The purpose of this study was to explore parents’ perceptions of sport specialization within the samplings years of Cote’s Developmental Model of Sport Participation (Cote, 1999). More specifically, this study explored how parents’ perceptions of their perfectionism and parenting styles were related to views of sport specialization in the youth sport context. Participants in this study were comprised of 203 parents of youth sport athletes from the Mid-West. Youth sport athletes were sons or daughters between the ages of 6 and 12 years old participating in ice hockey, figure skating, or swimming. Parents participated in a one-time quantitative collection of data regarding their perceptions of sport specialization, levels of perfectionism, and parenting styles through in-person questionnaires at the beginning or early part of their child’s sport season. After completion of the study, data was analyzed according to the study’s guiding hypotheses utilizing the IMP SPSS-X software package.
PARENTS’ PERFECTIONISM, PARENTING STYLES, AND VIEWS OF SPORT SPECIALIZATION

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PARENTS’ PERFECTIONISM, PARENTING STYLES, AND VIEWS OF SPORT SPECIALIZATION

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CHAPTER ONE
INTRODUCTION

In the United States, millions of children and adolescents participate in organized sport programs every year (Weinberg & Gould, 2015). As researchers and practitioners examine children’s organized sport participation, the literature suggests more children are participating at earlier ages than ever before with sport specialization (Callender, 2010). Many times, their participation is tied to aspirations of achieving elite level status in sport. With this in mind, a child’s aspirations would not be achievable, let alone possible, without the constant support and cooperation of their primary caregiver or parent(s). Oftentimes, parents assume the role of motivator, facilitator, and even coach during their child’s youth sport experience (Vealey & Chase, 2016). In these given roles, parents are the primary sources of financial, emotional, and physical support for their child. Of growing concern today is the issue of overbearing parents who demand excellence in sport from their child in order to gain higher economic status or popularity and ignore the possible adverse physical and psychological effects that sport specialization can have in this context (Jayanthi, Pinkham, Dugas, Patrick, & LaBella, 2012).

This chapter will begin with a broad overview of the talent development models in sport with a concentration on Cote’s Developmental Model of Sport Participation (Cote, 1999). Next, current views of sport specialization and diversification will be discussed, before describing in detail the influence a parents’ behavior can have on their child in these areas. Specifically, perfectionism and parenting styles will be reviewed as they relate to the youth sport context. The purpose of this study is to explore parents’ perceptions of sport specialization within the samplings years of Cote’s Developmental Model of Sport Participation (Cote, 1999). More specifically, this study will explore how parents’ perceptions of their perfectionism and parenting styles relate to views of sport specialization in the youth sport context.

Models of Talent Development

Today in the world of sport the nature of one’s expertise is an extremely important factor to take into consideration due to the time, money, and energy spent in the selection and identification of “talented” individuals who are believed to have the potential to be highly successful athletes. Talent itself is described as a hardwired intrapersonal phenomenon characterized by a mixture of inherited traits, appropriate support from trained individuals, and
opportunity (Vealey & Chase, 2016). Howe, Davidson, and Sloboda (1998) broke down this concept further into five characteristics of talent: 1) Talent is based on genetic structures and therefore partly innate; 2) Its full effects may not be fully evident at an early age, but there will be some early indications, allowing trained people to identify the presence of talent before mature performance has been demonstrated; 3) Early indications of talent can be used for predictive purposes regarding which athletes are most likely to excel; 4) Only a minority of children possess a high-degree of talent; and 5) Talent is domain-specific (i.e., specific domains of sport or types of sport). Taking these characteristics into consideration, oftentimes, parents and coaches concentrate on a child’s talent development so that he or she may have ample opportunity to reach a specific level of expertise in a given sport.

The pathway towards reaching this expertise level in sport is not necessarily simple nor clearly defined. The acquisition of expertise in sport is the result of complex interactions among biological, psychological, and sociological constraints (Singer & Janelle, 1999). More specifically, there is no exclusive formula or method to explicitly develop talent due to the array of factors (i.e. personal, environmental, situational, technical) that mediate this phenomenon. However, there are several theorists’ in the field who have dedicated their time and effort towards creating more systematic, effective models to explain and assist individuals (i.e. parents, coaches, and all responsible for youth development) in understanding the appropriate pathways for developing talent in young athletes that may lead to future elite level or professional status. Still, more important than reaching the elite or professional status in sport is the ability for these models to aid in creating a gratifying, worthwhile athletic experience for all athletes involved.

**Theory of Deliberate Practice.** Ericsson, Krampe and Tesch-Romer (1993) proposed one of the first and most well recognized theories of expertise based on the term they coined “deliberate practice.” While no one denies that practice is a necessary mediating factor for the attainment of expertise, Ericsson and colleagues (1993) make the claim that practice actually causes expertise and commonly refers to this as the “10,000 hours” prescription. The term “deliberate practice” is defined as any activity designed to improve the current level of performance, that is effortful and not inherently enjoyable. It is contrasted to other activities that could be considered practice such as play, work, and observing others performing a given skill (Hodges, 1995). For this theory, Ericsson and colleagues (1993) propose “the amount of time an individual is engaged in deliberate practice activities will be monotonically related to that
individual’s acquired performance.” (p. 368). Therefore, in order for an individual to have the best chance at obtaining expertise in performance he or she must maximize the amount of time they spend on “deliberate practice” to reach this specific level.

Ericsson’s study on violinists is considered one of the most influential pieces of work on talent development in which he attempted to explain how different levels of performance are attained as a function of deliberate practice. In this study, violinists were divided into three groups (elite, intermediate level, and lower-level) and asked to estimate how many hours per week they had practiced alone with their violin for each year since they had started practice. Findings indicated that the given violinists practice habits showed a highly positive correlation to the level of performance necessary to obtain expertise proposed by Ericsson’s framework of deliberate practice (10,000 hours vs. 7,500 hours vs. 5,000 hours for each group respectively). The finding that practice related positively with performance level was beneficial such that Ericsson and colleagues (1993) were able to highlight the importance of training in developing expertise which led to the identification of the “10,000 hours’ prescription” for talent development.

While these results concentrated on the quantity of practice, to develop true expertise one cannot rely solely on the number of hours practiced, but must also account for the quality of his or her practice (Ericsson et al., 1993). With this in mind, many believe the common saying “practice makes perfect” holds true, however, Ericsson would disagree and be more likely to support the saying “practice does not make perfect; only perfect practice makes perfect.” In order to reach an expert level of performance, Ericsson stressed that practice must be a “highly structured activity with the explicit goal to improve performance” and it may not necessarily be “inherently or incessantly enjoyable” for an extended period of time. Consequently, this has led to the popular definition of “deliberate practice” as mentioned above (Ericsson et al., 1993).

As previously reviewed, one of the most salient relationships in the behavioral sciences is the positive association between time spent in practice and improvement in proficiency (Cote, Baker, & Abernethy, 2007). Despite accepting the deliberate practice proposition primarily collected from data on violinists, Ericsson and colleagues (1993) have repeatedly contended that this phenomenon also applies to the development of expertise in other domains, such as sport. There is a growing body of evidence to support these claims found in the sport context from
chess (Charness, Tuffiash, Krampe, Reingold, & Vasyukova, 2005), to figure skating and volleyball (Deakin & Coble, 2003), and wrestling (Hodges & Starkes, 1996).

Though this positive relationship has been strongly supported in the literature, research on the exact prescription of Ericsson’s 10,000-hour rule is more equivocal. As noted above, literature in the sport domain has been able to successfully produce evidence supporting the theory of deliberate practice. However, when looking specifically at the breakdown of certain sports, this theory becomes controversial. For example, a study exploring international soccer players found that these athletes estimated they accumulated 10,000 hours of training before reaching expert level performance, matching the 10,000-hour prescription (Helsen, Hodges, Winckel, & Starkes, 2000). Another study by Helsen, Starkes, and Hodges (1998) examining field hockey players also found that athletes estimated an accumulation of 10,000 hours before reaching expert level performance, again, matching this prescription. Conversely, studies involving other sports such as basketball, field hockey and wrestling have discovered that the amount of training time needed to reach expert-level performance was actually much lower than the 10,000-hour prescription ranging closer to 4,000, 4,000 and 6,000 hours respectively (Bruce, Farrow, & Raynor, 2013; Soberlak & Cote, 2003; Cote, Baker, & Abernethy, 2003).

Based on the body of evidence regarding the notion of 10,000 hours’ rule the concept of a minimum volume of training required for expert performance is flawed such that research has been able to show that among individuals who have achieved similar “expert” performance levels, their training times are not always similar. Granted, the Theory of Deliberate Practice has generally been supported in the literature with its connection to sport and other domains (Cote et al., 2007) and has also provided researchers with the motivation to more critically examine the nature of talent development. However, more systematic models were needed due to the elusiveness of this theory when taking into consideration the collection of other important personal, environmental, and contextual factors that also play a role in guiding a talented youth sport participant to a level of expert performance in the athletic domain.

**Bloom’s Study of Expert Performers.** An earlier model that delved deeper into better understanding the underlying factors related to talent development in sport stems from Bloom’s study of expert performers. In this study, Bloom (1985) aimed to describe how a number of eminently talented and creative individuals in a number of domains such as athletics, art, music, and science developed skills across their lifespan. During this 4-year longitudinal study,
participants were asked about a multitude of topics including their skills, childhoods, parents, and education. Findings from this study not only acknowledged the importance of the hours each expert put into their training, but also gave us a unique view on the social, emotional, and interpersonal dynamics of both the child and family related to talent development. Through these observations and interviews Bloom (1985) found that no matter the field, children seemed to go through three specific stages in their development which he categorized in his three-stage model as the initiation stage, the development stage, and the perfection stage.

The first stage of this model is the initiation stage, sometimes referred to as the “romance” stage. Here, children are essentially “drawn in” to the activity and learn the basic skills in an atmosphere of fun. Generally, exposure of activities for these children is meant to be playful, while at the same time enticing, leading them to fall in love with the sport. In addition, there is little to no emphasis placed on outcomes. During this stage, it is important for parents to emphasize the importance of sampling many different sports and activities so that their child may grow in a positive way and decide for themselves what they like and want to participate in. Finally, coaches should focus primarily on being warm, nurturing, and supportive so that they may create an enjoyable, positive experience for the children.

The next stage is referred to as the development stage, in which the children become athletes and “hooked” on their sport. Here, there is a significant increase in practice time and increased focus on achievement and technique (Vealey & Chase, 2016). For parents and coaches, the stakes have risen and there is a significant increase in sacrifices required in order to meet the current needs of the child. Coaches are generally more skilled and knowledgeable at this stage while parents tend to seek out these types of individuals who have the ability to meet the high-level needs of their children. Finally, the perfection stage is categorized by athletes who have reached expert-level performance with a focus on high-level skill refinement. Here, athletes tend to be ‘obsessive’ and their sport dominates their lives. This type of passionate focus leads the athlete to be defined by their sport such that they have a difficult time identifying themselves in any other way. The coach and parent role also changes during this stage because of the shift in responsibility for training and competition as more focused on the individual athlete. With this in mind, athletes grow increasingly more autonomous, while coaches and parents act more as support systems than teachers (Bloom, 1985; found in Vealey & Chase, 2016).
Bloom’s model helped to build on the progression of talent development knowledge in a scientific manner and was effective in showing that successful individuals had very similar learning and development phases. He emphasized that while time spent on an activity plays a significant role in development, ‘what learners do, how they do it, and how they feel about it are more important’ (Bloom, 1985 found in Vealey & Chase, 2016). Consequently, Bloom was able to build upon the work of other researchers intrigued by this phenomenon in expert performers with this model acting as a stepping stone for the development of numerous talent models to follow. However, additional research was required to gain a better understanding of the psychological, social, and motivational influences on talent development in the sport context (Cote & Lidor, 2013).

**Long-Term Athletic Developmental Model (LTAD).** The Long-Term Athletic Developmental Model by Balyi and Hamilton (2004) is a more recent approach to talent development that places an emphasis on long-term commitment to practice and training rather than a more short-term attitude commonly characterized by parents and coaches as “peaking by Friday” with a focus on immediate results. Today, specialization is a debatable topic such that a major question amongst researchers examining expertise in sport (from a developmental perspective) is whether aspiring expert athletes should be limiting their childhood sport participation to a single sport, with a deliberate focus on training and development in that sport (Baker, 2003).

The LTAD does not focus primarily on determining whether or not specialization or diversification is the best choice for producing expertise in a youth sport athlete. Instead, the LTAD takes into consideration the type of sport when determining the nature of specialization by classifying them into groups of “early specialization” or “late specialization” sports. There appears to be support for early specialization for sports in which peak performance occurs in adolescence or early adulthood (e.g. gymnastics, figure skating, diving) because athletes in these sports tend to possess optimal physical skills and reach their peak performance at earlier ages in comparison to late specialization sports (e.g. soccer, football, track and field). With this in mind, the LTAD attempts to balance training load and competition throughout childhood and adolescence so as to assist optimal development processes rather than focusing on results (Balyi & Way, 1995; Bompa, 1995).
While Balyi and Hamilton (2004) stress the importance of understanding the LTAD models are generic in nature and must be further adjusted to the demands of each individual sport within their categories, they present a four-phase model for early specialization sports and a six-phase model for late specialization sports. Because there are only a few sports that can be truly categorized as “early specialization” sports, it is both important and advantageous to focus on the late specialization track, as the late specialization track follows the same four general steps as the early specialization track with the addition of two introductory stages known as the FUNdamental stage and Learning to Train stage (Balyi & Hamilton, 2004).

The first stage of late specialization sports is the “FUNdamental” stage in which the primary objective is to build overall motor skills through mastering the fundamentals before sport specific skills are introduced. These types of skills include basic locomotor, manipulative, and balance skills. For this stage, it is important that athletes approach these skills with a focus on enjoyment and fun along with a positive attitude. Balyi and Hamilton (2004) contend that the “fun” aspect is a key component at this stage because it can contribute significantly to future athletic achievements and trainability for long-term sport-specific development. In addition, this stage also places an emphasis on structure for these activities to ensure the overall development of an athlete’s physical and mental capacities through the practice of proper technique, form, and rules/regulations.

The second stage of the late specialization model is the “Learning to Train” stage. This is where youth athletes can use the fundamental skills learned from the previous stage and begin to apply them to their overall sport skills in whatever context they may be participating in. This stage is essential because without it, a child’s future engagement in sport and physical activity may be put in jeopardy. During the “Learning to Train” stage, a youth athlete’s fundamental movement and overall sports skills should be established because according to Balyi and Hamilton (2004) these skills are “the cornerstones of all athletic development.”

The next stage in the late specialization model is known as the “Training to Train” stage where the focus is placed on building the athletes “engine” and solidifying specific sport skills. This involves the development of an aerobic base and strength towards building specific skills and tactics. As noted above, Stage 3 of the late specialization model corresponds with Stage 1 of the early specialization model, and the two follow the exact pathway through the remainder of the model’s advancement. Towards the end of this stage an emphasis should be placed on
flexibility and the introduction of light muscular exercises to assist in the growth of an athletes’ bones, ligaments, tendons, and muscles. According to the LTAD model, a focus should also be placed on a child’s maturation levels because this could affect their readiness (or lack thereof) for aerobic and strength-training activities. While the intensity and frequency of training will be multiplied during this stage, it is important to remember that the major focus of training is on learning the basics as opposed to focusing on competing. As noted by the experts a “60% training to 40% competition ratio” is recommended (Balyi & Hamilton, 2004). However, this should be tailored based on the sport itself and individual needs.

After the “Training to Train” stage athletes will begin the “Training to Compete” stage. During this stage, athletes should focus on optimizing their overall fitness and training preparation for their specific sport and position/role on the team. The LTAD model suggests a “50% training to 50% competition” ratio for this particular stage (Balyi & Hamilton, 2004). Here, the athletes should be devoting their training efforts towards completing and mastering their basic and sport-specific skills. In addition, athletes should place an emphasis on incorporating the element of competition into their training habits so they are prepared to perform these sport-specific skills in high-pressure competitive situations during athletic performance. With this in mind, individualization for certain programs such as fitness, recovery, performance, and psychological preparation must be taken into consideration and tailored to a heightened degree during stage 4. This is suggested because at this point athletes are beginning to differentiate in terms of their strengths and weaknesses related to their sport, so it is important to modify each program on an individualized basis.

The final stage of the LTAD is referred to as “Training to Win” stage. At this point, athletes should be at their full physical development in terms of their technical, tactical, mental, and personal skills. Here, an emphasis is placed on maximizing the multidimensional characteristics of the athletes given sport in relation to their ability to perform. Generally, this stage applies to athletes over the age of 18 and is considered the final phase of athletic preparation. During this stage, the focus is on the optimization of an athletes’ fitness and training practices in order to reach their peak performance outputs. Therefore, the majority of the athletes’ training should be devoted to high competition-related performance. As the experts note, the training to competition ratio in this phase is “25% to 75%”, with the competition aspect involving competition-specific training activities (Balyi & Hamilton, 2004). Athletes need to be
aware of their knowledge and specific sport experiences in relation to their training and competition cycles so that they will be able to maximize their peak performance during intense competitions in a given sport. This individualized athlete awareness can aid in preventing both physical and mental exhaustion during performance.

Finally, stage 6 of the LTAD model refers to the “Retirement/Retention” stage in which the athlete retires from sport-specific competition permanently and begins to prepare for new opportunities in the real world that may or may not be related to athletics. The primary objective of this stage is for individuals to adjust their physical training practices to life outside of sport, and maintain this fitness to create positive, life-long sport and physical activity habits that may be endured over time (Balyi & Hamilton, 2004).

While the LTAD focuses on training to optimize performance longitudinally, and takes into consideration the sensitive developmental periods of a youth athlete known as ‘windows of opportunity’ it appears that this model is one-dimensional as it has difficulty interpreting the timeline at which a developing athlete should proceed to each stage (Ford et al., 2011). Though Balyi and Hamilton (2004) provide a rough idea of age guidelines regarding each stage of their model, they make clear that using chronological age as an indicator in which to base an athlete’s given training and competition stages is not ideal. Instead, Balyi and Hamilton (2004) aim to pinpoint the optimal “critical” or “sensitive” periods of growth where the athlete’s trainability is highest. One way to identify this is through the measurement of biological age markers such as Peak Height Velocity (PHV). The onset of PHV is influenced by both genetic and environmental factors (i.e. climate, cultural influences, social environment) and provides valuable information regarding the training of an athletes’ energy system and brain functioning without considering chronological age.

However, it has been suggested that many parents and coaches are not as educated as they could be in terms of interpreting and measuring these biological measures therefore choose to rely more so on chronological age when developing their youth athlete’s training strategy. While the LTAD has provided parents, coaches, and practitioners with a framework for identifying the ways in which talent may be nurtured, it is still often referred to as a “work in progress” (Ford et al., 2011). Therefore, the model that best encompasses a more holistic view of talent development through the utilization of age cut offs within each of its distinct stages is the Developmental Model of Sport Participation (Cote, 1999).
Cote’s Developmental Model of Sport Participation (DMSP). The social context influencing children’s participation in sport involves the child, the coach, and the family environment (Scanlan & Lewthaite, 1988). Taking this into consideration while following up on the work of Bloom (1985), Cote extended his research on families and talent development by creating the Developmental Model of Sport Participation (Cote, 1999). This model highlights not only the importance of appropriate training patterns but also the psychosocial influences a child may encounter throughout his or her sport participation (Cote et al., 2009). More specifically, Cote was interested in exploring the role that family members play in the initiation and development of a child’s pursuit of excellence in sport as well as identifying the patterns of family dynamics that characterize successful athletes. To do this, Cote studied families of expert athletes from a variety of different sports leading him to create a three-stage model of talent development focused on the affective, personal, and social aspects associated with optimal development.

The first stage in the Developmental Model of Sport Participation (DMSP) is the “sampling years” which typically occurs between the ages of 6-12. This stage is based on two main elements including involvement in various sports and participation in deliberate play. Cote and colleagues (2009) contend that sampling various sports allows children to experience different social interactions with their peers (family members and coaches) and reinforces the adaptation of emotional and self-regulating skills that can be positively invested in a single sport later down the road. In general, an all-around engagement in multiple sports with an emphasis on fun and enjoyment is an extremely important aspect of the “sampling years.” During this stage, parents play an important role in the development of their child with the responsibility of providing a wide array of opportunities for multiple sport involvement. Coaches too must make their presence known by emphasizing enjoyment and basic skill development along with fostering warmth and supportiveness for the child during his or her sport participation. If the love and enjoyment of a sport is not established initially (during the sampling years), athletes typically burn out or choose to drop out when the training hours and intensity increase in the future (Vealey & Chase, 2016).

Following the sampling years, youth athletes advance to the “specializing years” from ages 13-15. During this stage, athletes tend to decrease their involvement in a variety of sports narrowing their focus usually to one or two specific sports. While a decrease in the number of
sports a child participates in is significant, there is still an emphasis placed on maintaining fun and enjoyment during participation so that the child may remain engaged and committed to their respective sport(s). As the child limits the number of sports they choose to participate in, the training and time spent on skill development and improvement begins to intensify. Parents also play an important role during this stage such that as the number of sports their child participates in decreases, the amount of money and time necessary to make this type of sport participation possible increases. While some parents may commit more time and money to sport during the specializing years, they too may begin to adopt a growing interest in their child’s sport experience. As for coaches, teaching strategies should be more technically advanced and practice and competition is taken much more seriously at this point in development (Cote & Lidor, 2013).

The last stage of the Developmental Model of Sport Participation is referred to as the “investment years” ranging from ages 15 and up. During the investment years the athletes are focused on achieving an elite level of performance in a single activity (Cote, 1999). Here, the athletes’ primary motivation revolves around enhancing their strategic and competitive performance strategies in hopes of reaching elite level status. With elite level status in mind, athletes tend to place all of their time and efforts into a single sport, causing them to discontinue other sport activities they were previously involved in. These athletes know what they want and what they have to do in order to reach their goals and are considered much more autonomous, therefore, causing the parents’ responsibility to shift towards a more supportive role for their child. In addition, coaches are highly qualified and many times referred to as “sport specialists” because they are considered to be exceedingly knowledgeable in the sport specific domain of the child’s participation. During this stage, it is critical that the coach and athlete focus on building a relationship that will allow the coach to effectively deliver the highest level of training and instruction to the athlete (Cote et al., 2003). Since the development of this model, sport researchers have urged individuals (i.e. coaches, players, practitioners) to learn and embrace this practical application of a talent development approach to children’s sport because it provides the most appropriate and adapted environment for the development of life skills. In addition, this approach to youth sport seems to be a more efficient way of designing sport programs for children (Cote, Coakley, & Bruner, 2011).

Because expert performance in sport is difficult to predict at the youth level often times this leads to confusion for parents and coaches regarding the selection of the appropriate pathway
a child should take to produce and develop effective talent in sport. With this in mind, Cote and colleagues (2009) consider the main ideas of the DSMP and apply them to current knowledge of talent development. More specifically, Cote and colleagues (2009) highlight seven postulates associated with the different pathways of the DSMP by marking the distinction between the developmental paths for elite performance and continued participation. Whether a child chooses to sample or specialize at the start of their sport participation will greatly affect the recommendations they should use for proper guidance related to talent development in sport. The seven postulates highlight the recommendations for children on how and when to specialize:

1. Early diversification (sampling) does not hinder elite sport participation in sports where peak performance is reached after maturation;
2. Early diversification (sampling) is linked to a longer sport career and has positive implications for long-term sport involvement;
3. Early diversification (sampling) allows participation in a range of contexts that most favorably affects positive youth development;
4. High amounts of deliberate play during the sampling years build a solid foundation of intrinsic motivation through involvement in activities that are enjoyable and promote intrinsic regulation;
5. A high amount of deliberate play during the sampling years establishes a range of motor and cognitive experiences that children can ultimately bring to their principal sport of interest;
6. Around the end of primary school (about age 13), children should have the opportunity to either choose to specialize in their favorite sport or to continue in sport at a recreational level;
7. Late adolescents (around age 16) have developed the physical, cognitive, social, emotional, and motor skills needed to invest their effort into highly specialized training in one sport” (Cote et al., 2009).

The seven postulates associated with the Developmental Model of Sport Participation (DMSP) are extremely consistent with the literature reviewed above related to effective talent development. One of the models main components deals with specialization in sport and identifying the age and conditions in which an athlete’s sport participation should be shaped through specialization or diversification. The model also considers the role of family and the
psychosocial influences a child may encounter throughout his or her sport participation, an aspect that makes this model exceptionally well-suited for the scope of this study (Cote et al., 2009). Therefore, the DMSP will be used as a conceptual framework for this study, and results will be compared to Cote’s recommendations regarding specialization or diversification in sport, specifically with parent perceptions during the sampling years.

**What is Sport Specialization?**

Specialization is defined as “an investment in a single sport through systematic training and competition, typically including year-round participation in that sport, to pursue proficiency and enjoyment in a ‘signature’ activity” (Vealey & Chase, 2016). Although research in this area of study is limited, evidence has successfully shown a “catch them young” philosophy existing in a trend toward earlier and more intensive specialization at the youth sport level (Donnelly, 1993). This phenomenon was first reported in Eastern Europe with athletes involved in individual sports such as gymnastics, swimming, diving, and figure skating.

The International Olympic sports mentioned above likely contributed to increased sport specialization, with selection processes that eventually reached into the primary school years in an attempt to distinguish future champions and enhance opportunities for success (Myer et al., 2016). Hence, today, more so than ever we see parents pushing their children to specialize in one sport because many times they see specialization as a means for their child to advance both socially and economically. With a mindset emphasizing the pursuit of a college scholarship or a professional career, parents believe the straightest path to that goal is steering a child to play just one sport from an early age, and forsaking all others (Skolnick & Corn, 2016).

The possibilities for youth athletes to specialize are truly endless, such that children have the opportunity to play on local club teams, travel teams, interscholastic competitions, and even off-season training programs all for just a single sport, creating a year-round demand for constant training and participation (Matz, 2014). With this in mind, it is of growing concern that there is little to no research examining the influence parents have on their child’s youth sport experience, particularly pertaining to their support or lack of support of their child’s sport specialization.

The greatest difference between children’s sport participation today in comparison to their parents is the rise of year round, sport-specific organizations that ask, and sometimes even require non-stop participation in order to stay in the player development pipeline (O’Sullivan, 2014). The pressure placed on parents to have their child specialize in a single sport at a young
age has never been stronger. Research suggests that many adults believe if involvement in organized sport is not begun by age 7, an athlete will sufficiently lag in skill execution, such that future success in athletic competition is unlikely (Wiersma, 2000).

Despite this initial appeal of specialization, along with the possibility of a child becoming “elite” in his or her sport, it is important for parents to ask themselves, “will this type of participation set a solid foundation for my child to enjoy a long, worthwhile sport experience?” While some insist that specialization is the key to success both on and off the playing field, interestingly enough there are many others who disagree. With the pressure to specialize coming from all directions in the youth sport context there is concern from journalists (e.g., Ferry, 2008) and sport scientists (e.g., Gould, 2009) that young athletes are becoming specialized too early and that this sport specialization leads to a number of unfavorable consequences.

Benefits of Sport Specialization

There are some beneficial consequences to sport specialization. Gould (2010) notes that these benefits typically include better coaching and skill instruction, enhanced skill acquisition due to the extra hours of deliberate practice, and improved time management skills based on the time demands that these programs require children to adhere to. However, one must understand the specifics of developing expertise in sport before concluding that these benefits occur due to the practice of sport specialization.

Ericsson and colleagues (1993) views on deliberate practice have been widely accepted in the literature regarding the support of sport specialization. Generally speaking, many individuals have argued that utilizing this framework for the purposes of sport specialization may provide highly positive benefits to the performance and overall well-being of the individual. While some of these positive benefits were mentioned above it is critical to keep in mind that the concept of expertise development through specialization is not simply any form of training the athlete chooses, it must be the specific form of deliberate practice. To briefly explain, this means that an athlete must practice a well-defined task with an appropriate difficulty level for that individual, receive informative feedback, and also have the opportunity for repetitions and corrections of error to ensure the success of the youth athlete engaged in sport specialization (Brylinsky, 2010). Any form of training that doesn’t meet the terms of deliberate practice puts the youth athlete at risk for the negative psychological, physiological, biomechanical, and motor development implications of sport specialization. Hence, as the literature suggests, in order to reap the benefits
of sport specialization it is apparent that one must follow a finely tuned training regimen with the components of deliberate practice in mind which in turn may aid in reducing the associated risks (Christianson & Deutsch, 2012).

Benefits of Diversification in Sport

Diversification can be defined as involvement in sport spread across multiple activities. A number of studies (Bloom, 1985; Carlson, 1988; Cote, 1999) have demonstrated that elite athletes participated in multiple sports throughout their youth sport experience. In addition, most sport scientists and professional organizations advocate for diversification (12 years and under) rather than specialization in sport (American Academy of Pediatrics, 2000). Often times, athletes who choose to participate in a variety of sports do so with the intention of focusing on deliberate play rather than deliberate practice. Cote et al., (2007) defines deliberate play as the activities in which children participate because they are inherently fun or enjoyable but could none the less contribute to the development of expertise in sport. Some examples of deliberate play include: pick-up basketball, street hockey, backyard soccer, etc. Research has shown that athletes who had diversified sport backgrounds and engaged in deliberate play during childhood still reached an elite level in sport (Baker, Cote, & Abernethy, 2003; Baker, Cote, & Deakin, 2005). There have also been multiple anecdotal examples of professional athletes who were diversified in sport at a young age suggesting that sport specialization is not the only way to reach elite level status. Tom Brady, quarterback for the New England Patriots, is a great example of this and is now an individual who advocates his support for diversification in sport. Two-time NBA Most Valuable Player Steve Nash also described his involvement in multiple sports during childhood including soccer, lacrosse, and hockey. Consequently, Steve Nash didn’t begin to specialize in basketball until he reached adolescence.

With this in mind, Vealey and Chase (2016) suggest that one benefit of diversification in sport is that the child can sample early and still reach elite level status in most sports as an adult. A study of over 4,000 Olympic athletes found that the average starting age in sport was 11.5 years (Vaeyens, Gullich, Warr, & Philippaerts, 2009). Another study looking at 708 minor league professional baseball players showed that although the average starting age was 6 years old, the players average age of specializing in baseball was actually 15 years old with the majority of players (52%) not choosing to specialize until at least 17 years old (Ginsburg et al.,
Overall, the literature supports the notion of diversification as facilitative to an athlete’s development in most sports.

Building off of this research, Vealey and Chase (2016) contend that diversification in sport can also assist a child in developing well-rounded motor skills rather than skills that are only specific to a single sport. When an athlete shows they have a broad range of motor skills they provide themselves and their coaches with more performance options and general athleticism that may be used later down the road if the athlete chooses to specialize. Another benefit of diversification in sport that is not necessarily related to enhancing sport skills is the notion that it may foster a lifelong engagement in physical activity (Cote, Horton, MacDonald, & Wilkes, 2009). To date, there have been no studies linking diversification to sport dropout. This may be because diversification tends to provide more enjoyable athletic experiences for a child and limits the frequency of physical injuries (Fraser-Thomas, Cote, & Deakin, 2005) in comparison to specialization.

There are also psychosocial benefits of diversification outlined by Wilkes and Cote (2007) who contend that children who sample a variety of different activities have a greater chance of enhancing developmental outcomes such as life skills, prosocial behavior, healthy identity, diverse peer groups, and social capital compared to children who specialize in a single activity. Research has also shown that athletes who were engaged in multiple activities (school, church, arts) along with their sport participation possessed healthier psychological profiles than athletes who only participated in a single sport. These developmental outcomes are important because there is a very small percentage of youth athletes who participate in sport and actually make it to the professional level. Therefore, building these developmental skills can assist a child when he/she reaches adulthood to maximize their abilities in other domains outside of the athletic playing field.

While each individual is entitled to their own philosophy regarding specialization, the information shared above succinctly sum up the recommendations of the sport psychology literature and the trending viewpoint of researchers and practitioners in terms of specialization vs. diversification in the youth sport context (Cote, et al., 2009). To add to this point, researchers and practitioners in our field realize that playing sports is as much about growth, personal development, and maturity as it is about landing a professional contract (Edholm, 2015). Unfortunately, for others, especially the parents and coaches of youth athletes, this type of
thought process has been lost in adults’ delusions of grandeur, believing their child is the next Tom Brady of football or the next Sidney Crosby of hockey. With this type of mindset, adults are ignoring the refreshing idea of exposing children to different sports at the youth level that will in turn assist these children in figuring out what they truly enjoy doing in life. Instead, more and more youth athletes are now developing an artificial maturity because they are being over-exposed to information much earlier than they are ready and under-exposed to real life experiences far later than they are ready.

Parents and Sport Specialization

While serving as the primary support systems for their children, parents can also apply a great deal of pressure in the interest of achieving excellence and success through the practice of sport specialization (Hoyle & Leff, 1997). To further elaborate on this point, youth sport participation has evolved from child-driven, recreational free play for enjoyment to adult-driven, highly structured, deliberate practice devoted to sports-specific skill development (Caine, Maffulli, & Caine, 2008). Often times, parents believe they are doing what is best for their children and simply introduce them to a sport and initial success follows. When this occurs, parents desire for their children’s success continues and they proceed to encourage sport specialization to achieve higher level status in sport. Consequently, this leads to the parent acknowledging and supporting sport specialization because they assume this path is necessary for continued success (Jayanthi, et al., 2012).

However, explicit support of specialization is scarce in the youth sport literature and several sports medicine and exercise federations have discouraged its practice due to the unfavorable consequences that have been reported in the lay and medical literature. The American Academy of Pediatrics (AAP) Committee on Sports Medicine and Fitness (2000) does not recommend specialization in sport before the age of 12 or 13 years. The committee’s general guidelines propose that children be allowed to try a variety of sports and stress that unstructured play is encouraged to enhance enjoyment of sports, as well as promote spontaneity and creativity. In addition, the International Federation of Sports Medicine (1991) position statement on youth specialization in sport declared that intensified training has no physical or educational justification. Nonetheless, there is the “train harder, train longer” philosophy existing in a trend toward earlier and more intensive specialization at the youth sport level. Though the research is limited, specialization is often viewed as advantageous by parents and coaches regardless of the
leaders of our sport organizations dissuading the idea because of the adverse effects it can have on children (Pantuosco-Hensch 2013; & Callander, 2010). Wiersma (2000) also reviewed the sport specialization phenomenon elaborating on the profound adverse effects it can have on youth athletes in areas such as motor skill acquisition and performance, sociological maturity, and psychological development.

There has also been a considerable amount of attention placed on better understanding parental involvement in the youth sport context. However, much of this increased interest has been stirred by accounts in today’s media aimed at identifying the negative side effects of children’s sport participation; commonly fueled by over-involved, pushy parents (Weinberg & Gould, 2015). With this in mind, while few youth sport programs would survive without the instrumental support and volunteer time of parents there are limits. To make sense of this, parents can do one of two things during their child’s youth sport experience: 1.) Support or 2.) Pressure. Parental support is defined as behaviors by parents perceived by their children as facilitating athletic participation and performance while parental pressure refers to the behavior perceived by children as indicating expectations of unlikely, even unattainable heights of accomplishment (Leff & Hoyle, 1995). The literature suggests that parental support is associated with greater enjoyment of sport (Leff & Hoyle, 1995; Scanlan & Lewthwaite, 1986), more positive appraisal of performance outcomes (Smith, Zingale, & Coleman, 1978), and more positive appraisals of self-worth (Coopersmith, 1967; Felker, 1968; Leff & Hoyle, 1995). In contrast, parental pressure has been associated with unhappiness related to sport participation (Smith, 1986), stress associated with evaluation of performance outcomes (McElroy, 1982; Ogilvie, 1979), and negative or uncertain appraisals of self-worth (Smith et al., 1978).

Unfortunately, it seems that parental pressure on the youth athlete is increasing while parental support is decreasing in relation to the popular trends of sport specialization. More specifically, parental involvement often becomes excessive, which is inappropriate primarily because the structure of youth sport is generally organized around the values and expectations of adults which can be quite different from their children. Despite these differences, if a child meets the expectations of his or her parents, this success can act as an ego boost for the parents and cause them to feel as if they are the reason for their child’s accomplishments. In fact, as the literature suggests, when sons and daughters excel in sports their success is directly attributed to parents (Coakley, 2006).
Why Parents Encourage Sport Specialization

Parents want what is best for their children and will go to great lengths to ensure success in their child’s sport experience. Consequently, they are considered major players in sport specialization and other endeavors. One of the main causes of sport specialization is the perception by parents, coaches, and sometimes athletes themselves that focusing on a single sport will allow them to get ahead of, or at least keep up with their peers (Malina, 2010). Many times, sport specialization is practiced because parents and coaches want to develop children into elite athletes and feel this is the best way to do so (Gould, 2010). They may also agree with this notion that to develop sport expertise, children need to engage in 10 years of deliberate practice and this deliberate practice can in turn lead to advantages for children at an earlier age (Ericsson, 1996).

However, the problem here lies in understanding that this type of deliberate practice may not work for everyone and those successful athletes who have followed this path of starting their sport participation at an early age (e.g. Tiger Woods, Sidney Crosby) are unique cases. Tiger Woods, who had an early introduction to golf, a lot of deliberate practice at a young age, a parent who was in control of his sport experience, a highly regulated life through childhood and adolescence into adulthood, and eventual success is well documented and a great example of a possible influence on parental perceptions of the need for sport specialization (Malina, 2010). Since these rare types of athletes have been available to the public eye for some time they are viewed as models for parents who want their children to be highly successful in sport. In addition, today’s media also contributes to the belief that sport specialization is necessary such that its stories revolve around elite athletes who started their sport participation at an early age; and seldom do these stories ever focus on young athletes who started early and were unsuccessful at reaching the elite level (Gould, 2010). This type of thought process is pushing more and more parents to provide intense training on a year round basis for their children to ensure success in their present and future competitions.

Today, children are often labeled as gifted or talented at an early age in sport, art, and even academics. With this in mind, researchers and practitioners in our field suggest labeling most likely encourages parents to support specialization (Malina, 2010). There are many different reasons behind a parent specializing their child at a young age but one of the most prevalent is the pursuit of a college scholarship and/or becoming elite. Because these children are
subsequently labeled as “gifted” or “talented” parents often feel that it is necessary to endorse sport specialization to give their child the best chance at obtaining a college athletic scholarship. Sometimes, even if children aren’t necessarily labeled as such, parents still encourage them to begin specialized sport training because of the inherent ‘hope’ that this will lead to future success in the athletic domain later down the road.

The reality of the matter is, the odds of excelling to the elite level in sports do not appear to be increased by sport specialization. A study of 35,000 highly qualified young athletes selected to train in Russian sport schools found that only 0.14% reached high-level status. In addition, a 7-year study of German athletes selected to train at young ages found that only 0.3% eventually ranked among the 10 best international senior athletes (Gullich & Emrich, 2006). Another study exploring elite and near-elite athletes found that successful elite athletes actually specialized at a later age and trained less in childhood. It should also be noted that the elite group in the study above pursued intensive training more during late adolescence than their near-elite peers (Moesch, Elbe, Hauge, & Wikman, 2011).

Examining the current trends in research regarding sport specialization Gould and Carson (2004) contend that in essence, a failure to disseminate sport science information to parents and coaches has led many to believe that specialization is the best avenue to foster future success in athletics for children. Subsequently, this has led parents to believe certain “myths” associated with sport specialization some of which include the belief that specialization is needed to develop expertise, that it predicts success as an adult athlete, and the notion that diversification in sport is not a productive method of creating athletic talent. In addition, there is also trepidation that parents are becoming over-involved in their child’s sport experience such that practicing specialization has become the “norm” and parents are basing their own self-worth on their child’s achievements (Coakley, 2006).

Vealey and Chase (2016) suggest specialization is not required for expertise in most sports and expert athletes actually tend to participate in many sports and activities, emphasizing deliberate play and enjoyment, until age twelve, only narrowing their focus in one favored sport around age thirteen. As previously mentioned, in the domain of expertise, deliberate practice refers to the effortful activities individuals take part in designed to optimize improvement. Characteristics of deliberate practice include setting goals involving specific skills, intense involvement in structured training sessions, performing tasks that are not inherently motivating
and contain few external rewards, and self-monitoring performance outcomes while receiving feedback about current performances (Ericsson et al., 1993).

There are also a large number of professional athletes that were multiple sport participants growing up who cited concerns for specialization as one of the primary problems in youth sport today. These athletes ranged from baseball (John Smoltz, Joe Carter) to football (Shannon Sharpe, Chad Pennington) to basketball (Steve Kerr) to golf (Karrie Webb) to track and field (Sanya Richards-Ross), who emphasized the need for diversification in sport, for a more well-rounded upbringing (Skolnick & Corn, 2016). Tom Brady, another professional athlete who played a wide range of sports growing up spoke in an interview with WEEI radio in Boston, questioning if kids’ motivation suffers when the intensity of youth sports is so high at such young ages while also commenting on the role parents’ play today in their children’s sport participation. He stated, “It’s just hard, because all the parents are doing it, it seems. The competition, it feels like it starts so early for these kids, whether it’s to get into college, or to get into the right high school, or the right elementary school.”

Brady, who has competed on the highest of athletic levels, winning four Super Bowls for the New England Patriots, even commented on what youth sport participation used to be like before competition became so intense in the youth sport context and the term “sport specialization” was essentially, non-existent. “What I remember from being in youth sports, everything was really localized. There were no travel teams. Well, there were a couple, but you really had to be the top, top kid to go on those teams. My parents always exposed us to different things, different sports. It was basketball when it was basketball season, it was baseball when it was baseball season. I didn’t play football ‘til I was a freshman in high school. A lot of soccer. And there were just some [football] camps. But I just played in the neighborhood in our street with all the kids that we grew up with.” From a research scientist’s standpoint one would characterize Tom Brady as an individual who supports diversification in sport. As noted by Brady, “sometimes it is nice just for kids to be kids” and sadly this idea is becoming less and less prevalent in the youth sport culture. For Brady, playing an array of different sports was an opportunity to develop his personality and through that sport participation he found something he loved to do at a young age.

**Parental Perfectionism**
Additionally, when parents focus on elite level status and success for their child they become vulnerable to the “perfection infection” and feelings of inadequacy and the pursuit of flawlessness mix into an abysmal combination. This leads to the creation of an endless loop of new but unfulfilling accomplishments, because perfectionism is impossible to permanently achieve. Generally speaking, perfectionists tend to define an individuals’ self-worth in terms of achieving self-imposed standards (Burns, 1980). Today, perfectionism is viewed as a multidimensional personality trait characterized by striving for flawlessness and setting excessively high standards for performance accompanied by tendencies for overly critical evaluation of one’s behavior (Hewitt & Flett, 1991). The multidimensional aspect of perfectionism argues there are three dimensions including: self-oriented perfectionism (excessive striving and demanding absolute perfection in the self), other-oriented perfectionism (demanding perfection from other people), and socially prescribed perfectionism (the perception that other people demand perfection from oneself) (Hewitt & Flett, 1991; Frost, Marten, Lahart, & Rosenblate, 1990). The current study will concentrate on these multidimensional aspects when measuring levels of perfectionism in parents of youth sport athletes.

Within the field, the most controversial issue thus far has been whether certain dimensions of perfectionism have adaptive or maladaptive consequences for an individual. While some researchers support the notion that maladaptive dimensions of perfectionism (self-oriented, socially prescribed, other-oriented) hinder performance (Flett & Hewitt, 2005), others have argued these same perfectionism dimensions can be viewed as adaptive traits that help athletes achieve performance (Gould, Dieffenbach, & Moffett, 2002). Adaptive perfectionism is characterized as a normal, healthy type of perfectionism and exists by deriving satisfaction from achievements made from intense effort while also tolerating the imperfections without resorting to the harsh self-criticism that characterizes maladaptive perfectionism (Stoltz & Ashby, 2007). In this positive form, perfectionism is said to provide the energy which leads to great success and achievements (Schuler, 2000).

The role of perfectionism in the sport and exercise setting is apparent as literature has reviewed a multitude of different areas related to the adaptive and maladaptive consequences that can impact an athlete or exerciser (Gotwals, Dunn, & Wayment 2003; Stoeber et al., 2007; Stoll, Lau, & Stoeber, 2008; Appleton, Hall, & Hill, 2009). Perfectionism itself has been assumed to play a powerful and debilitating role in sport competition. The literature suggests that
perfectionist athletes fear failure and mistakes to such an extent that their enjoyment of sports is greatly diminished and their performance is impeded (Bunker & Williams, 1986; Burns, 1980). Perfectionism has also been associated with giftedness in the academic domain. Empirical studies have primarily focused on gifted adults and collegiate students (Frost et al., 1990; Hewitt & Flett, 1993) along with gifted children and adolescents (Bransky, 1989; Baker, 1996; Parker & Mills, 1996; Schuler & Siegle, 1994). Specifically related to children and adolescents, Bransky (1989) found that perfectionistic gifted junior high students took more responsibility for their academic outcomes because they saw themselves as the main agents for these consequences. In addition, gifted students with high academic perfectionism tended to experience an “extraordinary” need to excel in other areas of their lives outside of academics.

The majority of research in the areas of perfectionism have focused primarily on the performer themselves, whether that be in the athletic or academic setting. Additionally, very few studies, if any, have produced research examining perfectionism in the youth sport context from a parental perspective. Most studies that have examined perfectionism and the parent-child relationship have only looked predominantly at children’s perceptions of their parents’ perfectionism and their tendencies to set high standards that they expect the child to achieve (Blatt, 1995). Moreover, the majority of research on parental perfectionism has been focused in the academic domain (Ablard & Parker, 1997). This is unfortunate, because today in sport, there seems to be an inherent need for parents to relive their youth through their child. When this occurs, parents tend to expect perfection which can lead them to tie their own ego or image to their child’s performance (Appleton, Hall, & Hill, 2010). With the number of children specializing in sport increasing (Callender, 2010), this study will highlight the importance of placing a greater emphasis on parents and their perfectionism levels as this could be a primary source related to why their child is either diversified or specialized into their given sport.

Parenting Styles

Another important consideration regarding a parent’s involvement in their child’s youth sport experience is their unique parenting styles. The importance of parenting styles has been supported throughout the literature with a focus on the effects of parental influence on developmental processes of children (Stevenson & Baker, in Glasglow et al., 1997). Parenting style is described as a combination of attitudes toward the child that are communicated from the parent to the child and create an emotional climate in which the parents’ behaviors are expressed
and the child’s behavior is influenced. The emotional climate is created through parenting practices and non-direct behaviors including tone of voice when addressing the child, gestures, and expression of emotion toward the child (Darling & Steinberg, 1993). With this in mind, Bronfenbrenner and Morris (1998) assert that parents have a prominent influence on a child’s motivation, behavior, and psychological growth.

Since parents are highly visible in sport, many studies have looked directly at the positive and negative influences they exert on their children in the athletic domain (Brustad & Partridge, 2002; Fredricks & Eccles, 2004; Horn & Horn, 2007). Fredricks & Eccles (2004) suggest that parents play a critical role as socializers, role models, providers, and interpreters of their children’s sport experience. In regards to the positive influences parents’ behaviors have on their child, Brustad (1993) studied male and female youth basketball participants and their parents and found that parental enjoyment of physical activity was related to parents encouraging their children’s involvement, and in turn, that encouragement from the parent influenced the child’s perceived competence and motivation in an adaptive manner. On the other hand, after exploring more negative influences of the parent-child relationship in sport, Wuerth, Lee, & Alfermann (2004) found that pressure perceived by youth athletes was related to directing and controlling parental behaviors. These studies show the importance of parents’ behaviors and the influence they can have (both positively and negatively) on their child’s sport experience.

Taking a closer look at parenting styles, there have been numerous models derived from empirical investigations of parental authority (e.g. see Rollins & Thomas, 1979). However, after extensive research with parents and children, Diana Baumrind (1971) developed what has now become one of the most widely cited and empirically validated models of parenting. Baumrind’s model is best known for its multidimensional character, typological clarity, and empirical efficacy (Buri, 1991). In Baumrind’s (1971) study, she attempted to replicate or modify parent-child relationships found in her previous studies, differentiate further among patterns of parental authority, and measure these effects on the behavior of preschool children through interviews and observations. More specifically, Baumrind interviewed both parents and children and also observed parents’ interactions with their children. The current study resulted in Baumrind’s practical model of parenting.

In this model, Baumrind distinguishes among three general parenting styles: authoritarian, permissive, and authoritative. Maccoby & Martin (found in Hetherington &
Mussen, 1983) further defined these prototypes of parenting styles using two underlying processes involving the number and types of demands made by the parents and the contingency of parental reinforcement. In this context, demandingness refers to the extent to which parents show control, maturity, demands, and supervision in their parenting whereas responsiveness refers to the extent to which parents show affective warmth, acceptance, and involvement (Aunola, Stattin, & Nurmi, 2000). Each style is categorized by the level of demandingness and responsiveness expressed by the parent.

The authoritarian parenting style is high in control but low in warmth toward the child (Glasgow et al., 1997). Authoritarian parents tend to be highly directive and value obedience in their children. They do not place an emphasis on verbal interaction and favor using punitive measures to control their children’s behavior. These parents are typically detached and less responsive to the needs of the child. Maccoby and Martin indicated that “this parenting type scores high on measures of maturity demands and control but low on measures of responsiveness, warmth, and bidirectional communication” (found in Spera, 2005, p. 134). The environment in relation to this parenting style is extremely structured (Baumrind, 1971). This parenting style is associated with low levels of independence and social responsibility in their children (Baumrind, 1967).

Permissive parents, on the other hand, tend to make fewer demands on their children and tend to use little punishment. This parenting style is high in warmth but lacks control toward the child (Baumrind, 1967). While they do act as a resource for their children, they tend not to take an active role in shaping or determining their children’s behavior. Permissive parents are quite lenient and tolerant of the specific impulses of the child. Very rarely do these types of parents’ demand mature behavior of the child, but often allow high degrees of self-regulation (Baumrind, 1967, 1971). Maccoby and Martin stated that “these parents score moderately high on measures of responsiveness and low on measures of maturity demands and control” (found in Spera, 2005, p. 135). Children who develop under this type of parenting style tend to be associated with lower levels of maturity, lack of impulse control and self-reliance, and a lack of social responsibility and personal independence.

Lastly, authoritative parents are apt to fall somewhere within these two extremes. This parenting style is high in warmth and autonomy-granting with respect to the child (Steinberg et al., 1994). These parents are characterized as providing clear and firm direction for their children.
in a rational, issue-oriented manner by using reasoning and shaping. Although they seek and respect their children’s opinions, they do not hesitate to set firm limits when necessary (Baumrind, 1966, 1971, 1973). Authoritative parents recognize both the rights of the child and the rights of the parent (Baumrind, 1971). Maccoby and Martin contend that “these parents score high on measures of warmth and responsiveness and high on measures of control and maturity demands” (found in Spera, 2005, p. 134). Research on parenting styles has consistently shown that in particular, authoritative parenting is associated with successful outcomes in many areas of development. For example, Baumrind (1989; 1991) found that compared with children and adolescents raised by authoritarian and permissive parenting styles, those raised by an authoritative parenting style had higher levels of independence, personal responsibility, social skills, maturity, and academic achievement.

In the youth sport context, there has been valuable research describing the influence that parents’ behaviors can have on a child. Horn and Horn (2007) explain that parents’ belief and value systems determine their behaviors toward their child. These behaviors, including modeling, providing opportunities, emotional support then have the ability to influence their child’s belief and value systems, which in turn determine the child’s behavior. Hence, when a parent acts in a way that does not support their child, obvious problems arise. For instance, a study by Anderson, Funk, Elliot, and Smith (2003) examining behaviors related to parental pressure in sport found that as parental pressure increased, children’s reported enjoyment and satisfaction decreased. Additionally, excessive parental pressure has been linked to athlete’s negative affect.

Another study that examined parenting styles and practices in youth sport found that autonomy-supportive parenting styles allowed for open communication with the child, personal autonomy, and support in decision making. These parents were characterized as highly involved in their children’s lives and seemed to place minimal pressure on their child while exhibiting little controlling behaviors (Holt et al., 2009). This study’s findings support the complexity of youth sport parenting and the need to be sensitive to a range of perceptions and behaviors rather than focusing on single variables in isolation. While it didn’t specifically utilize Baumrind’s three general parenting styles, one might infer that an autonomy-supportive parenting style would best relate to the authoritative parenting-style as described in Baumrind’s previous studies.
Sport psychology researchers have also used a wide selection of developmental theories to further examine the influence that parents have on their children in sport including Harter’s competence motivation theory (Harter, 1999), Eccles expectancy-value model (Eccles, Wigfield, & Schiefele, 1998), and Nicholl’s achievement goal theory (Nicholls, 1984). Overall, this research indicates that children infer information that they view as valuable about their parents’ beliefs, behaviors, and goals. Holt et al., (2009) asserts this information in turn influences a child’s psychosocial development.

The information provided above has highlighted the importance of parenting in the youth sport context within the social milieu of family life and has led us to the current gap in literature regarding the lack of focus on parents of youth sport athletes whose behavior plays a prominent role in their child’s athletic experience. Research also lacks empirical evidence regarding parents’ perfectionism levels in the youth sport context. Currently, perfectionism and the parent-child relationship has only been predominately explored from the child’s perspective with a focus in the academic domain (Blatt, 1995; Ablard & Parker, 1997). With this in mind, the main concentration of this study was centered around views of sport specialization. Malina (2010) suggests one of the main causes of sport specialization is the perception of parents that concentrating on a single sport will allow his or her child to get ahead of, or at the very least, keep up with peers in the athletic domain. However, currently, we do not know whether or not parenting styles and perfectionism levels influence parents’ endorsement or lack of endorsement of sport specialization. While the evidence described above regarding the parent-child relationship is valuable, this study explored parents’ perceptions of sport specialization within the samplings years of Cote’s Developmental Model of Sport Participation (Cote, 1999). More specifically, this study aimed to expand our perspective on parental influences by honing in exclusively on parents’ perceptions of their perfectionism and parenting styles to better understand how the two relate to parental perceptions of sport specialization in the youth sport context.
CHAPTER TWO

METHOD

The purpose of this study was to explore parents’ perceptions of sport specialization within the samplings years of Cote’s Developmental Model of Sport Participation (Cote, 1999). More specifically, this study explored how parents’ perceptions of their perfectionism and parenting styles were related to views of sport specialization in the youth sport context.

Participants

Participants in this study included 203 parents of youth sport athletes from the Mid-West. Youth sport athletes were sons or daughters between the ages of 6 and 12 years old participating in ice hockey, figure skating, or swimming. These sports were chosen because they typically all have the opportunity to specialize or provide year-round opportunity for competition.

There were 71 male and 132 female parent participants, ages ranging from 30 to 64 years ($M = 42.87, SD = 5.44$). The sons and daughters of these parents included 111 female youth athletes, 91 male youth athletes, and one set of boy/girl twin youth athletes. The age of the youth athletes ranged from 6 to 12 years old ($M = 9.85, SD = 1.78$), which were within the sampling years of Cote’s Developmental Model of Sport Participation.

The breakdown of the number of parents with children participating in each sport were as follows: 50 = ice hockey parents, 35 = figure skating parents, and 118 = swim parents. There were 185 parents who had personal sport experience and 18 parents who had no sport experience with the level of sport participation ranging from no sport experience to professional. A more detailed breakdown of the parents’ sport experience/no sport experience can be seen in Table 1 below.

Table 1.
Parent Sport Experience

<table>
<thead>
<tr>
<th>Parents Sport Experience</th>
<th>Number of Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth (6-12 years old)</td>
<td>17</td>
</tr>
<tr>
<td>Middle School (13-15 years old)</td>
<td>18</td>
</tr>
<tr>
<td>High School</td>
<td>107</td>
</tr>
<tr>
<td>College</td>
<td>37</td>
</tr>
<tr>
<td>Professional</td>
<td>6</td>
</tr>
<tr>
<td>No Sport Experience</td>
<td>18</td>
</tr>
</tbody>
</table>
In terms of personal coaching experience, 38.4% of parents indicated that they coached their child at some point during his or her youth sport experience, whereas 61.6% of parents indicated they did not coach their son or daughter.

As for their child’s current sport participation, 66.5% of parents indicated that their child does currently participate in more than one sport during the year and 33.5% of parents indicated that their child does not currently participate in more than one sport during the year. The breakdown of the number of sports parents’ indicated their child currently participates in can be seen below in Table 2 ($M = 2.5$, $SD = .715$).

Table 2.
Number of Sports Child Currently Participates In

<table>
<thead>
<tr>
<th>Number of Sports Child Currently Participates In</th>
<th>Children Participating</th>
</tr>
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<tbody>
<tr>
<td>One Sport</td>
<td>68</td>
</tr>
<tr>
<td>Two Sports</td>
<td>74</td>
</tr>
<tr>
<td>Three Sports</td>
<td>39</td>
</tr>
<tr>
<td>Four Sports</td>
<td>17</td>
</tr>
</tbody>
</table>

In addition, the number of months out of the year the child currently participates in his or her favorite sport ranged from 2 to 12 months ($M = 9.56$, $SD = 2.19$). Parents were also asked to indicate the number of practices per week their child attended, which ranged from 1 to 7 days ($M = 3.43$, $SD = 1.25$), the number of competitions per week, which ranged from 1 to 5 competitions ($M = 1.40$, $SD = .645$), and the number of weeks this participation lasted during the year, which ranged from 1 to 52 weeks ($M = 21.92$, $SD = 15.14$). See Table 3 below. Overall, these means indicate that a youth sport athlete is this study typically participates in two sports, for nine months, practicing three times a week, competing once a week, for 21 weeks a year.

Table 3.
Frequency of Child’s Sport Participation

<table>
<thead>
<tr>
<th>Frequency of Child’s Sport Participation</th>
<th>Obtained Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Months</td>
<td>2-12</td>
<td>9.56</td>
<td>2.19</td>
</tr>
<tr>
<td>Number of Practices Per Week</td>
<td>1-7</td>
<td>3.43</td>
<td>1.25</td>
</tr>
<tr>
<td>Number of</td>
<td>1-5</td>
<td>1.40</td>
<td>.645</td>
</tr>
<tr>
<td>Competitions Per Week</td>
<td>Number of Weeks Participation Lasted During the Year</td>
<td>Participation</td>
<td>Length</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------</td>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>1-52</td>
<td>21.92</td>
<td>15.14</td>
</tr>
</tbody>
</table>

### Research Design

This study was approved by the university’s Institutional Review Board and data were collected on site at the child’s practice and/or competitions. A set of self-report questionnaire packets were developed to assess the variables of interest. Parents participated in the quantitative collection of data regarding their perceptions of sport specialization, levels of perfectionism, and parenting styles through in-person questionnaires. The primary investigator met with parents on-site and distributed questionnaires directly to have parents’ complete measures of perceived sport specialization, levels of perfectionism, and parenting styles. This was a one-time data collection at the beginning or early part of their child’s sport season.

### Instrumentation

**Parent Demographic and Child Background Questionnaire.** A demographic questionnaire was used in this study to gather background information on the parents’ personal characteristics and the characteristics of their child in the youth sport context. The parent questionnaire prompted participants for their age, gender, whether they had personal sport experience (yes/no) and if yes, to what extent (i.e. no sport experience, youth sport, middle school, high school, collegiate, etc.) the gender of their child, the age of their child, the sport their child currently participates in (i.e. ice hockey, swimming, or figure skating), the name of their child’s favorite sport, the number of months their child currently participates in their favorite sport, if they have coached their child at any time during his/her youth sport experience (yes/no), what their child would say the most important reason is as to why he or she participates in their current sport, and an open-ended question asking the parents to explain why they are providing this sport experience for their child (see Appendix: A).

**Perceptions of Sport Specialization Scale.** In order to measure parent perception of their endorsement of sport specialization, the Perceptions of Sport Specialization Scale (PSSS) was administered (DiSanti, Chase, Vealey, Horn, & Myers, in development). This measure is
comprised of twenty-six questions scored from 1 to 4 (i.e. 1 = strongly disagree; 2 = disagree, 3 = agree, 4 = strongly agree). These questions are designed to explore how parents view specialization, such as how it corresponds to enjoyment and success, whether coaches prefer athletes to specialize, and if an athlete must specialize to develop effective talent. The questionnaire begins by defining specialization (Vealey & Chase, 2016) so that participants will use the same definition of specialization in sport. There are ten items on this questionnaire that were reverse scored and all items were summed for an overall perception of specialization score. A higher overall score meant that participants favored the notion of specialization. The original subscales of the PSSS included specialization mandated by others (e.g., Coaches pressure athletes to participate in only one sport in high school), specialization as a model for all (e.g., All athletes should specialize in one sport by the time they reach high school), specialization as necessary for success (e.g., High school athletes can only be successful if they train and compete year-round in one sport), quality of sport experience related to specialization (e.g., Specializing in one sport can lead to overuse injuries and mental fatigue), and general preference for sport specialization (e.g., Specializing in one sport is the best option for those participating in high school sport) (see Appendix B).

**PSSS Factor Analysis**

Because the PSSS is a recently developed measure regarding perceptions of sport specialization, the parents’ responses to the 25 items from the PSSS were subjected to a principle axis factor analysis to determine the structure underlying the parents’ perceptions of sport specialization. Initial factors were extracted using a minimum eigenvalue of 1.0. Examination of the scree plots and the factor loadings revealed the presence of four conceptually distinct factors that explained a total of 50.63% of the variance in the data. To interpret the factors, loadings were examined using a criterion value of .40.

Eighteen of the 25 total items in the scale loaded on only one factor. Six of the items (Item’s: 5, 10, 14, 18, 19, and 21) did not load on any of the four factors. Thus, these six items were not used in the interpretation of the factors. The six items loading highly on Factor 1 (see Table 4) reflected a positive, personal view of sport specialization by the parent (i.e., parent themselves believe all athletes should specialize in one sport). Thus, this factor was labeled “Pro Specialization.”

Table 4.
Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Perceptions of Sport Specialization Questionnaire (PSSS)

<table>
<thead>
<tr>
<th>Scale Item #</th>
<th>Scale Item Description</th>
<th>Factor 1: Pro Specialization</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>I believe high school athletes should specialize in one sport</td>
<td>.76</td>
</tr>
<tr>
<td>1</td>
<td>All athletes should specialize in one sport by the time they reach high school</td>
<td>.70</td>
</tr>
<tr>
<td>11</td>
<td>Specializing in one sport is the best choice for all high school athletes</td>
<td>.69</td>
</tr>
<tr>
<td>25</td>
<td>Specializing in one sport is the best option for those participating in high school sport</td>
<td>.52</td>
</tr>
<tr>
<td>7</td>
<td>Athletes who specialize in one sport are more likely to have an enjoyable sport experience than athletes who participate in multiple sports in high school</td>
<td>.51</td>
</tr>
<tr>
<td>3</td>
<td>High school athletes can only be successful if they train and compete year-round in sport</td>
<td>.40</td>
</tr>
</tbody>
</table>

The four items loading high on Factor 2 (see Table 5) described parents with a more negative view of sport specialization (i.e., specializing in one sport takes away high school athletes’ ability to enjoy other activities in high school). However, this factor reflected somewhat mixed views. Specifically, parents who scored high on item 23 (“specialization can lead to overuse injuries and mental fatigue”), also scored low on item 20 (“athletes who specialize in one sport experience more burnout than athletes who participate in multiple sports in high school”). In addition, parents who indicated high support for item 9 (“specializing in one sport takes away from high school athletes’ ability to enjoy other activities in high school”), correspondingly tended to score low on item 2 (“coaches pressure athletes to participate in only one sport in high school”). Given these loadings, Factor 2 was labeled “Negative View of Sport Specialization.” Table 5.
Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Perceptions of Sport Specialization Questionnaire (PSSS)

<table>
<thead>
<tr>
<th>Scale Item #</th>
<th>Scale Item Description</th>
<th>Factor 2: Negative View of Specialization</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Athletes who specialize in one sport experience more burnout than athletes who participate in multiple sports in high school</td>
<td>-.75</td>
</tr>
<tr>
<td>23</td>
<td>Specializing in one sport can lead to overuse injuries and mental fatigue</td>
<td>.71</td>
</tr>
<tr>
<td>2</td>
<td>Coaches pressure athletes to participate in only one sport in high school</td>
<td>-.48</td>
</tr>
<tr>
<td>9</td>
<td>Specializing in one sport takes away from high school athletes’ ability to enjoy other activities in high school</td>
<td>.42</td>
</tr>
</tbody>
</table>

The five items loading highly on Factor 3 (see Table 6) reflected a position that supported multiple sport participation for the youth athlete (i.e. if it were entirely up to athletes, they would choose to participate in more than one sport in high school). Therefore, this factor was labeled “Pro Multiple Sports.”

Table 6.

Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Perceptions of Sport Specialization Questionnaire (PSSS)

<table>
<thead>
<tr>
<th>Scale Item #</th>
<th>Scale Item Description</th>
<th>Factor 3: Pro Multiple Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Participation in more than one sport can help an athlete be more successful in his or her favorite sport</td>
<td>.68</td>
</tr>
<tr>
<td>16</td>
<td>All athletes in high school should have the option of participating in multiple sports</td>
<td>.56</td>
</tr>
<tr>
<td>12</td>
<td>A more effective model for high school sport participation is to encourage athletes to participate in</td>
<td>.47</td>
</tr>
</tbody>
</table>
multiple sports and activities

<table>
<thead>
<tr>
<th>Scale Item #</th>
<th>Scale Item Description</th>
<th>Factor 4: Specialization for Talent Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>High school athletes who specialize in one sport are more skilled than their teammates who participate in multiple sports</td>
<td>.56</td>
</tr>
<tr>
<td>22</td>
<td>It is impossible to fully develop an athlete’s talent if she/he doesn’t specialize in one sport in high school</td>
<td>.54</td>
</tr>
<tr>
<td>13</td>
<td>High school teams that include athletes who specialize in that sport will be more successful than teams with athletes who participate in multiple sports</td>
<td>.43</td>
</tr>
</tbody>
</table>

Finally, examination of the three items loading highly on Factor 4 (see Table 7) suggest that parents who do support specialization believe that specialization does lead to talent development (i.e., “only athletes who have the talent and motivation to seek college or elite athlete status should specialize in one sport in high school.”) Thus, this factor was labeled “Specialization for Talent Development.”

Table 7.
Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Perceptions of Sport Specialization Questionnaire (PSSS)

Factor scores for each study participant were computed and used in subsequent analyses as a measure of the parents’ views of sport specialization. Cronbach’s alpha coefficients, calculated using the items loading highly on each subscale, ranged from .70 to .85 (see Table 8), indicating an acceptable internal consistency for the four subscales.
Table 8.
Internal Consistencies for PSSS

<table>
<thead>
<tr>
<th>PSSS Factor Subscales</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Specialization</td>
<td>.85</td>
</tr>
<tr>
<td>Negative View of Sport Specialization</td>
<td>.78</td>
</tr>
<tr>
<td>Pro Multiple Sports</td>
<td>.70</td>
</tr>
<tr>
<td>Specialization Leads to Talent Development</td>
<td>.72</td>
</tr>
</tbody>
</table>

**Multidimensional Perfectionism Scale.** In order to measure parents’ levels of perfectionism, the Multidimensional Perfectionism Scale (MPS) (Hewitt & Flett, 1991) was administered. The MPS is a non-clinical measure that uses its multidimensional component to quantify the parents’ level of perfectionism. The MPS divides this phenomenon into a multidimensional measure of parents’ level of perfectionism with three subscales: “self-oriented perfectionism” (e.g., “When I am working on something, I cannot relax until it is perfect”), “socially prescribed perfectionism” (e.g., “Anything that I do that is less than excellent will be seen as poor work by those around me”), and “other-oriented perfectionism” (e.g., “Everything that others do must be of top-notch quality”). The measurement consists of 45 items (i.e., 15 per subscale) related to perfectionism that are rated on a 7-point Likert scale (i.e., ranging from 1 = “strongly disagree” to 7 = “strongly agree”) based on the level of agreement with each statement. The parents’ scores on the 45 items were summed for a total perfectionism score, as well as summing each subscale (Hewitt & Flett, 1991) (see Appendix C).

Hewitt and Flett (1991) conducted five separate studies to demonstrate the perfectionism construct is multidimensional and show that MPS dimensions can be assessed in a reliable, valid manner. The purpose of study 1 was to develop a reliable set of items, derived from psychological theory, tapping the three dimensions of perfectionism while also controlling for the response bias of social desirability. Participants included 156 psychology students (52 men; 104 women) and were administered 122 items of perfectionism with instructions to rate them on a 7-point Likert scale (i.e., ranging from 1 = “strongly disagree” to 7 = “strongly agree”). Participants also completed the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) and items were retained only if they had a correlation of less than .25 with social desirability. Following evaluations, 45 items (out of the 122) were retained and placed into the
MPS with three subscales of 15 items each for the self-oriented, other-oriented, and socially prescribed dimensions (Hewitt & Flett, 1991).

The item-to-subscale total correlations for each item were computed and ranged between .51 and .73 for self-oriented items, .43 and .64 for other-oriented items, and .45 and .71 for socially prescribed items. The internal consistency for each subscale was measured with Cronbach’s alpha (Cronbach, 1951) indicating .86 for self-oriented perfectionism, .82 for other-oriented perfectionism, and .87 for socially prescribed perfectionism. Finally, inter-correlations among the MPS subscales ranged between .25 and .40, thus demonstrating some degree of overlap. These results suggest that perfectionism dimensions have acceptable internal consistency and that the subscales share some variance (Hewitt & Flett, 1991).

The purpose of study 2 was to establish a relation between self-ratings and observer ratings. To do this, a factor analysis was conducted to further assess the validity of the three dimensions by determining the degree to which others could rate the level of perfectionism in targeted individuals. Participants included 1,106 university students (399 men; 707 women) and 263 psychiatric patients (121 men; 142 women). The 45-item MPS was given to participants with instructions to rate their agreement with statements on a 7-point Likert scale (i.e., ranging from 1 = “strongly disagree” to 7 = “strongly agree”). The factor analysis conducted on the student and psychiatric samples confirmed that the three factors should be retained, accounting for 36% and 34% of the variance respectively. To determine whether the factor structure was similar for the two samples, a stringent test of the factor structure’s replicability was performed by computing the coefficient of congruence (Harman, 1976). The respective coefficients of congruence were .94 for the first factor (self-oriented perfectionism), .93 for the second factor (socially prescribed-perfectionism), and .82 for the third factor (socially prescribed perfectionism). The magnitude of these coefficients indicate that the factor structure is similar across the two samples and that levels of self-oriented, other-oriented, and socially-prescribed perfectionism are observable to others (Hewitt & Flett, 1991).

Study 3 focused on demonstrating the convergent and divergent validity of the MPS. In this study, there were three samples of participants who completed the MPS, personality, and psychopathology measures. Sample 1 included 104 students (33 men; 71 women), Sample 2 included 93 students (29 men; 64 women), and Sample 3 included 45 female students. Convergent and discriminant validity was assessed by administering numerous measures related
to self and socially related behavior. Results indicated that self-oriented perfectionism was correlated significantly with self-related measures such as high standards, self-criticism, and self-blame. Self-oriented perfectionism was not correlated with demand for approval of others, fear of negative evaluation, locus of control, authoritarianism, dominance, or other-directed blame. A positive correlation was obtained between other-oriented perfectionism and other-blame, as well as between other-oriented perfectionism and both authoritarianism, and dominance. Finally, socially prescribed perfectionism correlated significantly with measures of demand for approval of others, fear of negative evaluation, and locus of control. (see Table 2 in Hewitt & Flett, 1991). These results provide extensive support for the discriminant validity and construct validity of the MPS.

Study 4 explored the scales concurrent validity by comparing scores on the MPS to another measure of perfectionism described as measuring self-oriented perfectionistic attitudes (Burns, 1983). Participants included 91 undergraduate students (34 men; 57 women) from York University. After completing questionnaires, results indicated that the Burns scale correlated most strongly with the self-oriented perfectionism scale (.57); however, it also correlated with other-oriented perfectionism (.40) and socially prescribed perfectionism (.44). The correlation between the two self-oriented perfectionism measures was not significantly greater than the correlation between the Burns scale and the other-oriented perfectionism, $z = 0.22, p > .05$, but it was significantly greater than the correlation between the Burns scale and socially prescribed perfectionism, $z = 2.52, p < .05$ (see table 3 Hewitt & Flett, 1991). With this in mind, evidence of concurrent validity was obtained such that all three dimensions of perfectionism were correlated significantly with scores on the Burns scale of self-oriented perfectionism.

Finally, the purpose of study 5 was to demonstrate the practical importance of the new construct as well as establishing that the three dimensions of perfectionism are associated differently with severe psychopathology. To conduct this study, 77 adult psychiatric patients (39 men; 38 women) were asked to participate. The most frequent diagnoses included schizophrenia (33.8%), affective disorder (19.5%), alcohol/drug dependency (11.7%), marital family problems (11.7%), personality disorder (9.1%), and adjustment disorder (6.5%). Participants were administered the MPS and the MCMI (Millon, 1983). The MCMI is a 175-item true-false instrument that contains 20 scales relevant to the DSM-III. Results indicated self-oriented perfectionism was not correlated with any personality subscales for the total sample. Other-
oriented perfectionism was correlated positively with the histrionic, narcissistic, and antisocial subscales and negatively with the schizotypal subscale. The greatest number of significant correlations was obtained with the socially prescribed perfectionism dimension such that this dimension correlated positively with the schizoid, avoidant, and passive aggressive patterns and correlated negatively with the compulsive pattern (See table 4 in Hewitt & Flett, 1991). Overall, these findings provide supplementary evidence for the multidimensionality of the perfectionism construct, especially in relation to personality disorders.

Internal consistency of the three subscales for this study was assessed using Cronbach’s alpha analyses. Coefficients of .90, .78, and .79 were obtained for the self-oriented, other-oriented, and socially-prescribed subscales, respectively (see Table 9). These values are above the criterion of .70 recommended by Nunnally and Berstein (1994).

Table 9.
Internal Consistencies for MPS

<table>
<thead>
<tr>
<th>MPS Subscales</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Oriented</td>
<td>.90</td>
</tr>
<tr>
<td>Other-Oriented</td>
<td>.78</td>
</tr>
<tr>
<td>Socially Prescribed</td>
<td>.79</td>
</tr>
</tbody>
</table>

Parental Authority Questionnaire. The final quantitative measure that was given to parents is an adapted version of the Parental Authority Questionnaire (PAQ) (Buri, 1991). This questionnaire was developed for the purpose of measuring Baumrind’s (1971) permissive, authoritarian, and authoritative parental prototypes from the point of view of the child (Buri, 1991). For the purposes of the current study, items were modified so that parental prototypes could be measured from the point of view of the parent. The PAQ divides parental prototypes into three subscales mentioned previously including “permissive” (e.g., “I feel that in a well-run home the child should have his/her way in the family as often as the parents do”), “authoritarian” (e.g., “Even if my child doesn’t agree with me, I feel that it is for his/her own good if I force them to conform to what I think is right”), and “authoritative” (e.g., “I direct the activities and decisions of my child through reasoning and discipline”). The measure consists of 30 items (i.e., 10 per subscale) related to parental authority prototypes that are rated on a 5-point Likert scale (i.e., ranging from 1 = “strongly disagree” to 5 = “strongly agree”) based on their perception of
their parenting behaviors. The parent's scores were obtained by summing the individual items (i.e., permissive, authoritarian, authoritative) from each subscale score and all items for an overall score. PAQ scores on each subscale range from 10 to 50 (Buri, 1991) (see Appendix: D).

To examine the test-retest reliability of this measure 62 students from an introductory psychology class (30 women; 32 men) completed the PAQ at the end of a class period early in the semester and then again two weeks later. The questionnaire sessions over the 2-week period yielded the following reliabilities: .81 for mother's permissiveness, .86 for mother's authoritarianism, .78 for mother's authoritativeness, .77 for father's permissiveness, .85 for father's authoritarianism, and .92 for father's authoritativeness. Buri (1991) also explored the internal consistency of the PAQ by utilizing Cronbach (1951) coefficient alpha values for each of the six PAQ scales as follows: .75 for mother's permissiveness, .85 for mother's authoritarianism, .82 for mother's authoritativeness, .74 for father's permissiveness, .87 for father's authoritarianism, and .85 for father's authoritativeness. Both the test-retest reliability coefficients and the Cronbach alpha values are highly acceptable, especially when considering there are only 10 items per scale in the PAQ (Buri, 1991).

To determine discriminant validity, Buri (1991) hypothesized that if the permissive, authoritarian, and authoritative scales were an accurate measure of Baumrind’s three parental prototypes, then one would expect opposing responses to the items from these three scales. Results from the 127 college students supported the hypothesized divergence in PAQ scores such that Mother’s authoritarianism was inversely related to mother’s permissiveness ($r = -.38, p \leq .0005$) and to mother’s authoritativeness ($r = -.48, p \leq .0005$). Father’s authoritarianism was inversely related to father’s permissiveness ($r = -.50, p \leq .0005$) and to father’s authoritativeness ($r = -.52, p \leq .0005$). In addition, mother’s permissiveness was not significantly related to mother’s authoritativeness ($r = .07, p \geq .10$), and father’s permissiveness was not significantly related to father’s authoritativeness ($r = .12, p \geq .10$). To account for response biases, the following bivariate correlations between the PAQ scores and the Marlowe-Crowne Social Desirability Scale were obtained: $r = .23$ for mother’s permissiveness, $r = -.14$ for mother’s authoritarianism, $r = .10$ for mother’s authoritativeness, $r = .10$ for father’s permissiveness, $r = .01$ for father’s authoritarianism, and $r = .05$ for father’s authoritativeness. In conclusion, these results indicate that the PAQ is not vulnerable to social desirability response biases.
Internal consistency of the three subscales for this study was assessed using Cronbach’s alpha analyses. Coefficients of .79, .82, and .77 were obtained for the permissive, authoritarian, and authoritative subscales respectively (see Table 10). These values are above the criterion of .70 recommended by Nunnally and Berstein (1994).

Table 10.
Internal Consistencies for PAQ

<table>
<thead>
<tr>
<th>PAQ Subscales</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissive</td>
<td>.79</td>
</tr>
<tr>
<td>Authoritarian</td>
<td>.82</td>
</tr>
<tr>
<td>Authoritative</td>
<td>.77</td>
</tr>
</tbody>
</table>

Procedures

Approval to conduct this study was acquired via permission from the Committee on the Use of Human Subjects in Research. To recruit parents of youth sport athletes’ 203 parents were contacted in-person after receiving approval from the coaches and/or directors of the youth sport teams of interest. Specifically, parents were contacted using format from the initial contact script (see Appendix: E) during their child’s practice or competition to discuss the opportunity to participate in this study. In addition to the initial in-person contact, an attached copy of the research description consent form for parents (see Appendix F) was given to participants to review and provide consent. A packet of questionnaires was distributed to parents to complete during the down time of their child’s practice or competition. The researcher in this study had no relationship with the parents contacted to participate. Any male or female parent who chose to participate and provided proper consent were included in this study. The only excluding factors were that the parent had to be over 18 years of age and currently had a child between the ages of 6 and 12 years old participating in one of the following sports: ice hockey, figure skating, or swimming. Prior to any data collection, participants read over the Research Description for Participants consent form and decided whether they wanted to participate in the study. For the parents, this form preceded the in-person questionnaires, and the participants were instructed to contact the researcher with any questions or concerns before completing the quantitative measures. All participants were reminded that their participation was completely voluntary, and that they were free to end participation at any time without penalty. After all questions and
concerns were addressed, the participant handed in their copy of the research description consent form in-person, and were provided the option of requesting their own copy of this form in case any questions arose after their participation in the study. It should be noted that eight parents chose not to participate in this study and did not give a reason behind their decision for doing so. In addition, ten parents did not fully complete the questionnaires and were eliminated from this study.

After granting consent, the parent participants completed the questionnaires first with their completion of the Parent Demographic and Child Background Questionnaire. Parents then completed three questionnaires that were randomized in order of completion to control for order effects. These three questionnaires included the Perceptions of Sport Specialization Scale, to investigate their perceptions of specialization in athletics, the Multidimensional Perfectionism Scale, to measure their levels of perfectionism, and the Parental Authority Questionnaire, to measure their parental prototype (authoritative, authoritarian, or permissive). After completing these measures, each parent was given a debriefing form (see Appendix: G), which detailed the purpose of the study and gave them the opportunity to receive a summary of the results, once the study has been completed. The overall time for completion was approximately 15 minutes and each participant only needed to complete this process once.

**Hypotheses**

Several hypotheses were used to guide this study:

Hypothesis 1: Parents with children in the sampling years (6-12 years old) of the Developmental Model of Sport Participation (Cote, 1999) will endorse sport specialization.

Hypothesis 2: Parent perfectionism will be positively related to an authoritarian parenting style

Hypothesis 3: Parent perfectionism will be positively related to the endorsement of sport specialization

Hypothesis 4: Parent perfectionism and an authoritarian parenting style will be positively related to the endorsement of sport specialization
Hypothesis 5: Parents with an authoritative or permissive parenting style will not be significantly related to the endorsement of sport specialization whereas parents with an authoritarian parenting style will be related to higher endorsement of sport specialization.
CHAPTER THREE

RESULTS

The purpose of this study was to explore parents’ perceptions of sport specialization within the samplings years of Cote’s Developmental Model of Sport Participation (Cote, 1999). More specifically, this study explored how parents’ perceptions of their perfectionism and parenting styles related to views of sport specialization in the youth sport context. In the first section of this chapter, the descriptive results of the three measures used for this study (i.e., Parental Authority Questionnaire, Multidimensional Perfectionism Scale, and Perceptions of Sport Specialization Scale) are presented to determine how parents of youth sport athletes from the Mid-West personally rated their attitudes toward sport specialization and perceptions of their own perfectionism levels and parenting styles to better understand the possible relationship between these two variables and views of sport specialization in the youth sport context. In the next section, we will present the results of the analysis for each hypothesis.

Descriptive Statistics

Descriptive statistics (means, standard deviations, and obtained range) for all study variables are provided in Tables 11, 12, and 13 below (PAQ, MPS and PSSS variables).

Parental Authority Questionnaire. The Parental Authority Questionnaire (PAQ) (Buri, 1991) was given to the parent participants in this study. This measure was designed to provide a detailed breakdown of the parents’ perceptions of their own parenting styles in relation to the authoritarian, permissive, and authoritative parental prototypes. The questionnaire included 30 items total, with 10 items provided for each of the three subscales of interest (authoritarian, permissive, authoritative). Each participant began by rating their responses regarding the questionnaire statements on a 1-5 scale to the extent to which they agreed or disagreed with each statement (i.e., 1 = strongly disagree, 5 = strongly agree).

The results for the PAQ variables show that the participants as a group scored above the midpoint (a “3” on a 5-point response format) on the authoritative subscale and below the midpoint on both the permissive and authoritarian subscales (see Table 11). However, examination of the standard deviation values and the obtained range of scores for the authoritarian subscale indicate that there was substantial inter-individual variability in these parents’ responses. In addition, while the means of the permissive subscale indicate that the
participants as a group scored below the midpoint, the standard deviation values and the obtained range of scores again show that there was considerable inter-individual variability in these parents’ responses.

Table 11.

Descriptive Data for PAQ variables

<table>
<thead>
<tr>
<th>PAQ Subscale</th>
<th>Mean</th>
<th>SD</th>
<th>Obtained Range Score</th>
<th>Possible Range Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissive</td>
<td>2.07</td>
<td>.53</td>
<td>1.0-4.3</td>
<td>1-5</td>
</tr>
<tr>
<td>Authoritarian</td>
<td>2.94</td>
<td>.61</td>
<td>1.4-4.5</td>
<td>1-5</td>
</tr>
<tr>
<td>Authoritative</td>
<td>3.99</td>
<td>.43</td>
<td>2.7-4.9</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**Multidimensional Perfectionism Scale.** The Multidimensional Perfectionism Scale (MPS) (Hewitt & Flett, 1991) was also given to the parents of this study to provide information regarding parents’ perceptions of their own perfectionism levels in relation to the self-oriented, socially prescribed, and other oriented perfectionism subscales. This measure contained 45 items, with 15 items provided for each of the three subscales of interest (self-oriented, socially prescribed, other oriented). The MPS utilized a rating scale ranging from 1-7, with higher scores indicating a higher degree of perfectionism (i.e., 1 = Strongly Disagree, 7 = Strongly Agree).

The descriptive results of the Multidimensional Perfectionism Scale are shown below in Table 12. These results also yield interesting basic findings such that for the self-oriented and socially prescribed subscales, almost the full range of obtained scores was exhibited. In addition, the standard deviations for all subscales (self-oriented, socially prescribed, other oriented) were quite large (most at or near 1.0). With this in mind, there was only one subscale (self-oriented) that showed participants as a group scored above the midpoint (a “4” on a 7-point response format) while the other two subscales (socially prescribed and other oriented) scored below the midpoint. However, again, after examining the standard deviations for both the socially prescribed and other oriented subscales, results indicate there was a considerable amount of inter-individual variability among participants and their obtained scores (i.e., Socially Prescribed $M = 3.41, SD = .76$; Other Oriented $M = 3.92, SD = .73$).

Table 12.

Descriptive Data for MPS variables

<table>
<thead>
<tr>
<th>MPS Subscale</th>
<th>Mean</th>
<th>SD</th>
<th>Obtained Range Score</th>
<th>Possible Range Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44
The Perceptions of Sport Specialization Scale (PSSS) (DiSanti, Chase, Vealey, Horn, & Meyers, in development) was given to participants to gain an understanding of their perceptions of sport specialization in the youth sport context. This measure included 25 items total, with a rating scale ranging from 1-4. Participants were asked to rate the extent to which they agreed or disagreed with each statement regarding specialization (i.e., 1 = strongly disagree, 4 = strongly agree). For this scale, a response of 3 or 4 meant a higher score, indicating a higher degree of acceptance for sport specialization whereas a response of 1 or 2 meant a lower score, indicating a lower degree of acceptance for sport specialization. In addition, because this is a newly developed scale, for the purpose of this study, a factor analysis was conducted to identify potential subscale structure. The factor analysis provided 4 new subscales of interest including: pro specialization, negative specialization, pro multiple sports, and specialization for talent development.

The descriptive results for the PSSS variables are shown below in Table 13. These results suggest that the means of the four new computed subscales were all below the midpoint (a “2.5” on a 4-point response format). However, because this is a 4-point response format, participants actually did score close to the midpoint for the subscales including: negative specialization and specialization for talent development, especially when taking into consideration the standard deviations of those scores (i.e., Negative Specialization $M = 2.48 \ SD = .34$; Specialization for Talent Development $M = 2.15 \ SD = .63$). When examining the means and standard deviations of all PSSS subscales, results suggest that there was a great degree of inter-individual variability in these parents’ responses. In addition, because the standard deviations of the subscales were relatively significant (all but three subscales close to or above .50) almost the full range of possible scores were used, again indicating substantial variability among participants.

<table>
<thead>
<tr>
<th>PSSS Subscale</th>
<th>Mean</th>
<th>SD</th>
<th>Obtained Range Score</th>
<th>Possible Range Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Oriented</td>
<td>4.65</td>
<td>1.00</td>
<td>1.3-7.0</td>
<td>1-7</td>
</tr>
<tr>
<td>Other Oriented</td>
<td>3.92</td>
<td>.73</td>
<td>2.1-5.7</td>
<td>1-7</td>
</tr>
<tr>
<td>Socially Prescribed</td>
<td>3.41</td>
<td>.76</td>
<td>1.2-6.0</td>
<td>1-7</td>
</tr>
</tbody>
</table>
Cluster Analyses: A Person-Centered Approach

The primary purpose of this study was to explore parents’ perceptions of sport specialization within the samplings years of Cote’s Developmental Model of Sport Participation (Cote, 1999). More specifically, this study explored how parents’ perceptions of their perfectionism and parenting styles related to views of sport specialization in the youth sport context. Overall, we hypothesized that parents with children in the sampling years (6-12 years old) of the Developmental Model of Sport Participation (Cote, 1999) would endorse sport specialization.

This purpose was assessed using a person-centered rather than variable-centered approach. In a variable-centered approach, multivariate correlation or regression procedures would be implemented to assess the relationship between the identified study variables across all participants. In contrast, in a person-centered approach, study participants are first categorized into groups based on their scores from the scales assessing the MPS, PAQ, and PSSS variables, with each group containing those who exhibit a similar profile to one another. These profile groups can then be compared to the outcome variables of interest (e.g., views of sport specialization). To select or determine the profile comparison groups, simple data splitting measures can be used (e.g., mean/median split), but oftentimes these methods result in comparison groups that are not really conceptually different from each other. Therefore, another more conceptually accurate method for identifying profile groups occurs through the use of cluster analysis. Given that the univariate correlational analyses (see Table 16 below) indicated low to moderate correlation between the scores on the PAQ, MPS, and PSSS variables, a cluster analysis was selected as the primary statistical procedure for this study. With this in mind, these procedures were used to determine if parents within this sample could be classified into groups that exhibited similar patterns or profiles on the MPS, PAQ, and PSSS subscales measured at the global level.
This analysis began with the standardization of scores. Then, a two-step cluster analysis procedure was initiated (Hair, Black, Babin, & Anderson, 2010). First, a hierarchical cluster analysis, utilizing Ward’s method of cluster formation with squared Euclidian distance measures, was conducted to determine the number of clusters that best fit the data. The variables used in this analysis were the six scores representing parents’ overall perfectionism levels and parenting styles. This included three subscales from the MPS (self-oriented, socially prescribed, and other oriented) and three subscales from the PAQ (permissive, authoritarian, and authoritative). The agglomeration schedule produced from the hierarchical analysis as well as the results obtained from the dendogram indicated that a four-cluster solution was most appropriate.

Following the two-step procedures outlined by Hair et al. (2010), a k-means cluster analysis was then conducted, and the results provided verification of the four-cluster framework. Descriptive data (means, standard deviations, and z-scores) for the four clusters are presented in Table 14. A follow-up MANOVA conducted to compare the four cluster groups on the six variables indicated a significant difference between the groups, Pillai’s Trace = 1.34 $F(18, 588) = 26.26$, $p < .00$, $\eta^2 = .45$. Examination of the individual F-values for all six variables (see columns in the far right of Table 15) reveals that the cluster groups differed significantly on all of the clustering variables, and post-hoc Scheffe comparisons indicated that all cluster groups differed significantly from each other on all variables. Interestingly, the four cluster groups seemed to differ most in their scores on the perfectionism variables as compared to their scores on the parenting style variables.

After interpreting the results of the profiles, it is clear that participants in Cluster 1 scored very high on the permissive parenting style and socially prescribed perfectionism (z-scores at or above .42). In comparison, participants in Cluster 1 scored very low in all other PAQ and MPS variables (z-scores at or below -.91). Thus, this group can be labeled as high in permissive parenting and socially prescribed perfectionism. Participants in Cluster 2 scored low on authoritarian and authoritative (z-scores at or below -.51) and at a moderate level on the permissive parenting style (z-scores at .06). This group is also distinguished by very low scores on self-oriented, other oriented, and socially prescribed perfectionism (z-scores at or below -1.73). Thus, they can be designated as moderately permissive and very low in all forms of perfectionism. In contrast, participants in Cluster 3 scored very high on the authoritarian parenting style (z-scores at .59) and self-oriented, other oriented, and socially prescribed perfectionism (z-scores at or above .73).
perfectionism (z-scores at or above .67). Thus, participants in Cluster 3 appear to be high in all dimensions of perfectionism and the authoritarian parenting style. Finally, participants in Cluster 4 scored very high on authoritative (z-scores at .60), moderate in self-oriented (z-scores at -.05), and low on all others (z-score at or below -.46). Consequently, these participants appear to be high on all authoritative dimensions (z-scores at .60) and moderate in all self-oriented dimensions (z-scores at -.05) in comparison to the overall sample (see Table 14).

Table 14.
Cluster Group Results: Descriptive Data and Follow-Up Univariate F-value Comparisons

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cluster 1, High Permissive, High Socially Prescribed, Low in all Others (n = 31), mean (SD), and z-score</th>
<th>Cluster 2, Moderate Permissive, Low in all Others (n = 24), mean (SD), and z-score</th>
<th>Cluster 3, High Authoritarian, High in all Perfectionism (n = 73), mean (SD), and z-score</th>
<th>Cluster 4, High Authoritative, Moderate Self Oriented, Low in all Others (n = 75), mean (SD), and z-score</th>
<th>F(df = 3, 199)</th>
<th>Eta²</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAQ: Permissive</td>
<td>2.69 (.61) z = 1.18</td>
<td>2.10 (.47) z = .06</td>
<td>2.05 (.40) z = -.04</td>
<td>1.83 (.41) z = -.46</td>
<td>27.56</td>
<td>.29</td>
</tr>
<tr>
<td>PAQ: Authoritarian</td>
<td>2.87 (.61) z = -.11</td>
<td>2.63 (.56) z = -.51</td>
<td>3.30 (.47) z = .59</td>
<td>2.71 (.57) z = -.37</td>
<td>12.81</td>
<td>.21</td>
</tr>
<tr>
<td>PAQ: Authoritative</td>
<td>3.60 (.45) z = -.91</td>
<td>3.87 (.47) z = -.29</td>
<td>3.93 (.32) z = .59</td>
<td>4.25 (.34) z = .60</td>
<td>25.68</td>
<td>.28</td>
</tr>
<tr>
<td>MPS: Self Oriented</td>
<td>4.24 (.51) z = -.41</td>
<td>2.92 (.78) z = -1.73</td>
<td>5.45 (.63) z = .79</td>
<td>4.60 (.63) z = -.05</td>
<td>103.42</td>
<td>.61</td>
</tr>
<tr>
<td>MPS: Other Oriented</td>
<td>3.68 (.50) z = -.33</td>
<td>3.10 (.49) z = -1.12</td>
<td>4.49 (.62) z = .78</td>
<td>3.73 (.55) z = -.26</td>
<td>46.26</td>
<td>.41</td>
</tr>
<tr>
<td>MPS: Socially Prescribed</td>
<td>3.73 (.37) z = .42</td>
<td>2.23 (.52) z = -1.55</td>
<td>3.92 (.58) z = .67</td>
<td>3.16 (.55) z = -.32</td>
<td>69.80</td>
<td>.51</td>
</tr>
</tbody>
</table>

Note. p < .00

The cluster results indicate that the different constructs used in this study to assess parents’ parenting styles and perfectionism at the global level (i.e., permissive, authoritative, authoritarian parenting style, self-oriented, other oriented, socially prescribed perfectionism) load together as participants within each cluster group scored similarly on all variables. Furthermore, the eta² values in the far right column in Table 14 indicate considerable separation between the
four cluster groups in relation to their scores on the PAQ and MPS variables. Based on Cohen’s (1988) specifications for interpretation of effect sizes, the parents in the four cluster groups exhibited small-sized differences on the three subscales from the PAQ and medium-sized differences on the three subscales from the MPS. Therefore, it seems that the four groups or clusters of parents are quite different from each other in their profiles on these parenting style and perfectionism measures.

**Comparison of Clusters on Perceptions of Sport Specialization Scale (PSSS)**

To test hypothesis one, that parents with children in the sampling years (6-12 years old) of the Developmental Model of Sport Participation (Cote, 1999) will endorse sport specialization, a one-way MANOVA was conducted to compare the four cluster groups on their self-reported perceptions of sport specialization. The independent variable for this analysis was cluster group, and the dependent variables were the four factor-based subscales derived from the PSSS assessing parents’ views of sport specialization. Results indicated a significant cluster group main effect, Wilk’s Lambda = .87, $F(12, 518) = 2.28$, $p < .01$, $\eta^2 = .04$. Examination of the parameter estimates and univariate F-values (see descriptive data and univariate F-values presented in Table 15) indicated that the cluster groups differed significantly on two of the PSSS-based subscales.

Scheffe post hoc comparisons (using $p < .01$ as a criterion value) revealed that parents in high permissive and high socially prescribed (Cluster 1) as well as parents in high authoritarian and high overall perfectionism (Cluster 3) reported greater support of sport specialization than did their peers in high authoritative, moderate self-oriented (Cluster 4). Furthermore, both parents in high permissive and high socially prescribed (Cluster 1) and parents in high authoritarian and high overall perfectionism (Cluster 3) indicated significantly higher support for specialization for talent development than did parents in high authoritative and moderate self-oriented (Cluster 4) (see Table 15).

Table 15.
Differences Between the Cluster Groups on PSSS Subscale Scores

<table>
<thead>
<tr>
<th>PSSS Subscales</th>
<th>Cluster 1 (n = 31) mean(SD)</th>
<th>Cluster 2 (n = 24) mean(SD)</th>
<th>Cluster 3 (n = 73) mean(SD)</th>
<th>Cluster 4 (n = 75) mean(SD)</th>
<th>Univariate F-value Df = 3,199</th>
<th>Eta²</th>
<th>Post-hoc scheffe comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Specialization</td>
<td>2.13 (.55)</td>
<td>1.85 (.57)</td>
<td>2.02 (.62)</td>
<td>1.71 (.51)</td>
<td>5.72</td>
<td>.08</td>
<td>1, 3 &gt; 4</td>
</tr>
</tbody>
</table>

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As a general summary, it does appear that the four clusters of parents representing different types of parenting styles and perfectionism levels do vary with regard to their views of sport specialization. In particular, the parents who exhibited the most permissive-like parenting style and who were high in socially prescribed perfectionism (Cluster 1) as well as those who scored high on both authoritarian-like parenting style and all forms of perfectionism (Cluster 3) also reported higher support for sport specialization than did their peers in high authoritative and moderate self-oriented perfectionism (Cluster 4). In addition, the parents with a permissive parenting style and high socially-prescribed perfectionism (Cluster 1) and the parents with an authoritarian parent style and high forms of overall perfectionism also reported higher support for specialization as a need for talent development than did their peers, categorized as parents who exhibited the most authoritative-like parenting style and moderate self-oriented perfectionism (Cluster 4), thus supporting the notion that parenting styles and perfectionism levels assessed at the global level are related to views of sport specialization in the youth sport context.

**Univariate Pearson Correlational Analyses**

A series of univariate Pearson correlational analyses were conducted to provide an initial and preliminary assessment of the strength of the relationship between the three sets of variables in this study. The results of these analyses relative to the set of variables assessing participants parenting styles (PAQ: permissive, authoritarian, authoritative) (see Table 16 below) indicate significant positive and negative associations between the Parental Authority Questionnaire (PAQ) items, Multidimensional Perfectionism Scale (MPS) items, and Perceptions of Sport Specialization (PSSS) items.

The degree of correlation that existed between perfectionism and the authoritarian parenting style was assessed to test hypothesis two, stating parent perfectionism would be positively related to an authoritarian parenting style. Results indicated that parents who identified
with an authoritarian parenting style (e.g., “I do not allow my child to question any decision I make”) were positively, but moderately ($r$-values ranging from .22 to .26) related to self-oriented, other oriented, and socially prescribed perfectionism. Thus, parents who exhibited high scores on the authoritarian parenting style (high in control; low in warmth) also tended to score high on self-oriented, other oriented, and socially prescribed perfectionism, indicating a high level of overall perfectionism, therefore supporting hypothesis two.

To examine hypothesis three, that parents with higher levels of perfectionism would be associated with the endorsement of specialization, the MPS variables and PSSS variables were assessed. In particular, the most significant findings in relation to this hypothesis were seen when assessing statements regarding parents’ socially prescribed perfectionism (e.g., “the better I do, the better I am expected to do”), which were positively related to pro specialization (e.g., “all athletes should specialize in one sport by the time they reach high school”) ($r$-values at .18) and specialization for talent development ($r$-values at .14). Thus, parents who exhibited high scores on socially prescribed perfectionism (perception that others demand perfection from them) also tended to score high on pro specialization and specialization for talent development. Therefore, parents high in socially prescribed perfectionism were more likely to support statements regarding specialization and the need for specialization to develop talent in athletes. However, it should be noted that this was a moderate positive relationship such that the given $r$-values for this correlation ranged from .14 to .18. There were no significant positive or negative relationships found among those parents who identified with other oriented perfectionism and views of sport specialization nor those parents who identified with self-oriented perfectionism and views of sport specialization. Therefore, hypothesis three was partially supported, such that socially prescribed perfectionism was positively linked with pro specialization and specialization for talent development.

Hypothesis four stated that parent perfectionism and an authoritarian parenting style would be positively related to the endorsement of sport specialization. To examine this, the degree of correlation that existed between perfectionism, the authoritarian parenting style, and views of sport specialization were assessed. Since hypothesis two was confirmed above, we were able to conclude that parent perfectionism was indeed positively, but moderately ($r$-values ranging from .22 to .26) related to an authoritarian parenting style. In addition, parents who identified with an authoritarian parenting style (e.g., “I do not allow my child question any
decision I make”) were positively, but moderately (r-values ranging from .18 to .20) related to pro specialization and specialization for talent development, thus supporting hypothesis four.

Finally, we hypothesized that parents with an authoritative or permissive parenting style would not be significantly related to the endorsement of sport specialization whereas parents with an authoritarian parenting style would be related to higher endorsement of sport specialization. In particular, when looking at the PAQ subscales, parents who identified with a permissive parenting style (e.g., “I feel that in a well-run home the child should have his/her way in the family as often as the parents do”) were positively, but moderately (r-values ranging from .14 to .26) correlated with pro specialization (e.g., I believe high school athletes should participate in one sport”), pro multiple sports (e.g., All athletes in high school should have the option of participating in multiple sports”), and specialization for talent development (e.g., High school athletes who specialize in one sport are more skilled than their teammates who participate in multiple sports”). Thus, parents who exhibited a high permissive parenting style also tended to score high on three of the four perceptions of sport specialization subscales (PSSS) indicating a support for sport specialization, participating in multiple sports, and the need for specialization to develop talent in athletes. Therefore, hypothesis five in regards to the permissive parenting style was not supported.

When testing the second part of hypothesis five, that parents with an authoritative parenting style would not be significantly related to the endorsement of sport specialization, the authoritative parenting style was examined. Parents who identified with an authoritative parenting style (e.g., “Once family policy is established, I discuss the reasoning behind the policy with my child”) had significant negative associations between many of the PSSS subscale items. The authoritative parent was negatively related to three of the four PSSS subscales including pro specialization, pro multiple sports, and specialization for talent development (r-values at -.21, -.28, and -.26 respectively). Therefore, parents who exhibited high authoritative scores (high in warmth and autonomy-granting with respect to the child) were not in support of specialization nor diversification; or specialization as a need for talent development in athletes, further supporting the second part of hypothesis five.

The final part of hypothesis five was examined, stating that parents with an authoritarian parenting style would be related to higher endorsement of sport specialization. Parents who identified with an authoritarian parenting style (e.g., “I do not allow my child to question any
decision I make”) were positively, but moderately (r-values ranging from .18 to .20) related to pro specialization and specialization for talent development. Thus, parents who exhibited high authoritarian scores (high in control; low in warmth) also tended to score moderately high on the pro specialization and specialization for talent development. Therefore, authoritarian parents who correlated positively with pro specialization and specialization for talent development were in support of specialization and the need for specialization to develop talent in athletes, therefore supporting the final part of hypothesis five.

Table 16.

Descriptive and Correlational Data for MPS, PAQ, and PSSS variables

<table>
<thead>
<tr>
<th>MPS SO</th>
<th>MPS SO</th>
<th>MPS SP</th>
<th>PAQ Perm</th>
<th>PAQ Autorian</th>
<th>PAQ Atative</th>
<th>PSSS Pro Spec</th>
<th>PSSS Neg Spec</th>
<th>PSSS Pro Multi Sports</th>
<th>PSSS Spec Tal Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPS SO</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPS OO</td>
<td>.54**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPS SP</td>
<td>.54**</td>
<td>.45**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAQ Perm</td>
<td>-.04</td>
<td>-.07</td>
<td>.22**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAQ Autorian</td>
<td>.25**</td>
<td>.22**</td>
<td>.26**</td>
<td>-.10</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAQ Atative</td>
<td>.16*</td>
<td>-.01</td>
<td>-.14*</td>
<td>-.23**</td>
<td>-.12</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSSS Pro Spec</td>
<td>-.00</td>
<td>.04</td>
<td>.18**</td>
<td>.26**</td>
<td>.20**</td>
<td>-.21**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSSS Neg Spec</td>
<td>-.09</td>
<td>.04</td>
<td>.12</td>
<td>-.10</td>
<td>.03</td>
<td>-.10</td>
<td>.10</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PSSS Pro Multi Sport</td>
<td>-.05</td>
<td>-.01</td>
<td>.08</td>
<td>.14*</td>
<td>.02</td>
<td>-.28**</td>
<td>.42**</td>
<td>.13</td>
<td>-</td>
</tr>
<tr>
<td>PSSS Spec Tal Dev</td>
<td>-.01</td>
<td>.01</td>
<td>.14*</td>
<td>.23**</td>
<td>.18**</td>
<td>-.26**</td>
<td>.66**</td>
<td>-.07</td>
<td>.35**</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>4.65</td>
<td>3.92</td>
<td>3.41</td>
<td>2.07</td>
<td>2.94</td>
<td>3.99</td>
<td>1.90</td>
<td>2.48</td>
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</tr>
<tr>
<td>SD</td>
<td></td>
<td>1.00</td>
<td>.73</td>
<td>.76</td>
<td>.53</td>
<td>.61</td>
<td>.43</td>
<td>.58</td>
<td>.34</td>
</tr>
<tr>
<td>Obtained Score Range</td>
<td>1.3-7.0</td>
<td>2.1-5.7</td>
<td>1.2-6.0</td>
<td>1.0-4.3</td>
<td>1.4-4.5</td>
<td>2.7-4.9</td>
<td>1.0-4.0</td>
<td>1.5-3.5</td>
<td>1.0-3.2</td>
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<td>Possible Score Range</td>
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<td>1-5</td>
<td>1-5</td>
<td>1-4</td>
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</tbody>
</table>

*Note. * $p < .05$. ** $p < .01$
The primary purpose of the present study was to explore parents’ perceptions of sport specialization within the sampling years of Cote’s Developmental Model of Sport Participation (Cote, 1999). More specifically, this study explored how parents’ perceptions of their perfectionism and parenting styles were related to views of sport specialization in the youth sport context. In this section, the participants’ results for their perceptions of their own parenting style, their perception of their own perfectionism, and their views of sport specialization will be discussed. Findings of this study will also be discussed based on the strength of the relationship between parenting styles, perfectionism, and endorsement of sport specialization. Finally, limitations and directions for future research are summarized.

In regard to the study purpose, the cluster analysis resulted in the identification of four clusters or groups of individuals representing different intrapersonal profiles. Specifically, the four groups consisted of those who scored low, moderate, or high on the global measures of perfectionism and parenting styles. The parents in this study were found to differ from each other in their overall perfectionism and parenting style profiles. Following this, comparisons were made on the four cluster groups regarding their self-reported perceptions of sport specialization. The findings revealed a significant cluster group main effect, indicating that the four cluster groups differed significantly on pro specialization and specialization for talent development, thus partially supporting hypothesis one.

While our main hypothesis was partially supported, such that all parents with children in the sampling years (6-12 years old) of the Developmental Model of Sport Participation (Cote, 1999) would endorse sport specialization, the cluster analysis allowed us to conclude that specific parenting styles paired with specific types of perfectionism led to unique views of sport specialization. Published research in this area is scarce, therefore this study was important as it was able to shed light on information regarding parent influence in the youth sport context. We do know that parents are substantially involved in their children’s sport experiences (Cote, 1999) However, it is not clear how parents’ involvement in their child’s youth sport experience influences their views of sport specialization. As Brustad (1992) notes, “everybody talks about parents in sport, but nobody does any research on them” (p. 72). Taking this into consideration,
the current study provides insight on unanswered questions concerning parents’ role in their child’s sport experience, which may be helpful for expanding future research in this area of study.

A univariate Pearson correlational analysis was also conducted to examine the strength of the relationship between parents’ perfectionism, parenting styles, and views of sport specialization. The results revealed significant positive and negative associations between parent perfectionism, parenting styles, and views of sport specialization. The findings support hypotheses two and four with partial support for hypotheses three and five indicating that perfectionism levels and parenting styles are related to parents’ views of sport specialization in the youth sport context. It seems that examining perfectionism and parenting styles in combination with one another leads to a positive or negative relationship with specialization in the youth sport context.

Specifically, authoritarian parents (e.g., “I do not allow my child to question any decision I make”) were positively, but moderately related to self-oriented, other oriented, and socially prescribed perfectionism thus supporting hypothesis two. The authoritarian parenting style is characterized by high demands and low responsiveness. These parents have high expectations of their child, yet provide very little in the way of feedback and nurturance. When a child makes a mistake, this parent tends to utilize punishment quite harshly. This parenting style represents the most controlling style, with a focus on adherence to authority. With this in mind, the moderate, positive relationship found between the authoritarian parent and overall perfectionism suggests that parent expectations are very high for not only themselves but others. Therefore, when a mistake is made the parent is overly critical and utilizes punishment to discipline their child. This given relationship is important for understanding the parent-child relationship, as studies have found that children with controlling parents are more likely to be overly critical of themselves, a problem that may have long-term consequences for the child in the future (Hong et al., 2017).

We also explored perfectionism in relation to views of sport specialization and found that parents who exhibited high levels of socially prescribed perfectionism (perception that others demand perfection from them) also tended to support specialization and specialization for talent development. However, we did not find support for self-oriented and other oriented perfectionism, as parents who identified with these types of perfectionism were not related to either the endorsement or lack of endorsement of sport specialization. Therefore, hypothesis
three was partially supported. These particular results have important implications because they suggest parents who perceive that others demand perfection from them are more apt to support sport specialization. One explanation for this can be described through Eccles (1991) expectancy-value theory stating that parents’ beliefs predict parents’ behaviors; in turn, parents’ behaviors predict youths’ motivational beliefs, and youths’ motivational beliefs predict their behaviors. A parent who believes that others expect perfection from them may behave in a way that exemplifies perfection and this in turn influences their child’s beliefs which may predict the child’s given behavior. Therefore, parents who are high in socially prescribed perfectionism tend to support specialization and place these same expectations and beliefs on their child, disregarding what the child may or may not want. If a child does not have the choice, and often times they do not because the parents are more or less in control during the growing years, this may affect his/her overall sport experience. In essence, parents may not even realize the control and influence they have over their child and given Eccles expectancy-value theory, the child may only believe that their parents’ behaviors are the right behaviors and in turn accept them as their own, thus accepting sport specialization for themselves.

After examining the relationship between all three variables of interest including parent perfectionism levels, parenting styles, and views of sport specialization, findings supported hypothesis four. These results are particularly interesting, such that they suggest parents who are more controlling and generally make the decisions for their child along with showing high overall perfectionism are more likely to support sport specialization. In the literature, specialization has been defined as “an investment in a single sport through systematic training and competition, typically including year-round participation in that sport, to pursue proficiency and enjoyment in a “signature” activity (Vealey & Chase, 2016). With this in mind, parents who control the decisions in their home while showing high levels of perfectionism may go to great lengths to ensure success for their child in the athletic domain. This success can act as an ego boost for the parent and cause them to feel as if they are the reason for their child’s accomplishments. Hence, this may be a reason why an authoritarian parent with high levels of perfectionism endorses sport specialization. These parents are focused on controlling their child with expectations of perfectionism from both themselves and others, in turn believing that specialization is the best choice to ensure success in their child’s given sport.
Given the previously discussed findings on the authoritarian parenting style, stating that these type of parents are high in control and low in warmth, paired with high overall perfectionism levels, it is imperative to acknowledge these results as they are important for the literature regarding specialization in the youth sport context. Perfectionism itself has been defined as a personality characteristic that includes the compulsive pursuit of exceedingly high standards combined with overly critical appraisals and pervasive evaluative concerns (Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991). With this in mind, Flett and colleagues (Flett et al., 2002) have created a conceptual model of perfectionism development that suggests a child’s proclivity towards perfectionism is determined by a range of parental factors. Highlighting the multifaceted nature of parental influence, this model purports that a parent’s goals and practices, personality characteristics, and the style of parenting contribute to a number of pathways that underpin the development of perfectionism.

One pathway that is of particular interest to the current study due to its possible implications for children participating in youth sport is the idea that children tend to imitate their caregiver’s perfectionism (Flett et al., 2002). So, a parent described as authoritarian (e.g., “I do not allow my child to question any decision I make”) showing high levels of perfectionism more than likely expose their child to perfectionistic behaviors, which may lead the child towards modeling their mother or father and in turn develop similar tendencies. This is an issue in terms of youth sport participation because the current study revealed authoritarian parents with high overall perfectionism were positively related to the endorsement of sport specialization. Therefore, parents who focus on high expectations and success for their child may be unconsciously (or consciously) teaching their child that perfectionism is important for achievement.

Taking this into consideration, a child may learn at a very young age that being flawless in sport is highly valued and this again could have negative consequences in relation to skill proficiency in sport, injury rates, and overall psychological wellbeing. In addition, a child may be socialized into believing that participation in a single sport is necessary for success, in turn suggesting that one must be perfect in that single sport, whether they want to play a single sport or not. The authoritarian parenting style is also important regarding this relationship because these parents are highly controlling and their children most likely learn that they do not have a say in what they want to do, especially at an age where they are unable to make decisions on
their own. Hence, children rely on their parents who believe that specialization is the best choice for them in terms of youth sport participation and talent development.

In addition, permissive parents (e.g., “I feel that in a well-run home the child should have his/her way in the family as often as the parents do”) had a moderately positive relationship with pro specialization, pro multiple sports, and specialization for talent development, which unfortunately did not support the first part of hypothesis five. However, these results still hold interesting such that permissive parents not only supported specialization but they supported multiple sport participation as well. So, we can argue that permissive parents (high in warmth; low in control) may be indifferent towards specialization and diversification in sport, based on the fact that these types of parents tend not to take an active role in shaping or determining their child’s behavior. Therefore, it is possible that permissive parents allow their child to determine whether or not he/she would like to participate in a single sport or multiple sports during their youth sport experience.

In comparison, authoritative parents (e.g., “Once family policy is established, I discuss the reasoning behind the policy with my child”) had significant negative relationships with three of the four PSSS subscales including pro specialization, pro multiple sports, and specialization for talent development, thus supporting the second part of hypothesis five. This finding may be explained such that authoritative parents have reasonable expectations of their child and realize their child needs meaningful experiences and freedom to learn new skills. Therefore, these parents may not be inclined to support specialization or specialization for talent development because specialization focuses on refining specific skills related to a single sport the child is participating in. With this in mind, because authoritative parents are also negatively related to pro multiple sports, they may be indifferent towards specialization and diversification in sport, as their main focus is on providing their child with a milieu of experiences that will allow them to adapt and grow in different situations, regardless of whether their child is playing one sport or multiple sports at the youth level.

Finally, authoritarian parents (e.g., “I do not allow my child to question any decision I make”) were positively related to pro specialization and specialization for talent development, subsequently supporting the last part of hypothesis five. Again, as discussed above, these parents are extremely strict and expect their children to follow the rules with no discussion or compromising. In essence, these parents believe ruling with an iron fist is the best way to keep
their children in line and under control. Authoritarian parents like to be in control and this may be a reason as to why they have a positive correlation to sport specialization and specialization for talent development. Authoritarian parents generally have high expectations for their children so specialization in sport may be supported because parents believe that in order to be successful and meet their high expectations, specialization is necessary for their child.

As this study showed, one’s level of perfectionism paired with either the authoritarian, permissive, or authoritative parenting style led to unique views of sport specialization. Perfectionism in relation to the parent-child relationship is especially relevant today in sport, as the experience of young athletes is often shaped, in part by their caregivers (Horn & Horn 2007). Often times, parents are highly involved in youth sport, and are an immediate source of performance-related expectations and feedback for their child. While many parents exert a positive influence over their child (Gould, Lauer, Rolo, Jannes, & Pennisi, 2006), other parents contribute to a constellation of personality characteristics in their child that are less than desirable. We argue that one of these more negative personality characteristics that influence a parent is perfectionism. When a parent has high levels of perfectionism, his or her expectations are presumably high for not only themselves but for their child as well. Parents with high perfectionism and high expectations may contribute to the reasoning behind why one supports specialization for their child, as helping their child become elite and achieving success is very important to them.

In addition, we argue that examining perfectionism levels and one’s parenting style together leads to even stronger relationships with views of specialization in the youth sport context. With this in mind, parenting style has been defined as a combination of attitudes toward the child that are communicated from the parent to the child and create an emotional climate in which the parents’ behaviors are expressed and the child’s behavior is influenced (Darling & Steinberg, 1993). Baumrind’s (1971) authoritarian, permissive, and authoritative parental prototypes are each categorized by different levels of demandingness and responsiveness expressed by the parent. Hence, depending on how an individual identifies in terms of their parenting style, paired with one’s level of perfectionism, can determine the strength of the relationship with parents’ views of sport specialization.

Limitations
This study was meant to provide an introductory understanding of how parent’s levels of perfectionism and parenting styles relate to views of specialization in the youth sport context. Due to this introductory nature, there were several limitations of the study that should be noted. Social desirability was of particular concern, as this study asked parents to identify their own perfectionism levels, parenting styles, and views of sport specialization. With this in mind, there is a possibility that parents responded to statements regarding their perfectionism levels, parenting styles, and views of sport specialization in a manner that they believed would be viewed favorably by the researchers. In addition, this study did not collect data from both sets of parents. Instead, we asked that one parent from each household complete the set of questionnaires. It is possible that a mother and a father figure in the same household held different views of sport specialization for their child. This sample was also limited to the region surrounding the study, the results from this area may differ from other regions based on cultural differences and the sport organizations for which these youth athletes are nested under. It is possible that not all sport organizations have the same resources (e.g., training facilities, coaching payroll, etc.) for training their athletes, and the given sports in this study (ice hockey, figure skating, and swimming) may be valued more highly in some communities and regions than others, which may limit the application of the results. Finally, while the size of the total sample was appropriate, the majority of participants who completed the measures were swim parents. Hence, the given results may be more limited to parents of youth swimmers in comparison to the other sports (ice hockey and figure skating).

**Conclusions and Future Research**

The main scope of this study was to gain an introductory understanding regarding how parents’ perceptions of their own perfectionism levels and parenting styles related to views of specialization in the youth sport context. Clearly based on the results of this study, there is support for the idea that perfectionism levels and parenting styles are related to views of specialization in the youth sport context. Not only were the results of this study promising in regards to our ability to understand parents’ perceptions of sport specialization within the sampling years of Cote’s Developmental Model of Sport Participation (Cote, 1999), but they also opened many new avenues for future research. This study was primarily focused on parents of youth athletes participating in ice hockey, figure skating, and swimming. While this study was meant to provide an introductory understanding of the respective variables discussed above, it
would be helpful to extend the research by conducting parent-child dyads. By conducting parent-child dyads, we could explore the child’s perception of their own views of sport specialization to discover if there is incongruence between a parent and child’s respective views. While it was not within the scope of this study, it may also be interesting to explore gender differences, as it is possible that mother and father figures have different roles within a household. For example, in this study, we found that 38.4% of parents indicated that they coached their child at some point during his or her youth sport experience. With this information in mind, it may be interesting to dive further into research regarding whether fathers or mothers tend to coach their child more often. This information could lead us to better understanding who specifically may be making the decision to specialize their child into sport. The current study was also quite descriptive in terms of methods and results, therefore, we did not look specifically at the reasons why parents chose to endorse or not endorse sport specialization. It is important that we do not simply focus on the surface level results, as gaining a better understanding of the reasons why parents endorse or do not endorse sport specialization could be important for expanding the literature in this area. Finally, this study was primarily centered on parents of youth sport athletes. With this in mind, future research examining other social agents including high school and collegiate coaches, club coaches, and other peers could help to expand the literature regarding views of sport specialization. This research may help us to better understand if coaching styles are related to the variables of interest in this study as well as the influence of peers in the youth sport context.

In conclusion, we are primarily interested in studying parents in the youth sport context because we know that their behavior plays a prominent role in their child’s athletic experience. We know that youth sport parents invest significant time, money, and emotional energy in the sport-related activities for their children (Eynon, Kitchen, & Semotiuk, 1980). Therefore, this research is beneficial such that it suggests one’s parenting style and level of perfectionism may predict whether or not one endorses or does not endorse sport specialization. Today, there is the rise of year round sport participation that often requires season after season of participation to stay in the player development pipeline and the pressure to have one’s child specialize in a single sport has never been stronger (O’Sullivan, 2014). With this in mind, it would be optimal if we were able to determine the type of parent that would be more likely to endorse sport specialization for their child based on their perfectionism levels and parenting styles. The current study does just this and has given us reason to believe that the parental role in a child’s youth
sport experience may be greater than one thinks. Taking this into consideration, exploring the novel research terrain of parent perfectionism levels, parenting styles, and views of sport specialization through this study should provide a wealth of new and appealing directions for future research and applications in the field of sport psychology.


Balyi, I. & Way, R., 1995. Long-term planning for athlete development: the training to train


Brustad, R.J. (1992). Integrating socialization influences into the study of children’s motivation
in sport. *Journal of Sport and Exercise Psychology, 14,* 59-77.


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training task: Does striving for perfection enhance or undermine performance? 

_Psychology of Sport and Exercise_, 9(5), 620-629.


Appendix A:

Parent Demographic and Child Background Questionnaire

1.) Gender of your child: 1. Male  2. Female

2.) Age of your child: ________

3.) Sport your child currently participates in:
   1. Ice Hockey      2. Swimming      3. Figure Skating      4. Volleyball

4.) Does your child currently participate in more than one sport during a year? If yes, how many?
   1. Yes ________ How many? ________ 2. No ________

5.) Name your child’s favorite sport and one that he or she spends the most time playing?
   Favorite Sport _________________________________

6.) Out of 12 months, how many months does your child typically participate in his or her favorite sport?
   ________ months

7.) For your child’s favorite sport, how often does she or he practice and compete?
   ________ practices per week
   ________ competitions per week for ________ weeks

8.) Your Age: ________

9.) Your Gender: 1. Male  2. Female

10.) Indicate the highest level of sport you have participated in:
    1. Youth (6-12 years) ______
    2. Middle School (13-15 years) ______
    3. High School ______
    4. College ______
    5. Professional ______
    6. No Sport Experience ______

11.) Have you coached your child at any time during his/her youth sport experience?
1. Yes ______ 
2. No ______ 

12.) What would your child say is the most important reason why he/she plays their current sport? Check one. 
1. To have fun ______ 
2. To be with friends ______ 
3. To stay in shape ______ 
4. To improve his/her skills ______ 
5. To get exercise ______ 
6. To be a part of a team ______ 
7. To earn a college scholarship ______ 

13.) Why are you providing this sport experience for your child?
Appendix B:

Perceptions of Sport Specialization Scale

Specialization is defined as an investment in a single sport through systematic training and competition, typically including year-round participation in that sport to pursue proficiency and enjoyment in a ‘signature’ activity. Specialization often involves the limiting or exclusion of other activities due to intense time and energy demands of training and competition. The following questions are related to the concept sport specialization. **Please circle the number that you feel best applies to your views of sport specialization for each item: 1 = Strongly Disagree; 2 = Disagree; 3 = Agree; 4 = Strongly Agree**

1. All athletes should specialize in one sport by the time they reach high school.
   - 1
   - 2
   - 3
   - 4

2. Coaches pressure athletes to participate in only one sport in high school.
   - 1
   - 2
   - 3
   - 4

3. High school athletes can only be successful if they train and compete year-round in sport.
   - 1
   - 2
   - 3
   - 4

4. I believe high school athletes should specialize in one sport.
   - 1
   - 2
   - 3
   - 4

5. Specialization makes sense for talented athletes who seek to participate at higher levels.
   - 1
   - 2
   - 3
   - 4

6. High school athletes who specialize in one sport are more skilled than their teammates who participate in multiple sports.
   - 1
   - 2
   - 3
   - 4

7. Athletes who specialize in one sport are more likely to have an enjoyable sport experience than athletes who participate in multiple sports in high school.
   - 1
   - 2
   - 3
   - 4

8. If it were entirely up to athletes, they would choose to participate in more than one sport in high school.
   - 1
   - 2
   - 3
   - 4

9. Specializing in one sport takes away from high school athletes’ ability to enjoy other activities in high school.
   - 1
   - 2
   - 3
   - 4

10. College coaches prefer high school athletes to participate in more than one sport.
    - 1
    - 2
    - 3
    - 4

11. Specializing in one sport is the best choice for all high school athletes.
    - 1
    - 2
    - 3
    - 4

12. A more effective model for high school sport participation is to encourage athletes to participate in multiple sports and activities.
    - 1
    - 2
    - 3
    - 4

13. High school teams that include athletes who specialize in that sport will be more successful than teams with athletes who participate in multiple sports
14. Athletes are less likely to be selected for a high school team if they play multiple sports.

15. If it were up to parents, athletes would participate in more than one sport in high school.

16. All athletes in high school should have the option of participating in multiple sports.

17. Participation in more than one sport can help an athlete be more successful in his or her favorite sport.

18. High school athletes would like for their teammates to participate only in that sport.

19. All athletes should participate in the one sport that gives them the best chance of participating in that sport in college.

20. Athletes who specialize in one sport experience more burnout than athletes who participate in multiple sports in high school.

21. Specializing in one sport in high school leads to athletes loving their sport more.

22. It is impossible to fully develop an athlete’s talent if she/he doesn’t specialize in one sport in high school.

23. Specializing in one sport can lead to overuse injuries and mental fatigue.

24. Only athletes who have the talent and motivation to seek college or elite athlete status should specialize in one sport in high school.

25. Specializing in one sport is the best option for those participating in high school sport.
Appendix C:

Multidimensional Perfectionism Scale

INSTRUCTIONS: Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. 

**Strongly Disagree = 1  Strongly Agree = 7**  
If you feel somewhere in between, circle any of the numbers between 1 and 7.

1. When I am working on something, I cannot relax until it is perfect
2. I am not likely to criticize someone for giving up too easily
3. It is not important that the people I am close to are successful
4. I seldom criticize my friends for accepting second best
5. I find it difficult to meet others’ expectations of me
6. One of my goals is to be perfect in everything I do
7. Everything that others do must be of top-notch quality
8. I never aim for perfection in my work
9. Those around me readily accept that I can make mistakes too
10. It doesn’t matter when someone close to me does not do their absolute best
11. The better I do, the better I am expected to do
12. I seldom feel the need to be perfect
13. Anything I do that is less than excellent will be seen as poor work by those around me
14. I strive to be as perfect as I can be
15. It is very important that I am perfect in everything I attempt
16. I have high expectations for the people who are important to me
17. I strive to be the best at everything I do
18. The people around me expect me to succeed at everything I do
19. I do not have very high expectations for those around me
20. I demand nothing less than perfection from myself
21. Others will like me even if I don’t excel at everything
22. I can’t be bothered with people who won’t strive to better themselves
23. It makes me uneasy to see an error in my work
24. I do not expect a lot from my friends
25. Success means that I work even harder to please others
26. If I ask someone to do something, I expect it to be done flawlessly
27. I cannot stand to see people close to me make mistakes
28. I am perfectionistic in setting my goals
29. The people who matter to me should never let me down
30. Others think I am okay, even when I do not succeed
31. I feel that people are too demanding of me
32. I must work to my full potential at all times
33. Although they may not show it, other people get very upset with me when I slip up
34. I do not have to be the best at whatever I am doing
35. My family expects me to be perfect
36. I do not have very high goals for myself
37. My parents rarely expected me to excel in all aspects of my life
38. I respect people who are average
39. People expect nothing less than perfection from me
40. I set very high standards for myself
41. People expect more from me than I am capable of giving
42. I must always be successful at school or work
43. It does not matter to me when a close friend does not try their hardest
44. People around me think I am still competent even if I make a mistake
45. I seldom expect others to excel at whatever they do
Appendix D:

**Parental Authority Questionnaire**

**Instructions:** For each of the following statements, circle the number of the 5-point scale (1 = strongly disagree, 5 = strongly agree) that best describes how that statement applies to yourself and your child. Try to read and think about each statement as it applies to you and your child at home. There are no right or wrong answers, so don’t spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

<table>
<thead>
<tr>
<th></th>
<th>1 = Strongly disagree</th>
<th>2 = Disagree</th>
<th>3 = Neither agree nor disagree</th>
<th>4 = Agree</th>
<th>5 = Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I feel that in a well-run home the child should have his/her way in the family as often as the parents do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>Even if my child doesn’t agree with me, I feel that it is for his/her own good if I force them to conform to what I think is right.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Whenever I ask my child to do something, I expect them to do it immediately without asking any questions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Once family policy is established, I discuss the reasoning behind the policy with my child.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>I always encourage verbal give-and-take whenever I feel that family rules and restrictions are unreasonable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>I feel that what my child needs is to be free to make up his/her own mind and to do what they want to do, even if this does not agree with what I might want.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>I do not allow my child to question any decision I make.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>I direct the activities and decisions of my child through reasoning and discipline.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>I feel that more force should be used by a parent in order to get their child to behave the way they are supposed to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td>I do not feel that my child needs to obey rules and regulations of behavior simply because someone in authority has established them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>My child knows what I expect of them in our family, but he/she also feels free to discuss those expectations with me when they feel that expectations are unreasonable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12.</td>
<td>I feel that wise parents should teach their child early just who is boss in the family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13.</td>
<td>I seldom give my child expectations and guidelines for his/her behavior.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>Most of the time I do what my child wants when making family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
decisions.

15. I consistently give my child direction and guidance in rational and objective ways.  
1 2 3 4 5

16. I get very upset if my child tries to disagree with me.  
1 2 3 4 5

17. I feel that most problems in society would be solved if parents would not restrict their child’s activities, decisions, and desires as they are growing up.  
1 2 3 4 5

18. I let my child know what behavior is expected of them, and if they don’t meet those expectations, I punish them.  
1 2 3 4 5

19. I allow my child to decide most things for themselves without a lot of direction from myself.  
1 2 3 4 5

20. I take my child’s opinions into consideration when making family decisions, but I do not decide for something simply because my child wants it.  
1 2 3 4 5

21. I do not view myself as responsible for directing and guiding my child’s behavior as he/she grows up.  
1 2 3 4 5

22. I have clear standards of behavior for my child in our home, but I am willing to adjust those standards to the needs of my child in our family.  
1 2 3 4 5

23. I give direction for my child’s behavior and activities and expect he/she to follow my direction, but I am always willing to listen to my child’s concerns and discuss that direction with them.  
1 2 3 4 5

24. I allow my child to form his/her own point of view on family matters and I allow them to decide for themselves what they are going to do.  
1 2 3 4 5

25. I feel that most problems in society would be solved if we could get parents to noticeably and forcibly deal with their child when he/she doesn’t do what they are supposed to as they are growing up.  
1 2 3 4 5

26. I often tell my child exactly what I want them to do and how I expect them to do it.  
1 2 3 4 5

27. I give clear direction for my child’s behaviors and activities, but I am also understanding when my child disagrees with me.  
1 2 3 4 5

28. I do not direct the behaviors, activities, and desires of my child in our family.  
1 2 3 4 5

29. I know what I expect of my child in our family and insist that he/she conform to those expectations simply out of respect for my authority.  
1 2 3 4 5
30. If I make a decision in the family that hurts my child, I am willing to discuss that decision with them and admit it if I have made a mistake.
Appendix E:

Initial Contact In-Person Script

Dear Parent,

My name is Emily Wright and I am a Master’s student at Miami University. I am emailing you today to request your participation in a study for my master’s thesis, which examines parents’ perceptions of early sport specialization, and how these perceptions relate to perfectionism levels and parenting styles in the youth sport context. I have attached a copy of the research description consent form to further expand on the nature of this study. To participate, please complete the packet of questionnaires that I will distribute, which should take approximately 10-15 minutes to complete. Your participation would be greatly appreciated, and please feel free to contact me with any questions, concerns, or comments regarding this project.

Sincerely,
Emily Wright
wrightem@miamioh.edu
(814)-421-9794
Appendix F:

Consent Form

Title of Research Project: Parents’ Perfectionism, Parenting Styles, and Views of Early Sport Specialization

Principal Investigators: Emily Wright, Department of Kinesiology and Health, Miami University and Dr. Melissa Chase, Professor, Miami University.

You are invited to participate in a research study to investigate how parents of youth athletes perceive early sport specialization. If you decide to participate you will be asked to complete questionnaires detailing your perceptions of early sport specialization, levels of perfectionism, and parenting styles. This study involves three questionnaires that should take approximately 10-15 minutes to complete. If you are under the age of eighteen, you will not be able to participate in this study. The primary investigator will conduct the data collection on-site at a time and place of the participant’s convenience. Data will be stored in a locked cabinet in the office of the researchers at Miami University.

By participating in the study you will be contributing to the literature on effective youth sport talent development.

*We encourage your cooperation throughout the session, however, your participation is voluntary and you are free to refuse to participate and/or withdraw from the study at any time without penalty.* You are strongly encouraged to make the research staff aware of any discomfort or concerns you experience during the session. Any information obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission. In any written reports, publications, or presentations, no participant will be identified by name. All information that you disclose will NOT be shared with coaches, other parents, or anyone outside of this study without your explicitly granted permission.

Do you have any questions regarding your participation in the study?

In the future, if you have any questions or concerns about the study, please contact Emily Wright at Wrightem@miamioh.edu or Dr. Melissa Chase at Chasema@miamioh.edu. If you have general question about your rights as a research participant, you may also contact Miami’s Office for the Advancement of Research and Scholarship at 513-529-3600 or humansubjects@miamioh.edu.

By completing the survey questionnaire(s), you indicate that you are at least 18 years of age and give your consent for the data to be used in this research study.

You will be provided a copy of this form to keep.
Appendix G:

Debriefing Form

Thank you for agreeing to participate in this study. The general purpose of the study is to explore how parents perceive early sport specialization, and how this relates to their perfectionism levels and parenting styles in the youth sport context.

As a reminder, any information obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission. In any written reports, publications, or presentations, no participant will be identified by name. All information that you disclose will NOT be shared with other parents, coaches, or anyone outside of this study without your explicitly-granted permission.

For the sake of the study, please do not share the results of your participation with other potential participants.

If you have further questions about the study, please contact Emily Wright at Wrightem@miamioh.edu or Dr. Melissa Chase at Chasema@miamioh.edu. If you have any concerns about any aspect of the study you may contact Miami’s Office for the Advancement of Research and Scholarship at 513-529-3734 or humansubjects@miamioh.edu.