
Intensive Training in Youth Sport: A New Abuse of Power?

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Abstract

In many popular sports such as gymnastics, tennis, skating, diving and swimming, children are pushed into intensive training programs at a young age^{1,2,3}. Young swimmers, for example, train year-round, for longer periods and covering greater distances than in other sports: swimmers as young as 8 years old have been reported training between five and nine hours weekly, covering fourteen kilometers, while at age 14 this rises to twenty-three kilometers weekly³ - the aerobic equivalent of running 257 kilometers⁴. Commonly, these intensive training regimes are punitively enforced by the adults whom youth athletes look up to the most - their coaches and parents. Is this level of daily training healthy for a young athlete? Or is it a modern form of child abuse that has become such an accepted part of elite youth sport it is rendered invisible? Are coaches justified in pushing youth athletes towards success? Or is such behaviour bullying or even a flagrant abuse of power? Using examples from competitive youth sport, this presentation aims to trigger debate on normalized training practices in youth sport.

Key Words: Youth sport, early specialization, intensive training.

1. Baby Champions: The Birth of the Elite Child Athlete

Organized systems of training aimed at producing “baby champions” began emerging in the 1970s^{5,6}. Their focus was on the early exposure of children to sport, the identification of young athletic talent, and the development of intensive training programs for children. Initially, these systems were established in Eastern European block countries such as the former Soviet Union, where elite training programs for some sports began with athletes as young as 4 years old⁷. However, following the success at the 1976 Montreal Olympics of 14 year-old Romanian gymnast Nadia Comăneci, who at just 1.5 meters tall and weighing only 39 kilograms wowed the world with the first perfect 10 in gymnastics history⁸, similar systems quickly spread across the globe, from the then-German Democratic Republic (GDR) to China^{9,10}. Similar systems of training young champions have also existed

in Britain and the United States for decades, although on a smaller scale. For example, Olympic swimming medallists Mark Spitz in the United States and Sharron Davies in the UK trained in adult-orientated programs in the 1960s and early 1970s, when they were aged 13 and 11, respectively. Indeed, buoyed by the significance attributed by transnational governments to athlete-development plans that advocate ten years of training for elite success¹¹, talent-identification programs have increasingly come to focus on children and early specialization in sports, particularly in Olympic events; athletes are training longer and harder than ever before and from a younger age¹².

2. Fair and Foul: The Paradox of Competitive Youth Sport

Children's participation in sports is generally regarded as beneficial^{13,14}. As well as being fun, it has the potential to positively affect health and fitness¹⁵; increase bodily awareness and self esteem¹⁶, and teach rules, respect, sportsmanship and social interaction^{2,17,18}. However, intrusion by adults into children's sport and the performance-centered nature of modern, competitive organized sport has led to concerns. Critics suggest that competitive pressures engendered by adult supervision have robbed youth sport of its play and socialization values, with some arguing that modern organized sport is "an environment in which the most respectable aspects of sports, such as its educative scope, sportsmanship and physical and mental well-being, are seriously threatened"² and coaches "no longer asking how sports could benefit children but rather how children could benefit sports"². Young athletes, particularly those competing at the elite level, have come to be viewed as miniature adults², as athletes first and children second¹⁹ and as objects by the adults around them who have a stake in their success², all of which can threaten the physical and mental integrity of youth athletes.

Increasingly, research on the impact of competitive sport on young athletes is supporting these claims by highlighting the ease with which common sporting practices can cross the line into the realm of bullying, poor practice, abuse and exploitation. Areas of particular concern include early specialisation in sport and intensive training of youth athletes^{20,21,22,23}; child labour^{17,24}; disordered eating^{25,26,27,28}; doping²; and physical, emotional and sexual abuse^{19,29,30,31,32,33}. Space limitations prevent a detailed discussion of all these issues. Rather, the remainder of this paper discusses early specialization and intensive training in youth sport, and the pressure placed upon youth athletes to adhere to these protocols with the aim of considering whether these practices, which in recent years have become an accepted part of modern sport, can be considered a new form of bullying or abusive power relations.

3. Early Specialization in Sport

Contemporary sports training requires long and frequent practice hours, often coupled with specialized preparation outside of training. As noted earlier, children and young people are increasingly adopting such training regimens. Indeed, many sports, particularly Olympic sports including swimming, now have talent-identification and specialized training programs that target children, in some cases beginning while athletes are in junior school, with the aim of identifying and nurturing future champions^{22,34,35}.

Specialization in sport occurs when athletes limit their participation to a single sport, which is trained for and competed in on a year-round basis:

... [it is] the deliberate advancement of systematic training and planned competition ... with the specific goal of guiding the child, on a long-term basis, to top achievement in sport.³⁶

Such specialization has long been associated with sports where a small, prepubescent frame is considered essential, such as women's gymnastics³⁷. For example, Romanian gymnast Nadia Comăneci was introduced to gymnastics in nursery school, joined an elite training squad at age 7 and competed in her first international team at age 10³⁸. Almost two decades later, similar practices were still common. In 1992, US gymnast Shannon Miller won five Olympic medals at age just 15 and in 1996 compatriot Dominique Moceanu, who joined a gymnastics club at age 3, moved to an elite program at age 10 and became the youngest athlete to win a place on the US World Championship team at the tender age of 14, won an Olympic gold just days before her 15th birthday³⁹. Moceanu's case particularly illustrates the toll of such early specialization in sport: As an adult, Moceanu sued her parents for squandering her trust fund and money earned in her professional career, and complained that she had never had a childhood³⁹.

Following pressure from child development experts, the Fédération Internationale de Gymnastique (FIG), the sport's international governing body, has now set minimum age limits for competitors in Olympic events - 16 years old in gymnastics, rising to 18 years old in the case of trampoline events⁴⁰ - in an effort to protect young athletes from health risks like the incessant pounding that can take a toll on a developing body. However, there have been suggestions that overzealous coaches, keen to select the best athletes in the race to bring home gold, are flouting minimum age regulations. In the most high-profile case, China faced embarrassing allegations at the 2008 Beijing Games that it had fielded two underage female

gymnasts, one of whom was allegedly only 14^{35,41}, while in the Middle East, camel racers are continuing to use child jockeys despite national and Camel Racing Association (CRA) laws prohibiting the practice⁴².

But childhood specialization in sport is no longer confined to sports where a youthful, aesthetically pleasing physique is preferred, such as gymnastics; it is also increasingly common in other sports, particularly Olympic sports such as swimming, figure skating, ice hockey, tennis and football. Children as young as 6 years old train in elite football schemes⁴³, while high performance swimmers have been found to begin formal competitive training earlier than in any other sport, at an average age of 8 years and 6 months¹, although many elite clubs accept children as young as 5 into their training programs and some elite coaches write off swimmers if they have not joined an elite training squad by the age of 11⁴⁴. Meanwhile, in skating, competitions begin as early as age 3 and children as young as 5 years old are involved in formalized training programs^{2,45,46}. Elite figure skating coaches, meanwhile, have been found to adhere to the adage “the younger, the better,” with some suggesting skaters who have not specialized by the age of 8 have little chance of success⁴⁷.

The history of recent elite skaters bears this out. US Olympic gold medallist Sarah Hughes joined an elite skating program at age 3, while her peer Tara Lipinski took up figure skating at age 6 and won the World Championships when she was 14⁴⁸. Michelle Kwan, one of America’s most-winning skaters, joined an elite program at 8, where she squeezed her three-to-four hours training sessions in by waking at 3am to practice before school⁴⁸. Similarly, Shen Xue, bronze medallist in the 2002 and 2006 Olympics, attended practice twice daily, including at 4am, from the age of 6⁴⁹. In tennis, Switzerland’s Martina Hingis entered her first tournament at age 4 and turned professional two weeks after her 14th birthday^{50,51}; American Jennifer Capriati learned to play tennis as a toddler, was enrolled in an intense training program at age 10 and turned professional at 13⁵²; and Russian-born Maria Sharapova began elite tennis training at age 9⁵³.

Despite the increasing drive within sport for early specialization, no correlation has been found between beginning systematic training at an early age and the guarantee of future athletic success^{54,55,56}. In fact, research into some of the most successful Olympic athletes found that only five of the sixty-three examined in the study had specialized in their sport before the age of 12, suggesting a multi-disciplinary approach is more effective in achieving long-term success⁵⁴. Young athletes who specialize in one sport from an early age risk physical and mental burnout, overuse injuries, shorter sporting careers and increased likelihood of dropout^{57,58,59}. The latter concern has particular resonance for female athletes, who tend to leave sport at an earlier age and in greater numbers than their male counterparts⁶⁰.

In light of the negative consequences of early sport specialization, the International Federation of Sports Medicine notes that “intensified training has no psychological or educational justification”⁶². Meanwhile, the World Health Organization recommends that sport specialization be avoided before 10 years old and the American Academy of Pediatrics advises against allowing children to specialize in one sport before adolescence^{21,22}. Similarly, the Council of Europe recommends that the International Olympic Committee (IOC):

... raise the age limits for participating in certain competitions to 16 or 18 years, depending on the sport, particularly in international competition and championships⁶³.

More than a decade after this recommendation, however, no action has been taken and the IOC has still not set its own minimum age limits for participation in the Games⁶. Rather, national governing bodies of sport and international federations are permitted, though not required, to stipulate age limits on a sport-by-sport basis, which has resulted in wide variations in age limits within competitions across different sports⁶⁴. For example, in swimming in England, the ASA sets age limits according to the nature of the event so that athletes competing in regional-level events can be as young as 9 years old while swimmers in national and international events, including the Olympics but excluding long-distance open water events, must be at least 11 years old on the day of competition⁶⁵. By comparison, the International Tennis Federation (ITF) and the International Skating Union (ISU) have in recent years both increased age limits for turning professional to 16, while in other sports the minimum age limit is higher still, such as in equestrian sports where it is set at 18⁶⁶. Moreover, legislation that is perhaps best served to protect children on an international scale, such as the Convention on the Rights of the Child, has yet to engage with the issue of minimum ages for children’s intensive specialization in sport, despite recommending age limits on other issues, such as marriage (age 18), employment (between 15-18, depending on the type of work) and criminal responsibility (age 12)^{67, 68}.

Admittedly, not all children and young people who specialize in sport programs experience negative outcomes. Indeed, participation in sport does not, *ipso facto*, guarantee a specific set of positive or negative outcomes⁶⁹; rather the circumstances under which participation occurs are the defining feature⁷⁰. A distinction should, perhaps, be made between early specialization among children who join a formal elite training program and those who train and compete in a single sport but under less demanding

circumstances, since the latter are less likely to experience negative consequences. However, many Olympic and other high-status sports are requiring higher levels of investment from earlier ages, with children being pushed towards specialization in sport long before they reach the age of majority, often even long before they are able to make decisions for themselves^{34,71}. Should 5-year-old children be urged into early sport specialization? Is the expansion of formalized training programs into youth sport simply a necessity for the effective long-term development of successful athletes? Or is it motivated by children's vulnerability, malleability and tendency towards unquestioning compliance?

4. Intensive Training of Youth Athletes

The intensity and frequency of training expected of young athletes aiming to reach elite level also has the potential to reverse the benefits of sports participation. In modern competitive sport, as in wider society, quantity is being conflated with quality, with the former overtaking the latter as the primary concern⁷². Consequently, coaches commonly (and incorrectly) believe that athletes who train for longer and more intensely than their peers will be most successful⁷³. In many popular sports, such as gymnastics, tennis, figure skating, diving and swimming, young athletes endure numerous long, painful hours of practice once, sometimes twice, daily and all year round^{29, 44, 74}. In swimming, for example, young swimmers commonly train all year without a break, putting in multiple hours and covering great distances⁷⁵ - swimmers as young as 9 years old have been reported training eight times a week, covering 24 kilometers, rising to sixty-five kilometers weekly for swimmers age 14 years old³, the aerobic equivalent of running 257 kilometers⁴. Light reports children under 13 training five and six times a week in Australia for one and a half hours at a time, often rising at 5.15am to train before school⁷⁶, while Donnelly identifies swimmers as young as 12 training for more than twenty-five hours per week - a training load that would be considered extreme even for adults¹⁷. Indeed, the weekly distances commonly covered by elite youth swimmers are comparable to those for adult competitors only a decade ago and, in some cases, are higher than those covered by current swimmers on the senior British team, for example, five-time Olympian Mark Foster^{77,78}.

In the UK, the Amateur Swimming Association (ASA), the English governing body for the sport, supports an intense training regimen for young swimmers through the swimming-specific version of the long-term athlete development plan, which recommends that swimmers as young as 8 years old train between five and nine hours weekly for around fourteen kilometers in the pool, increasing to between fourteen and twenty-seven hours weekly,

representing more than fifty kilometers, by the age of 11 for girls and 12 for boys⁷⁹.

Meanwhile in other sports, child athletes have been found to train six to eight hours a day, six days a week from as young as 8. Hong, for example, discusses how children are identified as talented at age 5 and 6 then channelled into specialized sports school in China, where they train for six to eight hours a day, while child athletes who have already reached elite status and are on national or provisional teams in various sports from athletics to badminton train ten to twelve hours per day⁸⁰. Meanwhile, 10-year-old figures skaters in the United States commonly train for forty-five minutes daily five times a week and some 10 year old ice-hockey players in Canada play ninety games in a season^{17,45}. In gymnastics, former successful child athletes have spoken of beginning intensive training soon after they learned to walk⁷⁴. US Olympic champion Dominique Moceanu has described regularly being suspended by her feet from a bar attached to a door frame at age 1, while skaters as young as 6 years old report repeatedly taking painkillers to numb the pain caused by intensive daily training sessions on their growing frames^{2,6}.

In the culture of modern elite sport, where quantity has overtaken quality as the training mantra, training has become life consuming, even when the athlete involved is a child. Youth athletes dedicate tremendous amounts of time to their sport, often willingly sacrificing other social activities in order to train^{19,81}. They report lives in which every minute is taken up by scheduled activity - school, train, study, sleep - and often complain the sacrifices they make - to their health, the social development and their education - are too great^{29,74}. Recognition that such long training hours have become normalized as part of the discursive regime of elite youth sport has led to suggestions that elite youth sport more closely resembles the adult world of work than the child's world of play, and that child athletes are being exploited in ways that would not be tolerated in other social settings²⁴.

Indeed, elite young athletes subjected to such intensive training are at risk of physical and psychological damage², inhibited bone growth, delayed growth and onset of the menstrual cycle, physical and mental burnout and increased potential for injury and dropout^{57,58,60,82,83}. Moreover, in its extremes, intense specialized training of young athletes may constitute child abuse as defined by the World Health Organization (WHO) since it may result in "actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power"⁸⁴. Yet despite these concerns and the mounting evidence that youth athletes are increasingly becoming involved in intensive training programs, sports authorities rarely question the practice². To date, only the WHO has

expressed concern about such practices and even this is somewhat diluted, stating that:

Organisation of children's sports activity by adults does have a potential for abuses to occur if those who set the amount of sports participation and the training regimens are inexperienced and use adult models²¹.

While adult employees are protected against intensive work schedules under health and safety regulations and international labour law, there is limited legislation or guidance that covers children in sporting environments². Yet as children are in perpetual physical and psychological evolution, they are often more vulnerable than adults, and any intensive training program, whether in sports, arts, education or any other activity, should consequently respect the child's biological clock. Are such training regimens healthy for a developing, young athlete, simply a sign of the commitment required to become an international athlete? The evidence suggests otherwise. Rather, such training regimes represent a modern system of child abuse, an exploitation of the bodies and minds of children too young to understand the implications of such training.

5. Coaching Pressure

Worryingly, in many cases, these intensive, early-specialisation training regimes are imposed on children and young people by the very people whom youth athletes look up to the most – their coaches. Coaches are increasingly expected, and are even advised during coach education courses, to control the entire coaching process and coach educators commonly argue that coach control is a key aspect of successful coaching⁸⁵. Meanwhile, athletes are expected to unquestioningly defer to the coach, through discourses of physical preparation and mental toughness that attribute certain meanings to their preparation, including that they must comply with strict training regimes and controlled lifestyles to achieve success^{44,81,85,86,87,88}. Consequently, many coaches consider it good practice to assert their control over all aspects of their athletes' lives. They have been found to punitively impose frequent, intense training regimens, dietary restrictions and mandatory weigh-ins on their athletes and even enforce strict rules on dress, social activities and the use of contraception^{31,89}.

In relation to the frequent, intensive training regimes discussed in this paper, coaches commonly require athletes to attend a minimum number of training sessions, with athletes who fail to adhere to these regulations exiled from the club. Swimming coaches in my own research required athletes as young as 10 attend at least seven, one-and-a-half hour training

sessions per week – if they, or their parents, refused to do so, the athlete was asked to leave the club⁴⁴. Indeed, although empirical research on imposed training regimes across sport is lacking and more studies are needed, anecdotal evidence suggests young athletes are increasingly coming under pressure from their coaches to adhere to intense training protocols, with some coaches using bullying and abusive behaviour to induce athlete compliance. For example, David reports the case of a French gymnast who accused national coaches of beating her for failing to attend training sessions², and the case of Chinese track and field coach Ma Junren gained international notoriety after he publicly rationalized physically abusing athletes:

I would scold them [athletes] or beat them when they were lazy or disobedient. But I only did it for their own good. If we are not prepared to suffer bitterness ... how can China catch up with world levels in track and field? ⁹⁰

Meanwhile, and a qualitative study of former and current professional footballers that asked about players' relationships with their manager as youths found managers used verbal and physical abuse to intimidate young players and induce fear⁹¹. Another survey found that almost 20 percent of the athletes questioned had been hit, kicked or slapped while participating in sports⁹². Coaches also set "punishments," such as additional training loads, on athletes who fail to conform to strict standards or discipline⁶. A qualitative study of twelve former elite child athletes found all had experienced some form of emotionally abusive behaviour from their coaches, including shouting and belittling, while three-quarters had also experienced threatening or humiliating behaviour from their coach, leading the authors to suggest such behaviour within sport is a "habitual coaching tool used by coaches of elite child athletes"³³. Of course, some athletes may thrive off being push to succeed. But does this justify coaches pushing youth athletes towards success in this way? Or is such behaviour bullying or even a flagrant abuse of power?

Notes

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