal work rates and recovery periods. In most cases, it is a simple issue of mathematics. Identifying ideal loads, optimal work-to-rest ratios and applying the best biomechanical instruction wherever possible. Improved performance, not fatigue, must be the goal in each and every session. So how do coaches lose sight of this process?

Recently, it was brought to my attention by a good friend of mine that conditioning practices in the strength and conditioning field have gotten out of hand, particularly at the college level. Regardless of the fact that “sport science” is the new buzzword

for professional and college organizations, few conditioning programs are tapping into basic concepts such as energy system development, loading progressions and work-to-rest ratios. In many cases, “mental toughness” has been the overarching rationale for these training programs, science be damned. If the Navy Seals were taking trainees to near-drowning experiences, we sure as heck will find the football equivalent to make our guys mentally anti-fragile. As you can imagine, this is where things go off the rails.

The example that was posed to me was the use of 110-yard runs to condition athletes for football. Of course, 110 yards is a curious distance for me knowing what I know about the actual game of football. However, it was not so much the segment distance of 110 yards as it was the way it was being programmed to improve performance in football athletes. I was hearing that anywhere from 20 to 32 repetitions of 110 yard runs (although I could have sworn someone referred to them as “sprints”) were being used to condition players in a given training session. From the point of view of a 400m sprinter using extensive tempo running as a form of general conditioning, this type of work could make perfect sense, assuming an optimal running velocity has been selected. However, for an entire football team – from the kicker on through to the largest offensive and defensive linemen – this is insanity, particularly when unrealistic time targets are combined with relatively short recovery periods between repetitions.

Rather than simply proclaiming this conditioning practice as absolute madness, I decided to analyze the possible reasons why someone would engage in this “approach” – particularly in the golden age of sport science. Ask questions first, shoot second has always been my way of handling these issues. But then again, I’m Canadian.

Sport Specificity

Of course, the first question that comes to mind when analyzing a training method is whether or not it is specific to the sport in question. Just to be annoying, someone always seems to ask, “Is it functional?” With 110-yard runs, one could rationalize that a running back or kick-off returner could run from six yards deep into their own end-zone for 110 yards until they were four yards into the opposite end-zone – just to be safe! This is affectionately known as the “game-changing-big-play” and probably occurs once every five to ten games, if that. So with those odds, sports analytics geniuses everywhere would most definitely support a training session that involves 32 of those runs. Did I mention that sarcasm is the lowest form of humour? I should point out that this approach does not work so neatly for Canadian Football, where the field is 110 yards from goal-line to goal-line. Inevitably, Canadian running backs and kick-returners following this training program would always fall agonizingly short of scoring a touchdown.

Need I bring up the fact that no linemen or hall-of-fame quarterback would ever need to run this far in a single play - ever. But of course, we need to be training for the absolute worst-case scenario, don't we? NBA players most certainly practice 90-foot buzzer-beaters for 30 minutes at the end of every conditioning workout, don't they? I stand corrected: NBA players shooting 90-foot buzzer beaters while someone whips their hamstrings with bamboo poles would be the basketball equivalent, citing mental toughness as the rationale! But I digress...

With the volume of worked being prescribed in these running workouts, and the rather meager recover times between repetitions, we can all agree that speed is not being trained in these sessions. Nobody is getting faster. If you are running 16 seconds per 110 yards, that roughly equates to an average running velocity of 6.3 m/s or 14.1 miles per hour. Fat guys hoping to make 20 seconds per 110 yard run will be cruising at 5 m/s or 11.3 mph. I'm not sure who is calibrating the speed zones in their GPS units, but these would not be considered high-speed zones.

General Conditioning

One could argue that the sheer volume of these runs – admittedly at velocities slower than what we would expect in the game – would contribute to greater overall conditioning abilities, particularly if we want to dominate the other team in the fourth quarter. Running just over two miles of conditioning intervals must make everyone a better football player. It helps to get them through a tough pre-season training camp. It makes the athletes fitter for the regular season. And, of course, it carries them through to the post-season – when it really counts. However, football can be characterized as a sport that heavily involves the alactic anaerobic system with supporting involvement of the aerobic energy system. Excessive work in the anaerobic lactic system is neither indicated in football nor productive for the players, at any time of the year. It is distressing that coaches applaud when a player vomits during one of these workouts. I have never seen a player vomit during the Super Bowl from the excessive intensity of the game.

If the coaching staff truly wanted to improve the aerobic and general conditioning qualities of the players, I would recommend they speak to my good friend, David Clark, who works as a kinesiology professor, researcher and exercise physiologist, with exceptional expertise in training aerobic energy systems. Or, why don't they speak to Steve Magness – a track and cross-country coach and author on the subject of endurance running. These two people would seem to be a good place to start. However, I suspect that improving aerobic conditioning is not a true objective of these workouts. In addition, most conditioning tests implemented at the beginning of training camps involve similar energy system ranges. Repeat 110-yard runs and 300-yard shuttles dominate the landscape. It would be akin to watching Ironman Triathletes running 40-yard dashes and pro-agility drills on the beach the day before their race to make sure they were ready to perform.

Injury Prevention

I always have to consider that a training method will be advertised as valuable because it helps to prevent injuries. Let's not be concerned that it doesn't improve performance whatsoever. Preventing injuries is what it is all about these days. Strangely enough, since the "injury prevention lobby" has been touting the benefits of their approach, injuries rates continue to climb, from youth sport to the professional ranks. Hamstring strains are a daily occurrence in sports that never had hamstring problems. ACL and achilles tendon ruptures are increasingly more common. Despite advances in core strengthening, sport hernias are popping up like the common cold. Thank goodness we are focusing on injury prevention.

I am not certain how repeat 110-yard runs with 45-60 second breaks prevent injuries, but I am sure someone has used this line in their sales pitch. If anything, I have only heard that an epidemic of hamstring injuries follows in the wake of these workouts. It's as if opposing teams have hired a team of mercenary snipers that are lined up at the top of the stadium, athletes falling one-by-one all over the field. The irony is that opposing teams are doing the same ridiculous workouts. At the very least, a minor hamstring strain in the first workout of these insane running sessions will save athletes from having to do more sessions for at least three or four weeks, given the lack of sophistication in the majority of hamstring rehabilitation programs. I find it ironic that a lack of efficacy in one area can save athletes from tremendous inadequacy in another.

Mental Toughness

So we are left with one remaining reason why dozens of 110-yard sprints are relevant to the game of football. Beating the hell out of our players, in any way possible, makes them more mentally and psychologically prepared to handle the demands of the game. Hamstring pulls are a sign of weakness. Vomiting tells me you are pushing yourself to your limit. If you fumble the ball or go off-side too many times, the obvious reason is that you are not mentally tough and we are going to remedy the problem by making your run a distance that you will almost never experience in a game, for a number of repetitions that makes absolutely no sense.

We always hear people talk about concepts of specificity and whether or not an exercise is "functional". Why don't coaches apply these concepts when it comes to mental toughness or psychological preparation? If running repeat 110-yard sprints was the answer to mental toughness in football, I can direct you to a whole slough of 400m and 800m runners that would be perfect for the "mental toughness" demands of football. They will run repeat medium-velocity runs the length of the field to your heart's content. But, I'll tell you what. When a 160 pound 400m runner runs across the middle and gets his head taken off by a 210 pound safety, I can assure you that

he will not have the “right” type of mental toughness to get up off the turf and line up for the next play, let alone do this for a 16-game season, plus post-season play. As my good friend Rob Panariello recently wrote:

“The development of mental toughness is achieved with the appropriate structure of high tempo practices under high pressure game day type situations. To respond optimally in this stressful environment the athlete must be alert and able to perform with appropriate neuromuscular and musculoskeletal system function, not through exhaustion and nausea.”

Concluding Remarks

Some of you may think that I am taking liberties at making fun of people who implement conditioning workouts with 110-yard runs. Well, I’m not. To take a phrase out of Donald Trump’s campaign, “Some of my best friends make people run 110-yard sprints!” I am trying to make the point that greater thought must go into the planning of all workouts in your training program. It is not enough to say that a program is focused on injury prevention or mental toughness. Training sessions can have elements of these qualities, but the most important question should be, “How is this form of training making me better in a useful and measurable way?” If you are struggling with the reasons behind a particular workout you have planned, here’s a tip: Don’t do it! If you rationalize after the fact that a workout is primarily intended to improve mental toughness, you are on the path of destruction and you truly need to re-examine your approach to training and developing athletes.

It is always easy to look to our successes when reflecting on the efficacy of our program. However, we must also examine our many failures and make a balanced assessment of whether or not we are moving in the right direction. Even though Simon Sinek has asked us to, “Start With Why,” I will still stick with my old Slovakian coach’s recommendation of constantly asking, “For what?”