

[Editorial]

Sports Specialization vs Diversification

Over the past 40 years or so, there has been a significant change in the direction of amateur sports in the United States. Way back when, participating in several sports (baseball, basketball, football, or track) was the goal of many high school athletes. If you could letter in 3, especially before your senior year in high school, that was quite impressive. Those who achieved this goal in their sophomore or yet freshman years were the top of the class. High school sports were the pinnacle for most, with a few going on to college careers. There were no travel teams, and there were limited opportunities outside of high school sports except for summer leagues. Almost nobody thought of quitting the team prematurely, unless they were injured. I can't recall a single case of "burnout" back in high school.

Nowadays, more and more athletes choose to specialize in 1 sport even before high school, hoping to achieve elite status. Many of today's amateur athletes bypass school-sponsored programs altogether in favor of advanced, often year-round Amateur Athletic Union competition—especially in basketball. Some even leave home as teenagers to live in distant cities with sponsoring families to compete on highly competitive teams, such as USA Hockey. When kids commit or are committed to sports specialization, they enter a different arena where decisions are made by adults, not them.

The goal of sports specialization at an early age is to optimize the opportunities to develop athletic skills in 1 sport to enhance the chances of competing at the next level. Having fun and developing lifelong interests in athletic activities doesn't appear to be a goal of many, if not most, specialization programs. While there is no doubt that structured athletic practice time plays an important role in athlete development, the question becomes at what age and at what cost?

Fifty years ago, opportunities for sports specialization were few and far between. Sure, there were the kids who really only liked 1 sport to the exclusion of others, but that was usually the athlete's choice, not that of the parents or coaches. We had a lot more unstructured time to play ball. Summer days were spent at the local park from morning until the street lights came on; all you had to do was ride your bike to the park and pick-up games would ensue. There were no parents or coaches to guide play. We had to pick teams and make rules and adjustments all by ourselves. In the hot summer afternoon, if we couldn't field 2 full teams on the baseball field, we'd play "right field out" and limit play to the left side of the infield. Sometimes we used an

official pitcher who threw for both teams if we didn't have 2. It was carefree play with plenty of time to experiment with switch hitting, curve balls, and playing different positions. The same was true for basketball and touch football games as summer grew into August and football season approached.

Nowadays, I see very little unstructured, unsupervised sports play with kids. It seems like they need transportation everywhere, and practices are "focused" and highly organized. Practice sessions are deliberate, even for the youngest, and driven by skill acquisition rather than having fun. This is where the pressure for sports specialization begins. When coaches see youngsters who develop and acquire athletic skills faster or are more developed physically than their peers, these individuals are frequently singled out for advanced play because they have "potential." The slow developers of skill or physique are often left behind because they don't make the grade. The select kids are often steered toward travel teams and clubs that require more practice time—often year-round—that frequently makes participation in other sports more difficult. It appears that parents are the ones who initially encourage and initiate sports participation, but often it's the coaches who emphasize sports specialization, which often sets up an interesting dynamic. If the parent is cognizant of the coach's direction and agrees with it, the youngster hears the same tune at home and at practice. Unfortunately, if the parent is not on board with the coach's viewpoint, the young, vulnerable athlete is caught in between and many times finds it difficult to decide for himself or herself. It's great to give the high achievers in sports excellent opportunities to pursue their hopes and dreams, but it's very unfortunate to see kids cut and left behind at a young age because they haven't developed as quickly. Both of these common tendencies (pushing the gifted and diminishing the opportunities for those with poorer skills) can take the fun out of sports, especially when it happens at a young age. When the fun is removed, many drop out prematurely. How sad it is to see high school athletes flat out quit before their senior year because they've had enough. More than once I've heard the complaint, "Coach has taken all the fun out of it."

So at what age should these specialization decisions be made and opportunities offered? It really depends on who you ask and in what sports they participate. To fairly answer that question, think about the amount of time it takes to acquire elite-level skill. While we don't have sound data for sports, we do have estimates for music, which demands much of the

same physical and mental discipline and skill. Studies suggest that 10,000 hours over 10 years are needed for elite status.¹ Also, training should begin around age 5; those who start later apparently never catch up. In retrospect, I started playing the accordion at age 7 but did not put nearly that amount of time into practicing. I guess that's why I never made it to the top of the polka charts. However, elite gymnasts, divers, and figure skaters have taken that path or one similar. It's not unusual to see those kiddies start at age 3 or 4 in gymnastics or figure skating. I wonder how many of those 5- and 7-year-olds, into the routine for several years, really enjoy intense regular athletic training. Moreover, I wonder why they are doing the arduous daily routines. Who are they pleasing, and are they happy when it's all over? True, some make it all the way to the Olympics and to the cover of the Wheaties box, but 99% do not. I'd really like to ask all of them: Was it worth it? My impression is that if their training allowed for a reasonably normal family and social life with a coach that made it fun, yes, it was worthwhile, and they'd do it all over again. However, I bet that there's more than a few who feel like they lost their childhood, suffered far too many injuries, and missed out on a lot of fun in middle and high school.

In light of the many common outcomes of early sports specialization, I think the reports on sports diversification at a young age are notable. Take, for instance, a study of Division I female National Collegiate Athletic Association athletes; only 17% had previously competed exclusively in their college sport.² This statistic is pretty low and surprising to me! Based on this, it is difficult to argue with the recommendations of Jayanthi et al³ that "intense training in a single sport to the exclusion of others should be delayed until late adolescence to optimize success while minimizing risk for injury and psychological stress."

So, let's say the sports program was good and success was achieved; the specialization was advantageous, athletic prowess is gained, and a college athletic scholarship is awarded! College life should be good, the bills are paid! Unfortunately, according to the article by Weigand et al,⁴ nearly 17% of these accomplished college athletes are depressed! These results are very similar to those reported by Yang et al,⁵ with 21% of the 257 student athletes reporting symptoms of depression. The

most at-risk groups were freshman (3.27 greater odds) and female student athletes (1.32 greater odds).

The number of depressed student athletes is surprising to me, but maybe it shouldn't be. Depression can often be present, but a lot of athletes choose not to talk about it because of the stigma that it can carry. Also, as medical professionals, we don't look for it as often as we should in physically healthy, competing college athletes. I thought the problem was more common in retired athletes. In the past 3 years, nearly a dozen former stars, including Junior Seau, have committed suicide. I can understand that the transition from stardom to regular life is difficult. The loss of media attention and bright lights can be troublesome, and just how the traumatized brain plays into the downward spiral in those who played contact sports remains to be seen. I guess there are a lot of places we should be looking for depression. Honestly speaking, it has probably been present in a lot more individuals than we've recognized.

In retrospect, sports should above all be kept fun, especially for children and adolescents, realizing that elite status is gained by very few. That's the best route to keep them athletically active in the long term, which should be the emphasis for most. For those who achieve elite status, we need to keep an eye on them. Some of these athletes are facing difficult issues that come with the turf and may find it hard to ask for help. Hopefully we can recognize them and get them the help that they need.

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