

Frequently Asked Questions About Early Sport Specialization

Nicole Hauser^a and Brad Strand^b

^a Nicole Hauser is a graduate assistant with the volleyball team at North Dakota State University; ^bBrad Strand is a professor in the Department of Health, Nutrition, and Exercise Sciences at North Dakota State University.

Abstract

Youth athletes, and often their parents, are enamored with the so-called benefits of sport specialization, but sometimes fail to consider the risks involved. The idea of receiving a scholarship after high school to play sports often outweighs the negative effects that specialization can have on a young athlete's body and mind. It is important that parents and youth athletes understand these risks and carefully decide whether or not sport specialization is the right choice for them. The purpose of this paper is to answer frequently asked questions about early sport specialization.

Sport specialization is defined as “intense, year-round training in a single sport with the exclusion of other sports” (Jayanthi et al., 2011). The number of children specializing in sport has continued to increase and become trendier in the past twenty years (Malina, 2019). With specialization, there comes psychological consequences and potential risks of overuse and burnout (Giusti et al., 2020). All of these factors may lead to a youth athlete dropping out early or having a poor experience with youth athletics.

The youth sports industry is a huge money-making business in the United States (Research and Markets, 2019). With the increase of youth sport opportunities, there are many questions that arise in regards to how many activities a young athlete should be involved in and what the best path to reach athletic success is. Parents, coaches, and peers have an influential role on a young athlete and how they learn to enjoy or dislike their youth sport experience (Elliott, 2017). As the youth sports industry grows with opportunity, the number of kids specializing has increased as well (Jayanthi et al., 2013).

As a coach or parent of a youth athlete, the goal should be to give them a positive and enjoyable youth athletics experience (Perkins, 2017). There is a constant struggle to find a balance between parents'

and coaches' wants and the wants/needs of the youth athlete. Many adults believe that specializing will lead to collegiate or professional success and push young athletes to pursue that path (Padaki et al., 2017).

Before pushing a young athlete to devote the majority of their time to one sport, there should be an understanding of the potential risks and factors that are influenced by specialization. Some of these factors include an increased risk of burnout, high risk of overuse injury, and higher levels of psychological fatigue (McLeod et al., 2011). If specialization is understood and approached in the correct way, there are possible benefits that can come later in an athlete's career.

Who is the strongest influence in the decision for a child to specialize?

A young athlete is surrounded by all different types of pressures and influences when they are deciding their level of involvement in one sport, multiple sports, or no sporting activities at all (Jowett, 2006). When an athlete chooses the path of playing just one sport, there is typically someone or something that has influenced them to make that decision (Maatta, 2014). The youth sports world has become extremely adult-driven, and the adults involved have much control over a young athlete's path (Jayanthi et al., 2013).

Parents have a large influence on the activities that their children become involved in, but coaches within those leagues or programs have a large influence on the decision to specialize in one sport (Jayanthi et al., 2013). When a coach is encouraging a youth athlete to specialize, the parents may try stay out of that decision making process so they do not interfere with the coach and athlete relationship (Jayanthi et al., 2013). Parents may also believe that the pathway that a coach has proposed is the best way for their child to have success (Jayanthi et al., 2013). Through a study done on High School athletic directors in the United States, 77.7% of them stated

that there has been an increase in sport specialization, and that trend has stemmed from the high school coaches encouraging their athletes to participate in more intense training (Jayanthi et al., 2013).

Do parents push their children to specialize because of the fear of falling behind?

There are multiple reasons that a child may choose to specialize in a sport, but one of the reasons stems from a fear instilled from the adults in youth athletics, and that is the fear of falling behind (Field et al., 2019). In a study that investigated high school baseball parents, over 70% of the parents believed that early specialization in baseball would increase their child's baseball skills as well as increase their chances of making a college team (Post et al., 2019). These beliefs coming from a parental figure may put the fear of missing out or falling behind into the mind of a young athlete (Post et al., 2019; Benson & Strand, 2014).

Obtaining a college scholarship is one of the large external factors influencing young athletes to specialize (Dueppengiesser, 2019). Parents have the idea that they can create long-term athletic success through short-term opportunities by pushing their children too much when they are too young (Padaki et al., 2017). This leads to parents involving their child in too many athletic opportunities than they are capable of handling. The short-term pushiness leads to parents competing with other parents about whose child is more "elite" than another child, which creates a disconnect between parents' wants and children's wants through athletics (Padaki et al., 2017). Parents often fear that if their child is less involved in a sport than another child, they will fall behind or miss out on developing their skills in a particular sport.

According to the National Federation of State High School Associations (NFHS), there are four questions parents can ask themselves to determine if they are pushing their child beyond playing a sport for the love of the game (John, 2018). The four questions they have presented are as follows: Are your children in sports because it's convenient? Are your children in sports because everyone else's kids are? Are your children in sports only because you were? Are your children in sports because you want them to turn pro? The NFHS states that if parents can answer "yes" to any of those questions, there is a possibility that their child is being pushed to participate in a sport they are not passionate about (John, 2018). When a parent pushes their child and takes things too seriously, it can have negative psychological effects on their child (John, 2018).

What are the psychological implications of sport specialization?

Early specialization can potentially have negative effects on the psychological state of a youth athlete. Early specializers have shown to have lower levels of overall health and experience less fun when participating in their sport (Jayanthi et al., 2013). In a study of the U.S. Tennis Association Junior players, the players who were early specializers showed higher levels of psychological fatigue and burnout (Jayanthi et al., 2013). Burnout is the physical or emotional exhaustion that an athlete can develop from sport participation and is considered a psychological symptom that presents itself similarly in any sport (Giusti et al., 2020). In general, early sport specializers have shown to have a greater sense of reduced accomplishment and a lower level of passion for their sport than those who participate in multiple sports (Giusti et al., 2020).

These effects lead to higher burnout rates, which eventually leads to higher dropout rates than non-specializing athletes (Giusti et al., 2020). Not surprisingly, earlier dropout rates are correlated with earlier specialization (Dueppengiesser, 2019). As a young athlete, choosing to specialize may hinder development of other personal life skills. Participating in a wide variety of activities as a youth athlete helps develop expert decision-making skills and pattern recognition skills (Dueppengiesser, 2019).

Does parental socioeconomic status play a role in sport specialization?

The youth sports industry is a money-driven business. Parental socioeconomic status has shown to be a key factor in early sports specialization (Post et al., 2019). Parents from a higher socioeconomic background are more likely to have a child that is highly specialized in their athletic journey. In a study of 155 parents of high school baseball players, the families with a high median household income spent an average of \$3,000 each year (Post et al., 2019). Money spent in youth athletics is commonly used towards travel clubs. The high school baseball parents involved in the previously stated study noted that the greatest barrier of becoming involved in a baseball club were the travel requirements (Post et al., 2019). When parents involve more money in their child's athletics, this also leads to increased pressure being placed on the shoulders of the athlete to continue to specialize as well as improve their skills (Cote, 1999).

How do injury rates of multi-sport athletes compare to single sport athletes?

Being a highly specialized athlete often means putting in year-round training to a single sport, with little variation in the movements and skills needed to participate. By constantly using the same muscles, there is a greater chance of obtaining an injury. Multi-sport athletes have a 25% chance of experiencing a

major injury, while highly specialized athletes have a 42.8% chance of experiencing a major injury (Dueppengiesser, 2019). Additionally, a highly specialized athlete is 2.25 times more likely to obtain an overuse injury than a multi-sport athlete (Myer et al., 2015). An overuse injury is an injury that occurs because of repetitive demand or trauma over a period of time. Overuse injuries represent about 50% of youth athletics injuries and the high rate of overuse injury is the results of high-volume, specialized athletic participation (Post et al., 2020).

Is specialization beneficial in certain sports?

Although rare, in some cases early specialization can be beneficial for an athlete to reach elite status in their sport. For example skating, gymnastics, rhythmic gymnastics and diving are sports in which early specialization may be deemed necessary for an athlete to reach peak performance (Myer et al., 2015). Early specialization is beneficial because in these sports, peak performance typically occurs before an athlete reaches full physical development (Myer et al., 2015). The type of sport can also determine the level of specialization needed. Team sports typically do not require early specialization, nor is early specialization as effective as compared to an individual sport (Dueppengiesser, 2019).

Despite early specialization being beneficial in those sports, there is little research on what the long term health effects of specializing early in those may potentially be (Brenner, 2016). Some studies have shown that young females specializing in gymnastics, skating and diving are more susceptible to the female triad (Brenner, 2016). The female triad is the combination of having low bone density, menstrual cycle dysfunction, and low energy levels, with or without an eating disorder (De Souza et al., 2013). Therefore, the risk of becoming an elite gymnast or skater at a young age may result in issues with the female triad or overuse injuries (Brenner, 2016).

How many hours should a youth athlete be practicing and playing athletics during their development years?

The American Orthopedic Society for Sports Medicine recommends that in the development years, youth athletes should not participate in practice and/or athletic activities for more hours a week than their age and should not participate in one sport for more than eight months of the year (Post et al., 2020). This means that if an athlete is twelve years old, they should not participate in no more than twelve hours a week of their sporting activity. Additionally, participating in over 16 hours per week of organized activity, regardless of the number of sports, is associated with an increased risk of injury (Corso, 2018). Previous research has found that youth coaches do not have

strong knowledge about the sport-specific training recommendations. Coach knowledge and education of sport safe participation is vital in limiting the number of overuse injuries (Post et al., 2020). The National Athletic Trainers' Association has strongly recommended there be more education for coaches in regards to sport safe recommendations so that they do not overtrain youth athletes and are also aware of signs and symptoms of overuse injuries (Post et al., 2020).

Is early specialization necessary to reach elite athletic success?

For nearly all sports, there is little to no evidence that specialization is necessary to become an elite athlete. In a few sports, specialization may help to a certain degree, in order to develop elite skills (Jayanthi et al., 2013). Besides figure skating, gymnastics, and diving (sports in which athletes peak before puberty), if specialization does happen, it should not occur before puberty (Myer et al., 2015). The benefits of playing multiple sports can put kids at an advantage later in life. By participating in multiple sports, youth athletes develop a much wider skill set than they would have if they specialized early. Youth athletes in multiple sports develop a wide variety of motor skills, as well as a variety of athletic skills (Jayanthi et al., 2013). In a study done on 301 Division I collegiate athletes, 94.7% of them had competed in multiple sports in their high school years (Swindell et al., 2019). Early sport specialization is uncommon among high level athletes, and there is little to no evidence that it is necessary to reach an elite level of play.

Conclusion

The youth sports experience should be a positive and life-enriching time in a young athlete's life. To best practice and capture that, parents and coaches should be well-versed in the most effective way to approach a child's involvement in youth sports. The youth sports industry has become increasingly adult-focused, and the needs of the athletes are often overlooked. Parents and coaches often assume that a young athlete wants to specialize in a sport at a young age because of future desires to be an expert of that sport. In reality, there is little evidence that states early specialization leads to elite athletic success. It is important to be mindful of the sustaining their enjoyment for a sport and keeping their bodies in the best shape. To best maintain the love of the game, a healthy psychological state, and injury prevention, knowledge about risks and recommendations of sport specialization are necessary.

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