

Youth Sport Training Considerations
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Setting the stage for sport success when it counts- begins when it doesn't.

Contrary to western sports culture, in which youth sports are highly competitive, the optimal scenario is one in which the concept of competition doesn't even exist until the developing athlete is capable of executing sport maneuvers with efficiency and is in possession the psycho-emotional resolve necessary to deal with loss and victory in a mature fashion.

Practically speaking, it is illogical to introduce the idea of competition to a population who is not yet capable of efficiently moving and controlling their bodies which, in return, vastly increases the individual's durability against injury. Moreover, an immature psycho-emotional state of mind renders a youth much more likely to cease their participation in a sport, for any number of reasons that cause them disappointment, in which they may very well be predisposed to reach high results in later in life- WHEN IT COUNTS.

Of course, similar to other astonishingly logical methods used on a global scale, but not in the US, such as the metric system, the reality is that the idea of delaying sport competition until the early teenage years being instituted in America is about as likely to happen as the Vatican hosting the next AVN awards.

In most cases, the very premise of competitive youth sports, despite the vicarious avenue they provide to uniformed parents, borders on the criminal. One of the most important times in an athlete's life when they necessitate the supervision of an expert to secure motor skill acquisition, and the beginning of long term development, is during their early school age years. Paradoxically, the only qualifications one needs to become a youth coach, or nearly any level coach for that matter, is some familiarity with the sport and no criminal history. To add insult to injury, at the 'highest' levels of sport, specifically team sports, where the jobs are the highest paying and toughest to come by, the coaching qualification process isn't much different. This is made so because the athletes' ability is high enough to mask a myriad of coaching incompetence.

School age children participating in youth sports across the land are victim to countless acts of carelessness in their preparation; not the least of which are lactic training loads.

Higher intensity training that is either carried out for too long a duration (>8sec) and/or separated by recovery periods that are too short (i.e., gassers, suicides, 300yd shuttles...), and/or shorter duration intervals that are carried out for an extended series of repetitions without sufficient recoveries places too much stress on a pre-pubescent youth's cardiovascular system. The associated training intensity yields a situation in which too much stress is placed upon the myocardium.

Stereotypically, higher heart rate training intensities increase the thickness of the left ventricular wall while lower heart rate training intensities (higher in volume) stretch the tissues of the left ventricular wall. While the former adaptation is more closely associated with high power output sports and the latter more favorable for endurance sports, the former can, in the extreme, lead to premature thickening of the left ventricular wall and cardiac problems in youths who are not yet prepared for the associated training load intensity. In the extreme, one must logically question whether such loading may lead to hypertrophic cardiac myopathy- a potentially fatal condition. At the least, the transitional muscle fibers of youths, that have not yet assumed white or red characteristics, are much more likely to assume red qualities and limit that youth's speed/power potential later in life.

In order to compete, in the ideological sense of the word, at the highest levels, sport actions must be executed with technical-tactical mastery. If one accepts this to be true then one must also accept that sports training must begin, not by participating in competition, but by first learning how to move efficiently.

The fundamental attributes which constitute athleticism are heavily rooted in:

- mobility

- balance
- coordination
- kinesthetic sense (awareness of one's one body moving through space)
- rhythm
- relaxation
- timing

The training of all of these abilities may, and should, be initiated very early in life.

It is the development of these skills that separate high level athletes from athletes participating in a high level of sport.

The word 'athlete/athleticism' is used too loosely amidst the sporting community. It is one thing to participate in a sport and it is another thing entirely to be an athlete.

The one skill that all high level athletes share in common, unlike someone who merely participates in a sport, is the ability to execute complex sport maneuvers with high mastery. This comes as a result of movement that is executed with the skills listed in the bullet points above.

Three sport disciplines that do an excellent job at setting the stage for long term athlete development in young children are swimming, gymnastics, and a few years later, track and field. Concurrently, ball and simple games are a fine means of developing neurophysiological skill acquisition and coordination; however, the energetic demand must be carefully managed, the process of skill instruction is paramount, and competition must not be the emphasis.

Swimming, in its most basic form, may be initiated long before children are able to walk. The uniqueness of what is required to smoothly and efficiently mobilize oneself through water involves all of the previously listed motor skills. In order to execute the various strokes with precision one must possess suppleness, be able to perform large amplitudes of movement about the joints, and the motor skill to minimize the excess drag that an inefficient body presents when moving through the water.

Youth gymnastics, vastly less physically stressful to the joints and spine in comparison to the more advanced and competitive form of the discipline, is unmatched in its utility for developing high levels of motor skill and relative strength in developing athletes. Tumbling, balance drills, floor exercises, assisted ring training, parallette exercises, climbing ropes, varied calisthenics, and work on the various other gymnastic apparatus, all serve to provide the child with an array of essential abilities. Children may safely begin taking classes and performing the most fundamental movements shortly after they are able to walk efficiently.

A few years later, starting in first grade, youth track and field training is highly suggested. At this stage of biological development the late world class sprint coach Charlie Francis recommends the following events for youths in grades 1 through 3:

- 50m Sprint
- Standing Long Jump
- Tennis Ball Throw (backward overhead)

In addition, various short sprints <8sec, power-speed derived drills, two handed 1kg medicine ball throws, and low intensity jumps are appropriate to perform.

*For instructions on T&F training for grades 4 all the way through the University and Post Graduate stages, high intensity training for sports, high intensity training components, an illustration of a T&F annual plan, and long to short and short to long program examples -purchase Charlie Francis Edmonton Series 2007 lecture which may be found on his site www.charliefrancis.com

Learning how to sprint properly is a skill and arguably the most valuable ability for all land based team sport athletes. Interestingly enough, many athletes who participate at a high level of sport do not know how to sprint with efficient mechanics. High power output abilities may allow one to move fast; however, in order to maximize output

potential, and ultimately speed, one must maximize the efficiency in which they move. This requires a specialist's eye who understands biomechanics as it relates to the sprint action and the ability to teach what is necessary to the athlete.

Important to note, participation in any of these disciplines alone is insufficient. The more a maneuver is practiced, particularly at faster speeds or against greater overload, the more concrete that exact pattern is ingrained at the neuromuscular level. This means that athletes who are required to perform drill after drill without proper mechanical efficiency simply get better at moving inefficiently. It is the proper mechanical instruction of the associated skills, and physiologically sound management of the training load, that is vital in order to set the stage for long term athlete development.

Caveat Emptor, not all coaches are created equal.