MULTIPLE PERSPECTIVES AND INFLUENCES ON TALENT DEVELOPMENT

By

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A THESIS PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE IN EXERCISE AND SPORT SCIENCES

UNIVERSITY OF FLORIDA

2003
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ACKNOWLEDGMENTS

I would like to thank many people who allowed this exploration of talent development research to occur. First, I want to thank my advisor Dr. Peter Giacobbi, Jr., who afforded me countless hours of time, effort, and support, and motivated me to continue working harder and to push myself further than I thought possible. Also, I would like to thank Drs. Robert Singer and Chris Janelle for their commitment to my project. They were open minded in supporting me in my qualitative endeavors and in understanding the differences in research possibilities.

I would also like to thank two important people in this process who were members of the qualitative research group that spent tireless hours reading and coding interviews. Brad Langley and Amber Stegelin provided input and support throughout this entire process. I would also like to thank my fiancé, Matthew Morgan, for his support and understanding when I was buried in the computer and also for his outsider opinions and input into this project.

I want to thank everyone I have met and will continue to meet in my journey. All hold a special place in my heart.
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Researchers have debated the influence of nature and nurture in the development of talent in sport for many years. Recently, scholars have advocated an integrated or dynamic view of the interaction among nature, nurture, and the environment in the development of talent in sport. The purpose of the present study was to describe, examine, and gain an understanding of the major influences and experiences in the overall talent development of collegiate athletes from multiple perspectives (e.g., athlete, coach, family). A secondary purpose was to create a theoretical framework concerned with the important relationships, key influences, and critical incidents in the talent development of highly successful collegiate athletes. In-depth semi-structured interviews with 8 Division I collegiate athletes, 6 current college coaches, and 12 parents were conducted to explore multiple perspectives on the athlete’s talent development to the collegiate level in sport. The interviews were analyzed using grounded theory analytic methods. Results revealed several higher order themes for each subgroup in the talent
development process. The higher order themes that evolved from the athlete interviews included genetics, practice, parental influence, sibling influence, coach influence, teammate influence, personality/mental characteristics, coping with adversity, opportunities, sport lessons, and other sport participation. The higher order themes that developed from the parent interviews included genetics, practice, parental social support, parental roles, parental sacrifices, coach influence, teammate influence, child’s personality/mental characteristics, and priority on education. The higher order themes raised from the coach interviews included genetics, practice, parental influence, coach influence, teammate influence, athlete’s personality/mental characteristics, and athlete qualities. The impact of all of the higher order themes led to the adoption of an interactional framework, taking into account the many factors that were involved in becoming a highly successful college athlete. In addition, a grounded theory depicting the development of highly successful collegiate athletes was developed to visually depict the results and emphasize the importance of environmental opportunities, critical social influences, and critical incidents in the lives of the athletes. Also, a grounded theory depicting the importance of a social support system in athletic talent development emerged. This study supported aspects of previous research, yet expanded it because of the materialization of the importance of overcoming adversity. Therefore, developing innate talent through critical social influences was central to overcome critical incidents in order to develop into a highly successful college athlete.
CHAPTER 1
INTRODUCTION

The allure of professional sports leads many children to dream about becoming the next Tiger Woods, Michael Jordan, Joe Montana, or Serena Williams. Children around the world idolize high profile athletes and attempt to emulate their skills from a young age. The media’s portrayal of professional athletes and the exposure to sport that many children experience directs an extensive number of children to become involved in a variety of youth sporting events. Some of these children will mature into high school athletes, fewer will become collegiate athletes, and far fewer will make it to the Olympics or become professional athletes. Even though the percentage of people who become collegiate or professional athletes is low, it does not deter both athletes and parents from dreaming of receiving a college scholarship or becoming a professional athlete with a multi-million dollar contract.

A recent report by the NCAA found that there are nearly one million high school football players and almost 550,000 high school basketball players in the United States (NCAA, n.d.a). Of these high school athletes, only 250 football players make it to the NFL and only 50 basketball players make it to the NBA. Therefore, the odds of becoming a professional are 6,000 to 1 in football and 11,000 to 1 in basketball. In contrast, a greater number of high school athletes are able to become collegiate athletes. About 56,000 of the one million football high school football players will compete in college and 15,700 of the 550,000 high school basketball players will compete in college (NCAA, n.d.b). These figures lead researchers to question what separates the small
percentage of athletes who make it to college or the pros from the large percentage who are unable to take the next step in athletics. Some of these key factors will be addressed in the present study.

It is fascinating to explore how and why certain individuals progress farther in sport while others drop out to pursue alternative endeavors. Are some children destined to become great athletes, or can anyone be molded into a star through practice and the environment? The question then becomes who will be the next talented athlete that develops into a superstar? Are there genetic qualities that allow certain people to develop to the highest levels in sport? Or is athletic talent the result of years of practice? Or are situational factors such as family and coach support important? Could athletic talent be the result of a combination of genetics, practice, and environmental factors? These are questions that researchers have struggled to answer for decades and the present work will attempt to address.

One advantage of collegiate athletics is the opportunity to receive a scholarship that pays for the athlete to garner an education. In many ways, the athlete is set for life after college because if they do not continue playing, they will still have a degree to fall back upon. Also, they may have developed exceptional sport skills during college that would allow them to progress to the next level of sport if they choose to pursue that avenue. Some athletes are able to stand out in college and become all-conference and/or all-Americans. What was able to progress them to the collegiate level and what pushed them to become even better during their collegiate years? To answer the questions posed above it seemed best to ask the athletes themselves. It also appeared beneficial to talk to
the parents and coaches of the athletes to ascertain if they had the same or a different perspective on the athlete’s talent development.

**Study Rationale**

The goals of talent development research continue to be to comprehend the development of talent, to shorten the journey on the path to expertise, and to elongate one’s ability to perform at a peak level on numerous occasions (Starkes, Helsen, & Jack, 2001). Thomas, Gallagher, and Thomas (2001) alleged that these goals could be met with interactional research that involves longitudinal, cross-cultural, gender, and/or family studies. Numerous studies serve as examples of such interactional approaches to talent development research (Carlson, 1993; Côté, 1999; Thomas & Thomas, 1999; Vernacchia et al., 2000; Williams & Franks, 1998), yet only one study (Gould, Dieffenbach, & Moffett, 2002) has utilized the viewpoints of three subsets of participants. Gould and colleagues interviewed athletes who were current or former Olympic champions; therefore no study has interviewed three subsets of participants for collegiate athletes. Determining how extensive and meaningful practice, family support, competent coaches and teachers, adequate physical resources, and psychological characteristics should be maximized in the development of talent is an important next step for researchers (Durand-Bush & Salmela, 2001). The current study will take the next step by investigating these talent development components from the perspectives of multiple coaches, athletes, and families.

As will be discussed below, the examination of talent development is a fertile area. There are competing accounts in the talent development literature, namely the genetic, practice, psychological skills, and interactional accounts. Many debates have
ensued over which account could explain expertise, but none have become the clear-cut choice. Therefore, exploratory qualitative studies are needed to more delve fully into the multi-dimensionality of athletic talent development (Starkes et al., 2001). Interviewing athletes to obtain information is a procedure of knowledge acquisition that is essential to a better understanding of the various antecedents to expert performance (Regnier, Salmela, & Russell, 1993). Because qualitative methods lead to description, interpretation, verification, and evaluation (Strean, 1998), talent development research should benefit from this approach. Researchers, in an attempt to generate a comprehensive theory of talent development, are still trying to describe and interpret how some individuals become elite athletes while others never make it to the upper echelon of their respective sport. As Klinger (1973) suggested, beginning with qualitative methods and progressing toward more precise, quantitative methods may yield a richer portrayal of social scientific phenomenon. Similarly, Patton (1990) stated that qualitative methods allow the interviewer to understand how another person views the world. In order to gain the richest possible information about the idea in question, it is vital that the researcher provides a framework in which participants can respond accurately and thoroughly about their experiences (Patton, 1990). Therefore, the current study will utilize qualitative interview techniques to provide personal in-depth descriptions of athletic talent development of highly successful college athletes. Also, a theoretical framework will be created from the emergent findings in order to provide a guide for future talent development research.
Statement of Purpose

The purpose of the current study was to utilize multiple perspectives (e.g., athlete, parent, coach) to describe, examine, and gain an understanding of the major influences and important experiences in the development of highly talented collegiate athletes. A second purpose was to use the participants’ descriptions and experiences to create a theoretical framework in an effort to represent the most important social relationships and major influences during the talent development process of highly successful collegiate athletes.

Glossary of Terms

Coding is an analytic process through which data are fractured, conceptualized, and integrated to form theory. Open coding refers to an analytic process through which concepts are identified and their properties and dimensions are discovered in the data. Axial coding refers to a process of relating categories to their subcategories. Selective coding refers to the process of integrating and refining the theory.

Conceptual framework is a diagram that shows the relationship of the data from raw data themes to higher order themes.

Conceptual ordering refers to organizing the data according to a selective and specified set of properties and their dimensions.

Constant comparison refers to continually assessing similarities and differences in data.

Grounded theory is a set of well developed concepts grounded in the data and related through statements of relationship, which constitute an integrated framework that can be used to explain or predict phenomena.
Higher order themes are categories of raw data themes that fit together to form a category or higher order theme used to categorize further raw data.

Highly successful college athlete refers to a college athlete who has excelled in their sport during college and garnered at least all-conference but more likely all-American status.

Member check refers to sending interview transcripts and summaries to the participants for them to assure the accuracy and credibility of their responses.

Raw data themes are data specifically stated by participants in its basic form.

Reflexive journal is a journal to record memos, code notes, theoretical notes, and researcher insights throughout the research process.

Sensitizing concepts offer ways of considering, arranging, and understanding experiences, serve as “points of departure” from which to study data (Charmaz, 2000, p. 515).

Theoretical sampling is sampling on the basis of emerging concepts, with the aim being to explore the dimensional range or varied conditions along which the properties of concepts vary.

Theoretical saturation refers to a point in category development at which no new properties, dimensions, or relationships emerge during analysis.

Triangulation is comparing data from multiple sources to assure accuracy.

**Personal Interest**

Athletics have been a part of my life since the age of four. It all started when I began taking tennis lessons from the local pro in exchange for mechanical work on his car from my father. From that time, I participated in as many sports as possible such as
swimming, water skiing, surfing, volleyball, basketball, softball, golf, and of course tennis. My parents were both very athletic and sports just seemed like a part of life. While progressing through competition at the national level in junior tennis tournaments, I had to make a decision about becoming a professional or choosing to go to college on a scholarship. For some reason, I had always wanted to experience college life and college tennis so I chose the latter, which allowed me to play two sports at the Division I collegiate level. Because of my experience in athletics and my love of the psychology of sport, I then chose to pursue a master’s degree in sport psychology with the goal of helping other athletes learn about the mental aspects of their chosen sport. I always felt that the mental game was essential to my success and believe that I can help others become mentally tough, thereby gaining an edge to reach their greatest potential.

The question I always pondered throughout my career was how and why some athletes make it to college or the pros, while others do not, even though they may be very talented or practice all the time. I also wondered why I had chosen collegiate tennis and volleyball instead of pursuing professional tennis. These thoughts, as well as literature I read once I became interested in the topic of talent development, led me to my current research topic. I wanted to try to discover what characteristics lead to athletic success. While exploring talent development, I wanted to be able to talk in-depth to athletes about their experiences, which led me to choose qualitative interviewing methods. Interviewing also suited my interests because of my humanistic beliefs, coaching background, and people-orientated characteristics. In my opinion, a person’s in-depth individual recount of how he or she became who they are tells an intimate and elaborate story. Also, from my coaching and personal experiences, I decided to use the grounded
theory analytic method in hopes of providing a theory or framework for researchers, athletes, families, and coaches to benefit from during the talent development process of other athletes. My dream is to become a scientist-practitioner working as both a researcher and consultant, so hopefully this project is a first step in aiding researchers, consultants, and the general public both scholastically and practically.
CHAPTER 2
REVIEW OF LITERATURE

There is a wealth of research that has examined the development of talent in sport (Bloom, 1985; Ericsson, 1993; Côté, 1999; Gould, Dieffenbach, & Moffett, 2002; Starkes & Ericsson, 2003). As will be discussed, there are four main viewpoints that researchers have studied: the genetic account, the practice account, the psychological skills account, and the interactional account. Although the genetic, practice, and psychological skills accounts have strong components, none have been able to fully explain talent development. This is why contemporary researchers have advocated a shift toward a more interactional account of talent development that acknowledges the relative contributions of nature, nurture, and psychological skills (Durand-Bush & Salmela, 2001; Singer & Janelle, 1999). An overview of the four main perspectives of talent development will be examined subsequently, along with research performed within each viewpoint, to provide a background as to why some researchers advocate the adoption of an interactional perspective.

Genetic Account

The genetic account of talent development placed emphasis on innate characteristics being responsible for exceptional performance (Bouchard, Malina, & Pérusse, 1997). Genetics have been shown to contribute to factors such as height, body composition, flexibility, morphology, aerobic capacity, adaptability to training, muscle tissue composition, psychological skills, and personality traits (Wilmore & Costill, 1999; Baltes, 1998; Lykken, 1982; Cowart, 1987). These physiological factors represented a
distinctive characteristic to sport development research. These aspects of a person are not pertinent issues in the development of other skills such as academics, chess, and music, which were where a great deal of the expertise research emanated (Janelle & Hillman, 2003). Therefore, athletic expertise development research embodied the undeterminable factor of genetic influence. It was also possible that genetic physiology differed between and within certain sports. For instance, the physiology for football and tennis were quite different, as was the physiology for differing positions in football such as quarterback and offensive lineman. Although not a salient influence in talent development for other tasks, the influence of genetics presented a unique challenge for researchers of sport expertise.

Bouchard and colleagues (1997) alleged that researchers were considerably far from understanding the contribution of genetics to sport performance. Genetic advocates supported the notion that an elite athlete must first possess a favorable genetic make-up and also be highly responsive to training and practice in order to become an elite athlete. Genetic proponents believed that people who had a favorable genetic formula could improve their performance through extensive practice, thereby recognizing that extensive practice can potentially modify and/or enhance genetic characteristics that contributed to talent. Aside from this, genetic advocates also alleged that there were limits to adaptability and that these limits were primarily genetically determined (Klissouras, 1997). In spite of this, current research studies accounting for heritable genetic influences on expertise were limited (Reilly, Bangsbo, & Franks, 2000). Nonetheless, Bouchard, Malina, and Pérusse attested that the true contribution of genetics was far from understood and future research could possibly identify genes or combinations of genes that predisposed individuals to achieve athletic excellence. Because the current study
was not seeking to determine genetic markers, only participant’s perceptions of genetics, additional attention will not be given to the physiology of talent development.

It is worth pointing out that the talent account may have important social implications for children in sport. The talent account implied that a genetic ability must be present early in life for children to become successful in athletics. This could result in a stigma being attached to children who are identified as talented at a young age. It could also influence some children to avoid competitive sport if they or others did not deem themselves to have genetic gifts (Howe, Davidson, Sloboda, 1998). Janelle and Hillman (2003) described how the rigid naturist position has been almost discarded by most expertise researchers in favor of nurturist and interactionist perspectives. These viewpoints will be described below.

Practice Account

Researchers advocating the practice, or nurturist, account of talent development promoted the belief that appropriate environmental conditions could lead to the development of talent in sport for all people regardless of genetic potential. In this account, the role of practice was stressed and the role of genetics was deemphasized. Initial research on expert performance and expertise, introduced by DeGroot (1978/1946), was centered on world-class chess players, not on athletics. Simon and Chase (1973a, 1973b) advanced DeGroot’s research by developing a theory proposing that expert chess players did not vary from non-experts in terms of their basic capabilities and general potentials. Simon and Chase’s theoretical perspective eventually became a dominant theory and molded expertise research for years to come (Ericsson, 2003). They predicted that the identical patterns of thought and knowledge mediated memory for
game situations, but research failed to find similarities in thought patterns. Therefore, Ericsson and Smith (1991) concluded that conventional expertise theories could not fully explain complex memory and perception during expert performance. From this, Ericsson and Smith inferred that through extensive training, experts were able to extend the basic limits of information processing and develop superior performance to those who did not engage in extensive training.

Thereby extending early theories of expertise, the theory of deliberate practice was proposed to explain talent development by Ericsson, Krampe, and Tesch-Römer (1993). These researchers believed that expertise was achievable by essentially anyone and that talent emerged through an expansive period of deliberate practice. Deliberate practice was defined as any highly structured, goal-directed activity designed exclusively to improve performance through well-defined tasks, informative feedback, and possibilities for repetition and corrections of errors (Ericsson et al., 1993). Because these well-defined tasks were effortful, they were not found to be inherently enjoyable nor motivating. Ericsson (1996), from the benchmark work of Chase and Simon (1973a, 1973b) with chess experts, alleged that 10 years or 10,000 hours of deliberate practice was necessary, yet not sufficient, for someone to become an expert performer. Achieving exceptional skills reflected an on-going long-term adaptation to the demands and constraints of deliberate practice within the chosen domain. Some constraints to achieving expertise were lack of resources, motivation, and/or effort. Ericsson et al. (1993) observed a positive linear relationship between the number of hours engaged in deliberate practice and the level of expertise attained with expert musicians. They also found that children who began training later could not catch up to those who began at an
earlier age. Therefore, Ericsson et al. (1993) concluded that regardless of genetic potential, anyone could reach expertise given they participated in the necessary amount of deliberate practice.

The physiological nature of sports was one aspect that differed from chess, music, or academics. Ericsson and Lehman (1996) claimed that practically all aspects of the human body could change and adapt to induced demands, especially when practice was started during childhood and adolescence. Examples given by Ericsson and Lehman included a ballet dancer’s ability to turn out the feet and a baseball pitchers shoulder joint range of motion. Also, the human body and its cells could be placed under extreme strain, whereby the body responded with exceptional physiological processes. Examples of this were when adults’ bodies recover from broken bones and/or surgery and when an adult donated a kidney, the other immediately grew in size by 70% only two weeks post-surgery. Therefore, Ericsson (2003) believed that when exposed to demanding deliberate practice or physiologically exerting activities, bodies could exceed the confinements of ability and capacity in untrained life. The genetic traits that Ericsson felt were not modifiable included only height and body size. Others such as heart size, VO₂ max, strength, endurance, and metabolic rate were believed to be alterable through extended physical activity and deliberate practice. Although the theory of deliberate practice was attractive to those who believed that anyone could become a world-class athlete, it did not explain why some people trained extensively for over 10 years, yet never reached elite athletic potential.

In response to Ericsson, Singer and Janelle (1999) wondered about the “what and how” of deliberate practice, rather than only about the amount of deliberate practice. For
Singer and Janelle (1999), the “what and how” included the training and expertise of coaches in the athletic environment and the extent to which feedback and monitoring of goals by coaches was emphasized. They asserted that coaches played a significant role in deciding which techniques and strategies were taught as well as how and how long athletes were trained. Expert coaches were also found to possess the goal of producing an environment that was most conducive to improving performance in the athlete and making practice enjoyable for them (Salmela, 1996). In contrast to Ericsson’s claims, deliberate practice in athletics has been found to be enjoyable because athletes were practicing their chosen sport and enjoyed participating in relevant, effortful activities (Young, 1998). Enjoyment of deliberate practice was a discrepancy found between the musicians studied by Ericsson and the athletes studied by other researchers (Durand-Bush & Salmela, 2001; Young, 1998; Csikszentmihalyi, Rathunde, & Whalen, 1993).

Another set of supporters for the nurturist account, Howe, Davidson, and Sloboda (1998), provided a comprehensive examination of the nature-nurture talent development literature. An important factor in the review was that they outlined and defined five properties of talent. These were: (1) Talent originates in genetic structures and is at least partly innate, (2) it may not be fully evident at an early stage but there may be some early indications, (3) early indications provide a basis for predicting who will excel, (4) only a minority are talented, and (5) talents are relatively domain-specific. Along with Ericsson, Howe and colleagues favored the nurture explanation of talent development, but also provided evidence in support of the talent (genetic) account, evidence contradicting the talent account, and alternative influences on talent development in their review. These researchers concluded that innate talents were fiction and not fact because they felt that
people became successful as a result of environmental factors such as intense training rather than innate abilities.

Howe and colleagues received numerous peer commentaries, with researchers supporting both sides of the nature-nurture debate. A number of researchers also favored the interactional approach, as shown in the following examples and elaborated upon in the section labeled interactional approach. Csikszentmihalyi (1998) responded to the Howe article saying that researchers were “flogging the dead horse” (p. 411) trying to account for expertise in only one way, because it seemed clear that talent involves innate characteristics, practice, and social opportunities. Detterman, Gabriel, and Ruthsatz (1998) felt that the Howe et al. (1998) article should have been called “absurd environmentalism” (p. 411). They claimed that deliberate practice was important to expertise, but would not equalize outcomes despite the best of intentions. They argued that everyone would convert to the nurture viewpoint if Howe et al. could randomly select 100 mentally retarded people and 100 people with a high IQ, and after 10 years of deliberate practice make them all equally outstanding musicians. From this debate, it appeared that some researchers saw the need for a dynamic, interactional approach to the study of expertise.

Discussion over the influence of nature and nurture on talent development seemed to be never-ending. With this in mind, it appeared as if an interactional approach might be the most productive for researchers. For instance, Singer and Janelle (1999) recommended the need for an explanation of the development of talent from birth to maturity that encompassed all relevant factors. From their perspective, talent development should be viewed as a lifelong process. Genetics formed the basis and
predisposition for success in a specific sport by allowing an ideal body structure, a lack of critical disorders or diseases, and a particular temperament for learning in that sport. If a person possessed a favorable genetic predisposition, it was probable that deliberate practice would produce the intended outcome. Also included were opportunities, feedback, guidance, support, and reinforcement from parents, coaches, and other family members that molded one’s genetic potential. The individual should also be actively involved in self-instruction and show effort, persistence, enjoyment, and satisfaction within their chosen activity in order to remain committed to developing to their full potential. Singer and Janelle (1999) claimed that long periods of dedicated practice and training to attain excellence, establish self-competence, and realize self-worth and self-confidence finalized the talent profile. The interaction of genetics, practice, and situational factors must be investigated further to understand to what degree they are intertwined. Along with practice, some researchers also believed that certain psychological characteristics allowed an athlete to succeed, although it is not certain whether psychological skills were innate or learned. Therefore, before elaborating on the interactional account, a synopsis of research on psychological skills in the development of talent will be presented.

A Psychological Skills Account

Another approach to research on talent development was the psychological skills account. Studies pertaining to psychological skills were sparse in the literature on expert performance (Janelle & Hillman, 2003). In previous research, elite athletes had been found to possess significantly higher levels of psychological skills than less elite athletes (Durand-Bush & Salmela, 2001). In these studies, it was consistently determined that
commitment and self-confidence were related to high-level performance (Orlick & Partington, 1988; Mahoney, Gabriel, & Perkins, 1987). In addition, some studies have shown that expert athletes scored higher in commitment, goal setting, competition planning, self-confidence, stress reactivity, focusing, and refocusing (Janelle & Hillman, 2003). Wilson (1999) concluded that elite athletes utilized mental skills more than their non-elite counterparts in both training and competition. Overall, it was concluded that elite athletes were extremely confident and dedicated individuals who were willing to do anything to be the best, even if they sacrificed other important activities (Orlick, 1996; Mahoney, Gabriel, & Perkins, 1987). Some of the studies pertaining to psychological skills will be discussed subsequently.

Mahoney, Gabriel, and Perkins (1987) administered the Psychological Skills Inventory for Sport (PSIS) to 713 male and female athletes from 23 different sports. They found that psychological skills such as concentration, anxiety management, self-confidence, mental preparation, and motivation were greater among elite and collegiate level athletes than people who were non-elite. The PSIS was found to have problems with reliability and validity so the results from this study must be interpreted carefully.

Another study on psychological skills conducted by Morgan, O’Conner, Ellickson, and Bradley (1988) found that elite runners were more likely than non-elite runners to possess the “Iceberg Profile” of mood states. Low scores on tension, depression, anger, fatigue, and confusion, and high scores on vigor characterized the “Iceberg Profile”. Participants in exercise and sport have confirmed this profile (Morgan, 1985; Morgan, O’Connor, & Pate, 1987), but it was also questioned as to how robust its findings were for sport (Van den Auweele, Nys, Rzewnicki, & Van Mele, 2001).
Orlick and Partington (1988) studied mental links to athletic excellence of Olympic athletes using both interviews and questionnaires. They found that mental readiness, namely attentional focus and quality and control of performance imagery, were important in influencing an athlete’s performance. They also found common elements related to success. These included: (1) total commitment to pursuing excellence, (2) quality training that included daily goals, competition simulation, and imagery training, and (3) quality mental preparation for competition. Roadblocks to excellence included: (1) changing patterns that work (e.g. deciding to run before an event instead of doing your normal stretching routine), (2) late selection (e.g. being passed up when you are young), and (3) inability to refocus after distractions (e.g. not being able to get over a bad call by the referee). In general, psychological skills account research has failed to identify the mechanisms by which mental skills are acquired and implemented, which led to the need for more in-depth research on how psychological skills are developed and utilized.

The previous three accounts of talent development (genetic, practice, and psychological skills) have provided rich data over the years. Although these findings were beneficial, no single account was able to explain talent development completely. This discrepancy led toward a swing for a more conciliatory position known as the interactional account. The interactional account encompassed genetics, practice, psychological skills, and situational factors such as the influence of family, coaches, and teammates. This viewpoint will be described below, along with research conducted in this area.
Interactional Account

The interactional account emphasized many characteristics that were ingredients in athletic talent development. These aspects included genetics, practice, psychological skills, and situational factors (i.e. family, coaches, teammates, socioeconomic status, significant others). The interactional viewpoint observed that there was more than one reason a person becomes an elite athlete because all factors (genetics, practice, psychological, and situational) must interact in the best way possible for success to occur. For instance, Singer and Janelle (1999) noted the need for a more integrative, less confrontational approach to future studies on expertise. They stated, “We must return to the idea that nature and nurture do interact to determine performance. It is important to delve further into understanding to what degree they are interwoven” (p. 146). Therefore, it was essential to move beyond examining the extreme positions of nature and nurture, and shift toward a more unified understanding of the development of athletic talent. The focus should be on the interaction of all factors and how they could be utilized to their maximum potential for children hoping to become talented athletes. Other researchers also noted the need for multidimensional studies that embraced the mutual importance of all perspectives (Csikszentmihalyi, 1998; Detterman, Gabriel, & Ruthsatz, 1998; Freeman, 1998). Therefore, an overview of interactional research conducted with athletes, athletes and families, athletes and coaches, and athletes, families, and coaches will be discussed below.

Researching Athletes

Csikszentmihalyi, Rathunde, and Whalen (1993) engaged in a four year study on the experiences, thoughts, and behaviors of 208 high school athletes, considered “talented teenagers,” by Bloom’s (1985) criteria. Csikszentmihalyi and colleagues (1993) assumed
that there was a particular mind-set called a complex attentional structure or a complex consciousness, which allowed certain athletes to reach a flow state where deliberate practice was enjoyable. When athletes possessed this mind-set or flow state, they enjoyed the hardships and challenges of their sport, and viewed these situations as positive and stimulating. This perception allowed talent to continue to develop to its utmost level. Therefore, in contrast to Ericsson, they felt that deliberate practice could be an enjoyable experience for athletes and that the athletes were more likely to continue in their talent development because they enjoyed what they were doing. In addition, Csikszentmihalyi and colleagues (1993) stated that talent had three elements: individual traits (both inherited and learned), cultural domains, and social fields. It was the interaction of all of the factors within these elements that led to a favorable talent temperament. Some athletes may have been born with greater gifts, but it was not the size of the initial gift, it was what the individual made of it through a long, arduous training process that led to expertise. Talent development, from this viewpoint, was considered to be a long-term dynamic process involving individual traits, cultural domains, and social fields (Csikszentmihalyi et al., 1993).

Williams and Franks (1998) examined talent identification in soccer, detecting potential anthropometrical, physiological, psychological, and sociological predictors of talent in soccer. These findings led to the implication that many attributes lent a hand in the development of talent, with the possibility that each category might vary from sport to sport. Therefore, finding specific indicators of talent in each sport, and also by gender, could be an important advancement in future research on talent development. The more
specific the measurements, the more likely that one might be able to predict success in a certain sport (Howe, Davidson, & Sloboda, 1998).

Carlson (1993; 1988) also found that talent development was the result of an interactive process with the environment in which the learning of social roles was important. Youngsters who were talented at early ages had the opportunity to develop through good coaching, sport clubs, parental support, and socialization, whereas youngsters who were not seen as talented did not receive the same opportunities. The development of talent was regarded as a dynamic, ongoing interactive process between the individual and the immediate environment. Carlson’s (1993) interpretation of the tendency to underestimate social and psychological influences in the development of talent led again to an interactive approach for studying talent development in sport.

More recently, Vernacchia, McGuire, Reardon, and Templin (2000) conducted an interview study with 15 (nine male, six female) Olympic track and field athletes to explore the psychosocial factors in their development. Four themes emerged and were labeled mental skills and attitudes, developmental concerns, socioeconomic factors, and spiritual/religious factors. For mental skills and attitude, athletes stressed the ability to have fun as an essential element to success. Athletes also adopted a process-orientated approach to their sport that stressed socialization factors, travel opportunities, and health benefits. Many athletes emphasized the role of mental imagery and visualization in allowing them to focus and concentrate. Patience, perseverance, persistence, overcoming self-doubt, confidence, and having dreams were seen as virtues to succeed in track and field. For developmental concerns, the athletes thought that participation in a variety of sports during childhood was important, with a gradual training progression as they aged.
The role of the coach and the coach-athlete relationship were important to the athletes’ development, with the coach’s role changing from a task master role to an advisory role as the athlete matured. For socioeconomic factors, a strong social support system and nurturing environment were essential. Many athletes also tried to gain scholarships to college at this time because of economic concerns and/or to continue training. For spiritual/religious factors, athletes believed that spirituality, religion, and/or prayer helped them remain faithful to goals, provided deeper meaning to their athletic career, and allowed them to cope with injuries. Overall, this study showed that athletes considered psychosocial factors to play a large role in their athletic talent development.

Similarly, Durand-Bush and Salmela (2002) conducted interviews with 10 (four men, six women) World and Olympic Champions who had won at least two gold medals at separate games to explore factors that played a role in the development and maintenance of their expert athletic performance. They found that the athletes progressed through four stages in their career including the sampling, specializing, investment, and recreational years. Transitions from stage to stage were marked by a significant event such as obtaining a new coach, moving, entering high school, or winning a gold medal. Key characteristics of the investment and maintenance years will be discussed below.

During the investment years, athletes focused in on their sport and became a World or Olympic champion making many sacrifices to concentrate on training. Family members played a supportive and nurturing role. Coaches were both motivating and demanding. Having adequate equipment, facilities, and funds were found to be important during the investment years. Key personal characteristics pertained to self-confidence, motivation, and competitiveness. These included being highly independent, motivated to
train, and enjoying the sport. Practices were intense and regimented. They included more physical (weights, push-ups, stretching), tactical (developing strategies), technical (refinement), and mental training (imagery, focusing). Competitions were very important at this time to apply training and appraise advancements and achievements. Athletes adopted an optimal mindset prior to competition by using imagery, relaxation, and self-talk techniques to deal with pressure and expectations. They also utilized post-competition evaluations. During the maintenance years, athletes continued to rely on their families and coaches, as well as sport psychologists, other athletes, and strength trainers for guidance. Families and coaches provided support, knowledge, and feedback to athletes. The personal characteristics that helped athletes during the maintenance years included self-confidence, motivation, and competitiveness as in the investment years, but also included always striving to learn and improve. The viewpoint of athletes on talent development was an important avenue to pursue, but some researchers felt that more in-depth studies using families and coaches were warranted to encompass the full spectrum of athletic talent development (Côté, 1999; Thomas and Thomas, 1999; Gould, Dieffenbach, and Moffett, 2002). Research pertaining to athletes and families, which included Bloom and Côté’s influential stage theories, will be described next.

**Researching Athletes and Families**

Bloom (1985) conducted an innovative study that attempted to deduce factors that contributed to talent development. He provided extensive in-depth research on the development of talent using a four-year longitudinal study of over 120 talented athletes, artists, musicians, and scientists. The sample included 21 Olympic swimmers (10 male, 11 female) (Kalinowski, 1985) and 18 top 10 world-ranked tennis players (10 male, 8 female) (Monsaas, 1985). The athletes were retrospectively interviewed along with one
or both of their parents. From the results, Bloom outlined three “Critical Stages of Talent Development.” The early years, or “Stage of Initiation,” were characterized by fun, playful activities with guidance, stimulation of interest, and support from parents. Activities were very process-orientated during this stage. Many parents and/or teachers noticed special talents or gifts in children during this time. The middle years, or “Stage of Development,” were when children became more serious about their activity and showed more dedication to succeed. During this stage, more practice time was initiated, athletes were competing extensively, and the focus was more achievement-orientated. Parents and athletes made sacrifices through both time and money, and parents primarily provided moral and financial support. Coaches became more technically advanced and developed a strong relationship with the athlete. The late years, or “Stage of Perfection,” were when individuals become experts. The chosen activity dominated all aspects of the person’s life and they became more autonomous and knowledgeable about their training and competition. Coaches became very strict and demanded enormous amounts of dedication. The parent’s role was lessened and limited to motivation and monetary involvement as athletes became immersed in their chosen sport.

The “Critical Stages of Talent Development” developed by Bloom (1985) provided an outline that encompassed the stages of talent development required for obtaining a high level of expertise. Bloom’s own perspective on the nature-nurture debate was that regardless of the “initial characteristics (or gifts) of the individuals, unless there is a long and intensive process of encouragement, nurturance, education, and training, the individual will not attain extreme levels of capability in these particular fields” (p. 3). It took many years of commitment to go through the talent development process, thus the
amount and quality of support and instruction an athlete received was important. Overall, Bloom’s investigation was instrumental in the advancement of talent development research.

Similarly, Côté (1999) interviewed athletes and their families about athletic career development and the role that several factors played in their improvement. He interviewed four elite athletes (two female rowers, one male rower, and one male tennis player), four mothers, three fathers, and four siblings. The interview data fit into three distinct chronological categories he called the “Stages of Sport Participation,” much like Bloom’s (1985) “Critical Stages of Talent Development.” The first stage was labeled the “Sampling Years.” This stage occurred from the ages of 6-13 and consisted of more play than deliberate practice or training, with enjoyment, as well as experimentation in different sports emphasized. During this stage, parents started their children in sport and felt that they had a special gift, which increased supportive behaviors such as motivation, encouragement, and positive reinforcement. The athlete and their siblings participated in a variety of activities at this age. The second stage was labeled the “Specializing Years.” This stage occurred from ages 13-15 when athletes chose one or two sports to focus on, rather than continuing to experiment with numerous sports. Families and coaches influenced this decision, and athletes focused their skills with more structured practices. There was a balance between play and deliberate practice in this stage. Parent’s showed more interest in their child’s sport and engaged in support through time and monetary means. Parents placed emphasis on both school and sport during this stage, and did not want their child to have a part-time job. Older siblings served as positive role models for having a strong work ethic during this stage. The third stage identified was the
“Investment Years.” This stage was illustrated by the quest for an elite level of performance and occurred around the age of 15. More time, effort, and intense deliberate practice were found in this stage, with much less play. Parents showed extreme interest in the child’s sport and provided support through motivation, helping the child fight setbacks, and financial means. This often caused an uneven distribution of resources among other siblings, producing jealousy and bitterness.

Côté’s (1999) “Stages of Sport Participation” and Bloom’s (1985) “Critical Stages of Talent Development” seemed fairly similar, provided frameworks for further investigations, and stressed the need for an interactional approach to expertise research. Côté’s stages differed from Bloom’s because they identified age ranges for each stage, were sport specific, and focused on the concepts of deliberate practice and deliberate play. Both studies found parental influences and guidance to be very important, with the parent’s roles changing as children developed. The role of parents evolved from a leadership role to a supportive/motivating role as children became more involved in sport (Côté, 1999). Thus, Côté and Bloom’s works suggested the need to further study the role of families in the development of talent. Finally, coaches should also be focused on in talent development research because of the impact they have on the athlete during these stages of development. Studies that examined both athletes and coaches will be described below.

Researching Athletes and Coaches

Thomas and Thomas (1999) interviewed two expert elementary school physical education teachers who coached a future NBA player and a future Division I soccer player. Their objective was to determine whether the elementary school teachers could have predicted future success. The main factors the teachers identified in these athletes
as children were working hard, knowing what to do, demonstrating positive attitudes, and having coordinated skills and body awareness. Both experts were identified as having early promise, but the teachers felt that other students showed the same level of ability as the two who made it to the elite level. Although the teachers mentioned genetics during the interviews, they generally downplayed the role of hereditary characteristics. Therefore, elementary school teachers were able to identify students who became successful athletes later in life, but also recognized others who were at the same level at that time and did not make it. This led researchers to ponder what occurred throughout the successful and non-successful talent development periods of these students’ lives.

Giacobbi, Roper, Whitney, and Butryn (2002) conducted an exploratory investigation with collegiate coaches to examine their viewpoints on athletes who developed significantly while on their team. Ten Division I coaches (five women’s and five men’s coaches) were interviewed and seven higher order themes emerged. These themes were developmental considerations, motivation/competitiveness, coachability, coaches’ influence, teams’ influence, and miscellaneous contextual influences. Developmental considerations included physical, mental, and psychosocial development. Coaches observed that players matured in many aspects of life and sport during their collegiate athletic career. In addition, athletes were motivated, competitive, determined, and committed to doing their best. Coachability was attributed to athletes who responded well to instruction, were willing to make changes, and were organized, attentive, inquisitive, and trusting of their coaches. The coaches’ influence was seen as important because they treated each athlete as an individual, gave feedback, and filled many roles for an athlete (coach, parent, friend, sport psychologist). Positive team influence and
team support were found to have a positive impact on social support and motivation for athletes. According to the collegiate coaches in the Giacobbi et al. (2002) study, a combination of individual experiences (e.g., maturity, motivation/competitiveness, coachability), and contextual influences (e.g., coach-athlete dynamics and team considerations) made valuable contributions toward athletic development in college. Lastly, one study examined the viewpoints of athletes, parents, and coaches, and this research will be illustrated below.

Researching Athletes, Families, and Coaches

A recent study conducted by Gould, Dieffenbach, and Moffett (2002) examined the development of psychological talent from the perspectives of athletes, families, and coaches. Ten current or former United States Olympic champions, one of their coaches, and a parent, guardian, or significant other were interviewed as part of the study. All of the athletes had been successful at the Olympics, with a total of 32 medals among them. This study focused on discovering the psychological talents athletes possessed, as well as determining what individuals, institutions, and/or strategies influenced the development of these talents. Quantitative psychological inventories were used to supplement qualitative interview methods. The results of this mixed-method study revealed that successful Olympians were characterized by the ability to cope with and control anxiety, sport intelligence, confidence, mental toughness/resiliency, the ability to focus and block out distractions, coachability, high levels of dispositional hope, optimism, the ability to set and achieve goals, competitiveness, a hard-work ethic, and adaptive perfectionism (Gould et al., 2002). Many of these findings verified current research, yet adaptive perfectionism, dispositional hope, and high levels of optimism emerged as new variables. The major influences on the psychological talent development of the athletes were the
community, family, non-sport personnel (teachers, friends), the individual themselves, sport environment personnel (coaches, agents), and the sport process itself. These influences were either direct (teaching psychological lessons) or indirect (unknowing and/or modeling). Parents were found to be very influential and played a critical role in development through financial, logistical, and social-emotional support. Coaches also played a key role by tailoring coaching strategies to athletes, providing encouragement, emphasizing hard work and fun, facilitating trust, and directly teaching mental skills.

It should be noted that all of the athletes in the Gould et al. (2002) study fit into Bloom’s (1985) “Critical Stages of Talent Development.” In conclusion, it was suggested that the interaction of many factors over a long period of time allowed these athletes to become Olympic champions. Interesting recommendations for athletes, coaches, and parents alike were found in the Gould et al. (2002) study. Specifically, the authors suggested that a profile of psychological skills of champions might be used as a collegiate recruiting tool. The authors also suggested that providing such a framework could offer a base of knowledge that would assist athletes in the development of mental skills, thereby making desirable outcomes more likely.

Summary

The exploration of talent development was and continues to be a prolific area for investigation because as shown previously, no research has been able to provide a conciliatory explanation of the attributes necessary to become a successful athlete. There may not be one specific formula that led to successful athletic development, but more studies should be done to bring the scientific world closer to a solution. Hopefully by partaking in more studies and utilizing a variety of methods to examine talent
development, researchers will advance closer to figuring out what combination would be most advantageous to becoming a successful athlete. In the majority of previous studies, participant groups have focused on elite athletes, namely Olympians or professional athletes. In the current study, highly successful collegiate athletes were concentrated upon because as described in the introduction, more people are able to become college athletes and the highly successful college athlete subgroup could lead to expanded evidence on the specifics of athletic talent development.

The road to expertise provides many curves and bumps to athletes who embarked on a journey toward athletic success. Some factors along the way were controllable and others were uncontrollable. In general, people were born with certain characteristics that were not malleable such as height and size. These predetermined characteristics were indisputable, yet there were many other factors that could not be controlled. Focusing on the manageable factors such as practice, psychological skills, and social support should be more feasible because making these factors more beneficial could allow the road to success to be much smoother. Therefore, the current study focused on the relative perception of genetics, practice, psychological skills, and social support from multiple perspectives to provide a framework for future research and applied applications.
CHAPTER 3
METHODS

Participants

Eight NCAA Division I collegiate athletes (four male and four female) from a large southeastern university were selected for the current study. The athletes represented a variety of individual and team sports. Specifically, there were five individual sport athletes (two male and three female) and three team sport athletes (two male and one female). No more than two athletes (one male and one female) from any sport were chosen. The sports included were men and women’s swimming, men and women’s track and field, men’s basketball, men’s football, women’s soccer, and women’s tennis.

The mean age of the athlete participants was 22.75 years. The average height of the athletes was 1.86 meters. For female athletes the average height was 1.77 meters. For male athletes the average height was 1.99 meters. The average weight for the athletes was 89.92 kg. The average weight for the female athletes was 75.41 kg. The average weight for the male athletes was 104.33 kg. The athlete participants had been starters on their team for an average of 3.31 years.

Twelve parents participated in the current study. A total of six fathers and six mothers were interviewed. The mean age of the parent participants was 51.25 years. At the time of the interview, three sets of parents and two individual parents resided in Florida, one set of parents resided in the Northeast, and one set of parents resided in the Caribbean. Overall, there were five sets of parents interviewed, one individual mother, one individual father, and one athlete’s parents were deceased.
Six current collegiate coaches participated in the current study. The coaches had been coaching in their sport for an average of 17.33 years and had been coaching the athletes in the current study for an average of 3.83 years. Five male coaches and one female coach were interviewed. Each coach must have coached the athlete for at least one full year prior to the interview. All coaches had played the sport they coached at the collegiate level, and three had played at the professional level. The mean age of the coaches was 39.17 years. Three coaches were from Florida, two were from the Northeast, and one was from Europe.

A purposeful sampling procedure (Patton, 1990) was adopted to ensure that each athlete participant was a nationally recognized collegiate athlete. Each athlete was the top or among the top contributors on his or her team, with the potential of becoming (or already having been) a professional or Olympian. The following recruitment criteria was utilized to determine “highly successful” collegiate athletes: 1) Each participant must have participated in his or her sport for at least five years, 2) all athletes must have been starters in college for at least two years, 3) all athletes were required to have had the same coach for at least one year, and 4) all were required to have received national recognition in their sport. National recognition was defined as being at least an All-Conference or All-American selection, and having the potential to become (or already have been) a professional or Olympian in their sport.

Participant Biographies

The following biographies include fictitious names to protect the identities of the participants. Each biography describes background information on the participant, honors they have received, and future plans.
Amy was a 23-year-old South American female tennis player. She was a native of South America but had lived in Florida much of her life. She had started for four years on the women’s tennis team and enjoyed a successful career. She was a seven-time All-American and Conference Player of the Year, as well as being a National Senior of the Year. Her future plans are to become a professional tennis player.

David was a 23-year-old white male basketball player. He was a native of New Hampshire. He was a two and a half-year starter on the men’s basketball team and had enjoyed a successful career. He was an honorable mention All-American, two-time Academic All-American, and three-time All-Conference athlete. His future plans are to pursue a professional basketball career and graduate school.

Dennis was a 24-year-old white male track and field athlete. He was from Arizona. He was a four-year starter on the men’s track and field team. He had enjoyed a successful career. He was a two-time All-American. His future plans are to start his business career.

Jason was a 22-year-old white male swimmer. He was a native of Florida. He was a four-year starter on the men’s swim team and had a successful career. He was a four-time All-American and was on the All-Conference Honor Roll. His future plans are to attend medical school.

Jennifer was a 23-year-old female soccer player. She was a Nebraska native who moved around a lot but ended up living in Florida. She was of African-American and Caribbean-American decent. She had started for four years on the women’s soccer team and enjoyed a successful career. She was a two-time All-American and three-time All-Conference player. She was also an Academic All-American and was named to the
conference Academic Honor Roll four-times. Her future plans are to attend graduate school.

**Michelle** was a 24-year-old Caribbean-American female swimmer. She was a native of Barbados. She had started for four years on the women’s swim team and enjoyed a successful career. She had participated in many international and national competitions, including the Olympics twice. She was an eight-time All-American and was also Academic All-Conference. Her future plans are to attend graduate school.

**Tara** was a 23-year-old Caribbean-American female track and field athlete. She was a native of Trinidad and Tobago. She was a three-year starter on the women’s track and field team at the time of the interview and had a very successful career. She was a two-time national champion, four-time All-American, and five-time All-Conference athlete. Her future plans are to finish school and compete internationally and nationally, which she has already began to pursue.

**Tommy** was a 20-year-old white male football player. He was a native Floridian. He was a two-year starter on the men’s football team. His career thus far had been successful. He was an All-American and All-Conference selection and a member of the All-Conference Honor Roll. His future plans are to finish his collegiate career and pursue professional football.

**Procedure**

Approval to recruit participants was obtained from the University of Florida Institutional Review Board (IRB Protocol #2002-390 and IRB Protocol #2002-U-390). Each athlete, parent, and coach was contacted via letter, telephone, or electronic mail to determine if they would be able to participate. Informed consent was obtained from all
participants at the onset of the interviews (athletes, coaches, and parents). See Appendix A for informed consent forms.

Interview Procedures

In-depth semi-structured face-to-face interviews conducted by the author were used for the athlete’s and the coaches. Telephone interviews were conducted with the parents because they are unavailable for face-to-face interviews. Each interview was audio-tape recorded and lasted approximately 30-90 min. Confidentiality and anonymity of responses was assured to all participants at the beginning of the interviews. Each athlete was interviewed first, followed by the parent(s) and then the coach. Specific probing questions were used during interviews with the parents and coaches based on previous athlete responses (Gould, Dieffenbach, & Moffett, 2002). American Psychological Association (2002) procedures regarding the treatment of human subjects were adhered to throughout this study.

Interview Guide

The interview guide (see Appendix B) was set up to (1) explore each athlete’s (or coach or parent’s) perspectives on their own (or their athlete or child’s) talent development in sport and (2) to investigate thoughts about genetics, practice, and situational factors that led to athletic talent development. Probes were employed to follow up on the participants’ responses in order to obtain more information concerning the relevant issues that arose throughout the interview process. Finally, a research group, consisting of individuals trained and experienced in the use of qualitative research methods reviewed the interview guide and determined that it was sufficient to obtain deep and rich data from the participants. The qualitative research group was made up of the author, the author’s advisor, and two other qualitative master’s level students. All
four of the group members had extensive knowledge and practice conducting qualitative research studies.

**Data Analysis**

A grounded theory analytic procedure (Strauss & Corbin, 1998) was adopted in the current study. Grounded theory allows researchers to build and create a new theory grounded in the raw data that was collected. The researcher did not begin with preconceived notions; rather the theory was allowed to emerge during the research process. This inductive approach to theory development allowed the researcher to develop a representation of human experience that was grounded in the individuals being studied. The goal of grounded theory analysis was to interpret raw data to detect concepts and relationships and to classify it into a theoretically descriptive diagram (Strauss & Corbin, 1998). A post-positivistic grounded theory data analysis technique was utilized in the current study (See e.g., Charmaz, 2000; Strauss & Corbin, 1990). The post-positivistic viewpoint allowed the researcher to utilize previous research findings as sensitizing concepts or “points of departure” to compare and contrast to the participants’ experiences (Charmaz, 2000, p. 515). In other words, previous research findings helped to interpret the raw data derived from the interviews.

In accordance with recommendations from Strauss and Corbin (1998) and Charmaz (2000) the following steps occurred during grounded theory analysis:

1. Each interview was audio-tape recorded. Each interview was transcribed verbatim and combined with extensive notes taken by the lead investigator. The primary investigator summarized the transcribed interviews and each athlete, coach, and parent received a copy of the transcribed interview and a brief summary to determine if the researcher was interpreting their responses correctly. This procedure was commonly known as a member check (Lincoln & Guba, 1985). The participants were also given a chance to add any additional comments or provide
editorial feedback at this time. This process served as a member check to ensure the validity and reliability of the data analysis (Sparkes, 1998).

2. Sparkes (1998) noted the importance of keeping a reflective journal throughout the research process in order to allow the primary researcher to record memos and other relevant issues that arose during the interviews. Also, it allowed further discussion after the completion of the interviews and in research focus group meetings when the data was being analyzed. The primary researcher kept a reflective journal to record experiences and additional thoughts during the entire research process.

3. The interview text underwent line-by-line open coding by the author and members of the qualitative research team in order to pull out raw data themes in the form of quotations from the participants (Charmaz, 2000). Strauss and Corbin (1998) perceived coding to be the analytic procedures by which data are fractured, conceptualized, and integrated to develop theory. The labeled raw data themes were grouped into categories by comparing labels with similar themes and assigning a classification that the researcher felt best captured the substance of the topic. The emergent categories were then discussed during research meetings until theoretical saturation was reached.

4. Following the line-by-line coding of the interviews, the researcher built a set of categories, each of which were mentioned on one or more occasions in the data. Grounded theory allows researchers to generate theory through close inspection and analysis of qualitative data (Henwood & Pidgeon, 1992). The researcher was allowed maximum flexibility in spawning new categories for the data that developed, allowing a creative process that exercised the interpretative strengths of the researcher. These categories must “fit” the data well and a balance must be preserved concerning the researcher’s intellect and the requirement of fit.

5. Axial coding was then performed to relate categories to subcategories along the lines of their properties and components (Strauss & Corbin, 1998). Each raw data theme was placed into a category in which it was deemed to fit. Once all raw data themes were placed in a category, the categories were then compared and contrasted to each other to determine how they interacted. Selective coding also occurred at this stage to integrate and refine the categories, which allowed for the formation of a larger theoretical structure (Strauss & Corbin, 1998).

6. Constant comparative analysis was implemented so the research group could maintain awareness of the similarities and differences existing between concepts, thus ensuring that the widespread diversity, richness, and complexity of the data were explored (Henwood & Pidgeon, 1992). Constantly making comparisons involved evaluating (a) different athletes, parents, and coaches with each other, (b) different sets of participants who talked about the same person, (c) the same person at different times throughout their interview, (d) data within a general dimension or category, and (e) data between dimensions and categories. This allowed the
researcher to recognize comparisons and discrepancies between the same individual or different participants.

7. Throughout the analysis, the research team used “sensitizing concepts” from which to interpret the data. Sensitizing concepts served as “points of departure” from which to organize, interpret, and extend previous research findings (Charmaz, 2000, p. 515). As noted by Charmaz (2000) “Sensitizing concepts offer ways of seeing, organizing, and understanding experience; they are embedded in our disciplinary emphases and perspectival proclivities” (p. 515). Put another way, sensitizing concepts allowed for the interpretation of the present data in a manner consistent with the extant talent and expertise literature. However, because qualitative methods are discovery oriented, flexibility was maintained throughout the analysis so that unique findings and/or points of departure from previous theory and research could be observed.

8. Coding continued until theoretical saturation was reached. Theoretical saturation occurred when no further properties, components, or relationships emerged during analysis (Strauss & Corbin, 1998). Therefore, there were no new raw data themes materializing because all of the data fit under a category. At this point, a grounded theory was developed.

9. Development of a grounded theory entailed both inductive and deductive processes (Charmaz, 2000). Prior knowledge about talent development as well as knowledge from the current study was utilized to develop a framework and theory that aptly portrayed the development of talent to a highly successful collegiate level. Prior knowledge was useful in helping to determine labels for categories. A conceptual framework was constructed beginning with the raw data themes from the interviews and progressing to first order and higher order themes. From the conceptual framework, a grounded theory diagram was established to show relationships, influences, and progressions from youth sport to a highly successful collegiate athletic career.

**Issues of Trustworthiness**

Several procedures were followed to establish trustworthiness, reliability, and validity in the current study. Rapport was established through an informal opening session and body signs such as nodding, and/or with words of thanks, support, and praise in accordance with Côté’s (1999) recommendations. An introduction of the study and why it was being conducted also served as opening banter. Each interview began with demographic questions as well as questions about the athletes beginning in sport. This served to familiarize the participants with the format of the interview and allowed them to
feel comfortable conversing with the researcher. Participants were assured of their anonymity and confidentiality at the beginning and during the interview. They were also advised that they did not have to answer any questions that they did not choose to or felt uncomfortable answering. Participants were encouraged to share their life experiences and any perceptions they had, whether positive or negative. The researcher continued to facilitate discussion throughout the interview by using words of acknowledgement, nodding, and smiling.

Furthermore, numerous methods were employed to establish reliability and validity, thereby verifying the accuracy of the research results (Sparkes, 1998). First, the interview transcripts and summaries were sent to all participants in an effort to seek confirmation of the interview results and interpretations of the author on their responses. Second, the author conducted research group meetings with others on a regular basis to discuss the interview results (Maxwell, 1996). This allowed for triangulation of the data by multiple coders with the ability to analyze discrepant findings. Third, the primary investigator kept a reflexive journal and recorded the major discussion points from each meeting and other important observations and opinions from the interview sessions (Sparkes, 1998). This was utilized to highlight and reveal the reflexivity and interdependence of the researcher and researched in qualitative studies (Henwood & Pidgeon, 1992). Extended documentation throughout the research process was used to record concerns, decisions, hunches, and observations to lay a “paper-trail” for colleagues (Lincoln & Guba, 1985). Finally, a review and summary of the major impressions that emerged from the interviews was presented to all research group participants at the end of the data analysis stage. Extensive quotations from the participants that seemed to
highlight the overall conclusions of the study were presented to shed light on the themes that emerged, and to allow readers to judge for themselves the accuracy of the researcher’s conclusions (Sparkes, 1998).

Throughout the study, qualitative research group meetings (Dale, 1996) were conducted to analyze and interpret interviews. Several interviews were read verbatim, which allowed the researcher to remain flexible and unbiased during the process of coding and developing theory (Pollio, Henley, & Thompson, 1997). Dale (1996) and Sparkes (1998) noted that a research group closely parallels an external audit, which was a means to ascertain credibility and dependability of qualitative data. Triangulation also occurred because athletes, parents, and coaches were interviewed. This provided multiple views and perceptions on the same topic that could be compared and contrasted.
CHAPTER 4
RESULTS

The purpose of the current study was to describe, examine, and gain an understanding of the major influences and important experiences in the development of highly talented collegiate athletes from multiple perspectives. Another purpose was to utilize the participants’ descriptions and experiences to create a theoretical framework in an effort to represent the most important social relationships and major influences during the talent development process of successful collegiate athletes. The results of open and line-by-line coding resulted in the emergence of 10 higher order themes for the athletes, nine higher order themes for the parents, and seven higher order themes for the coaches. What follows is a description of the major themes that emerged from the data analysis. The first section of the results is divided into three segments to depict the raw data results from the athletes, the parents, and the coaches. The emergent conceptual frameworks shown in Figures 1, 2, and 3 delineate the interrelations between the raw data, first-order, and higher-order themes for the athletes, the parents, and the coaches respectively. The second section of the results provides an overview of the interactions, similarities, and differences between all three sets of participants. This includes similarities and differences between all athletes, parents, and coaches, as well as the interactions between differing sets of participants. Lastly, a grounded theory is presented to depict the major influences and optimal conditions during the talent development process of highly successful collegiate athletes. Another grounded theory is presented to depict the importance of the development of social support influences.
Overall, it was ascertained that there were multiple influences on the developmental process of high-level collegiate athletes. Although the participants in the current study progressed through a variety of upbringings, types of support, and hardships, there were many similarities in their overall experiences. The first section of this chapter discusses the raw data themes that resulted from the athletes, parents, and coaches.

**Raw Data Themes**

**Athletes**

After each interview was transcribed verbatim, 91 pages of text surfaced from the athletes. As shown in Figure 1, the overall themes included genetics, practice, parental influence, sibling influence, coach influence, teammate influence, coping with adversity, opportunities, personality/mental characteristics, sport lessons, and other sport participation. Each of these themes is elaborated on below.

**Genetics.** The higher order theme of “genetics” was defined by the first order themes of “family/gene influence” and “physical traits.” The athletes in the current study perceived genetics to be the building blocks or starting points for their career, but not the most important factor in their success. The participants felt that they had been given certain physical characteristics or innate talents, but also felt that they had to practice and work hard to be successful at the collegiate level and beyond. This point is also elaborated upon later under the higher order theme of “practice.”

The first order theme of “family/gene influence” emerged because athletes mentioned members of their family who had been athletes when they were younger, and also referred to being “born athletic.” Jennifer’s father was an athlete when she was younger; her father “played both football and basketball.” She added later that she thought she was “athletic probably from my parents, probably more so my dad than my
mom.” Jason’s father was “really athletic” although like Jennifer, his mother was not as involved in sports. Tara mentioned that her mother played cricket and her father was a bodybuilder. She said, “I think that might have kind of had a little influence.” Michelle felt that genetics “must have played some sort of part in it.” She explained that her grandfather had been a professional cricketer and her father played cricket as well. Her mother was not athletic, but her brother and sister were both fairly athletic. Michelle thought she might have an “athletic gene” in her and felt that she was “blessed with something that helped her swim.” In contrast, Amy did not have athletic parents but felt that she was just kind of “born athletic” because she was able to do things at a young age such as riding a bike and bouncing a ball. Her grandfather was a tennis player, but she was not sure where her athletic talent came from saying, “It was weird you know.” More so than family/gene influence, athletes mentioned specific physical characteristics they felt aided them in becoming successful collegiate athletes.

The first order theme of “physical traits” resulted because some athletes believed their physical characteristics assisted their success in sports. Some of the physical characteristics discussed as genetic traits that helped them were “being tall,” “being lanky,” “size,” “having built in speed,” and “being coordinated.” The majority of the athletes mentioned height and/or size as helpful traits. For instance, David elaborated, “I think it [height] helped just being taller than everyone else. When you’re young and you’re bigger than all the other kids it’s a huge advantage and I think that helped inspire my interest in the sport.” Dennis also viewed his height as an advantage. “I’m so tall I have an advantage and the fact that I’m so lanky. Basically I believe that plays a very important role, and the fact that I have speed to go along with it.” Tommy felt that his
height and size were important as well. “Genetics impacted my development a lot, just
my natural size. I wouldn’t be here unless I had that.” Tara also mentioned her height
and size advantage stating, “It helps being tall … as far as being tall and with the size I
have for the event that I’m doing it’s actually not bad, not bad at all.” As a swimmer,
Jason felt that his height gave him an advantage as well because he had a “greater wing
span and longer reach.” Even though the athletes described their innate characteristics as
beneficial, they also believed that physical traits were not the only thing that allowed
them to succeed in sports.

After discussing their perceptions of genetics, some athletes added that other
factors had impacted them. For instance, Jason stated, “It [being tall] doesn’t help out
that much but I would say it definitely has some type of advantage.” David also noted, “I
think practice is the key, it’s more important than genetics.” The participants realized
that when they were younger sports seemed to come easier to them than when they
became older. Amy talked about being able to get away without practicing a great deal
when she was younger but that it caught up with her when she came to college.

To be honest when I was younger I was real lazy and hated practicing. I would still
win without practicing, which is terrible now because it really was a bad thing for
me because I won, it sounds cocky, but I won really easily without having to
practice and it caught up with me. It came the time where I’m like oh my God I’m
actually going to have to go to the gym and do things.

Jennifer described how her parents and her brother warned and encouraged her to
practice her skills when she was young because her natural talent would not last forever.
She took their advice and felt that doing this allowed her to be successful later in her
sporting career. She brought this together saying

I think that [genetics] played a role only so far. I think that more so it had to be
with just my experiences. They [my parents] always made an emphasis like make
sure you’re practicing those skills they teach you that’s important. When I was
younger I was faster and taller than everybody and I could’ve just got away with using my natural athleticism and not learn the fundamentals of the game. But between my parents and my brother they constantly made an emphasis of work on these skills, work on the fundamentals, do this, and that’s what made me a better player. I remember as we were growing up as we developed through adolescence and into high school the people who were really fast and really athletic or whatever, they started dropping off because at this point now they didn’t have the skills and fundamentals. Just to be a quality player, it [genetics] could only carry them so far and I think that’s what made a big difference is that that was always instilled in me as, you can’t rely on what you already have given to you.

In summary, the athletes viewed the influence of genetics and/or physical traits as important to athletic development. This theme emerged because the athletes perceived their parents to be athletic, and felt like they were born with an innate athletic ability as well as advantageous physical traits. However, the participants believed that practice and social influences were more important to their development than genetics.

Practice. The higher order theme of “practice” was defined by the first order themes of “general practice importance” and “commitment to practicing.” With regard to the first order theme of “general practice importance,” the participants discussed the importance of practice and the role it played in developing the necessary skills they needed to become successful. The majority of the athletes felt that practice played a large role or was key in their talent development in sport. For instance, Jason said, “Obviously practice leads to success…without practice you’re not going to do well.” Tara concurred saying, “As they say practice makes perfect, the more practice the better you get.”

Practice was the factor that accentuated natural talent for the athletes in the current study. Many felt that they had a certain innate talent but that practice and effort allowed them to excel at the collegiate level. This was illustrated by the following quote from Dennis:

It [practice] was a big role. That was the main key because practice makes perfect and if I didn’t do practice there was no way I would be doing what I did … doing all the extra work on top of your natural talent, it’s awesome.
Likewise, David described, “I think that [practice] is the key, that’s more important than genetics,” while Tommy said, “It’s [practice] the most important thing.” The athletes also realized that their genetic talent was not the only thing they could count on to make them successful. Elaborating upon this, Jennifer observed:

I remember growing up, as we developed through adolescence and into high school, the people who were really fast and really athletic or whatever, they started dropping off because at this point now they didn’t have the skills and fundamentals. Just to be a quality player, it [talent] could only carry them so far and I think that’s what made a big difference is that that was always instilled in me as like you can’t rely on what you already have given.

As for the first order theme of “commitment to practicing,” some participants noted the importance of commitment to quality practice rather than just going through the motions during a practice session. They felt that giving 100%, putting in extra work, and practicing how you want to play was very important. For instance, Amy elaborated, “Like they say, practice makes perfect, not just practicing but practicing how you’re going to play a match.” Jason talked about the importance of investing time and effort into practices.

Investing the time was never really a problem; it’s investing the time with the right attitude and the right demeanor. You can always go and swim and go through the motions but it’s actually physically if you’re going to invest that much time you better, you know there’s no point in wasting two hours so if you’re going to go those two hours you might as well give it your all. That’s just something that I realized, there’s no point. I think my old roommate told me that if you’re going to do this don’t half ass it.

Dennis agreed saying, “If you do the right things like you’re told it [practice] will play an important role.” Tara felt that it was important to put in extra practice saying, “It [success] all depends on how much extra you practice.” Amy also felt lazy when she was younger but she appeared to experience a mixture of shame and pride when discussing these feelings by saying
To be honest when I was younger I was real lazy and I hated practicing which is terrible now because it really was a bad thing for me because I won really easily without having to practice and it caught up with me.

Once Amy’s laziness during practice caught up with her, she began to lose a few matches because she could not rely on talent alone. She then changed her attitude by rededicating herself to practicing.

I think practice was what made me get to where I was. I think you practice how you want to play and I really got the concept of what you’re going to do in a match, do it in practice. I think practice is very important in developing as a player, not just practicing but practicing how you’re going to play a match.

**Family support.** Support from parents and siblings played a large role in the lives of the athletes. As shown in Figure 1, parental and sibling influences were coded as separate higher-order themes. “Parental influence” was defined by the first order themes of “early parent influence,” “parental social support,” “parental roles,” “parental sacrifice,” “parent/child relationship building,” and “parental adversity.” “Sibling influence” was defined by the first order theme of “early sibling influence.”

The first order theme of “early parent influence” emerged because some athletes revealed that they were encouraged by their parents to become involved with their primary sport at a young age. For instance, Michelle stated, “My father first started to teach me to swim when I was four.” David was also influenced by his father. “My dad has always been a big basketball fan and he played basketball. I don’t know I just started playing.” Jason’s mother “always made sure we [my sister and I] could swim” because the family had a pool in the backyard.

The first order theme of “parental social support” was characterized by the athlete’s perceptions that parents offered unconditional support and acceptance in their athletic pursuits. Parental support was a very important factor in the upbringing of the
participants. All of the athletes found support from at least one parent, and in the majority of cases, both parents were supportive. Parental support served as an important foundation for the athletes during their childhood and continued to be important during high school and college athletics. Jennifer stated, “My parents are by far my biggest fans, I mean unbelievably supportive, and I think they have influenced me in the fact that whatever I wanted to do I could do.” Tara concurred saying, “They [my parents] were behind me all the way.” Also, David added, “They [my parents] were totally supportive of me playing.” Similarly, Tommy said, “They [my parents] were always supportive, always there for all my games. They never missed a football game ever since seventh grade.” While the participants felt that their parents offered support and encouragement to participate in sports, there was no indication that any perceived pressure to participate. Amy who described the following revealed this:

They [my parents] just let us [my brothers and I] do what we were interested in. If I didn’t feel like going to practice one day they’d just say that’s fine, do something else today. They just encouraged us to be the best that we can at everything we did … I think just the encouragement that they gave us, just always there to talk to us, to encourage us, if we lost it wasn’t a big deal. I think that plays a big part in a person being a good athlete, just being out there and learning by yourself and not having your parents pushing you around and maybe being mean to you if you do bad or anything.

The first order theme of “parental roles” emerged when athletes discussed their parents engaging in differing gender related roles during their athletic careers. Parental roles became evident in families where the father took on the working, coaching, or stricter role, and the mother took on traditional maternal roles of driving the athlete to and from practice and being the cheerleader, sympathizer, or motivator. Jennifer encountered this situation because her father was also her coach. “My mom was kind of like the mother, bring me to practice and all that good stuff. My dad was the person I could talk
to as far as if I wanted to talk tactically.” Michelle’s mother also had a similar role as described by Jennifer. “My mother took charge of waking me up for practice in the morning and getting up to fix breakfast and that sort of stuff.” In Amy’s case, role related behavior revolved around her father’s work schedule. She stated, “My mom kind of had a bigger part just because my dad had to work so much but he would’ve loved to have that part too.” In some cases, the parents of the participants offered different forms of emotional support. Tommy discussed this by saying, “My mom was more of the sympathy and my dad was more, he’s more like the stricter kind of one.” Even though parents may have engaged in different roles in their child’s development, there were sacrifices that both parents had to make in order for their child to succeed, which is discussed below.

The first order theme of “parental sacrifice” emerged because participants felt that their parents made many sacrifices to allow them to compete at the junior and high school level. Some of these sacrifices included: “taking the athletes long distances to practice and competition,” “paying for coaching and competition,” “coming to watch them play rather than taking vacations,” and “allowing them to do whatever they wanted to do in their sport.” For instance, Tommy discussed how, “At one point we were driving about an hour and a half for practices.” David’s parents also “had to give me rides to practice every day.” Budgeting was important for parents to be able to support their children by providing coaching and travel to competitions. Jennifer felt that her family was middle class, but because her mother was “an amazing budgeting person” she never felt like she missed out on anything because of money. Michelle offered the following statement about the importance of parental sacrifice:
They [my parents] had to pay for everything so that was a big role because if they couldn’t afford it then I wouldn't have been able to get the experience to swim as well as I did because a lot of racing is needed in order to build that experience in competing. So I think that … being at least middle class is very important just so that you’re able to afford to get that experience and it’s important from my perspective just because my parents were able to pay for it even if they had to borrow and pay back later. So that played a very big role.

Even though the parents had to sacrifice a great deal of time and money to accompany their children to competitions and practices, the athletes felt that family relationships flourished as a result. The participants felt that they developed very good relationships with their families and enjoyed sharing their athletic experiences with their family. This led to the emergence of the first order theme of “parent/child relationship building.” Amy offered the following quote that supported these observations:

It [sports] didn’t hurt our [my brothers and my] relationship at all with my parents. It just made it grow even more. It was just something else to do that they enjoyed doing, watching me play and watching my brothers play, it was just something extra for them.

Overall, the athletes felt that unconditional support from their parents was important in their development. None of the parents in the current study were perceived to be overbearing by the athletes. The athletes seemed to appreciate this because it allowed them to make their own decisions about their athletic career. Michelle felt that her mother influenced her the most because “she was just always always always always always there from the time I was eight and coming in last to the point in the Olympics, she was always always there.” The following statement by Jennifer seemed to capture the essence of this theme:

I think that it was not just me. I know that I put a lot of hard work in but it was not just me. I think I was really in a good environment. My family, I can’t think of a better environment to be in to excel.
Finally, there was one instance where an athlete encountered some parental adversity. The first order theme of “parental adversity” emerged because Dennis’ parents were divorced. He said, “I didn’t really get support from my real mom.” As will be discussed later, Dennis also talked about how this adversity encouraged him to become involved in sports. Even though Dennis encountered a lack of support from his mother, he did receive support from his father.

I got all the support from my dad. He would call me and say how’d you do, I wish you luck. I always wanted to do good for him but then when I came here to college he was there for every single race.

As shown in Figure 1, “sibling influence” was a higher order theme defined by the first order theme of “early sibling influence.” Older siblings were mentioned as playing an important role, especially during the youth years. Siblings influenced the early development of the athletes by getting them started or providing someone to play with and compete against when they were young. Five of the eight participants noted that their older brother or sister got them started in sport. The other three participants were either oldest children or only children, which showed that if a participant had an older sibling, they were the one to get the participant started in sport. The following quotes elaborate on the early sibling influence for the athletes. Jason said, “I started swimming when I was seven, just because my sister was doing it.” Jennifer stated, “I started playing [soccer] with my brother who’s four years older.” Amy explained, “I was a little sister with 3 older brothers and I think that was the first influence that I had really because my parents didn’t play sports and I think it was just coming from my 3 older brothers.” Michelle elaborated, “My sister was the one to take me to the beach all the time and I pretty quickly got very comfortable in the water.” Finally, Tommy described, “It [how I got started] was definitely my older brother … I’m still trying to outdo my older brother.”
Sibling support continued throughout the participant’s collegiate years because the athlete’s siblings continued to come to their competitions or call to see how they had done in their sport. Older sibling influence gave the athletes someone to look up to and to compete with when they were younger and then someone for support when they became older.

**Coaches.** The higher order theme of “coach influence” was defined by the first order themes of “early coach influence,” “coach social support/belief,” “coach/athlete relationship,” “coach traits,” and “coach adversity.” Throughout the careers of the athletes, all participants noted the importance of coaching in their talent development in sport. Many also gave credit to their coaches for their personal development as well.

The first order theme of “early coach influence” emerged when athletes suggested that a coach got them started in sport or recognized the athlete had talent in the sport they played. For example Dennis stated, “It was my PE coach who happened to be my high school coach I was in eighth grade and he kind of noticed me … I wouldn’t be anywhere if it wasn’t for him because he started me out.” Amy also felt that a particular coach noticed her early in her career. “One of the coaches at the club where we belonged saw right from the start, something in me, you know in my tennis ability.” Michelle was also identified as talented at a young age, saying “A coach from [city] noticed that I was pretty talented and told my coach that he could get me to swim at the Olympics.” Tara’s high school coach convinced her to switch from track events to field events, which turned out to be a positive change because she was able to later receive a college scholarship because of her success in the field events. Dennis’ high school coach observed his athletic talent, which Dennis elaborated on saying, “It was my PE coach who happened to
Another first-order theme, “coach social support/belief,” was important to the athletes in the current study. This theme emerged because the athletes had both high school and college coaches that supported and believed in them. Many athletes mentioned that they had at least one supportive coach during the youth or high school phase of their career that encouraged them and gave them the basic skills of the game as well as the encouragement to believe they could receive a college scholarship. The athletes also had a college coach that influenced them by taking them to the next level of their sport and believing that the athlete could succeed. Tommy was very close to his high school coach. “My high school coach … I don’t think I could’ve done it without him, and that’s kind of the reason why I want to be a coach.” Tara’s high school coach helped her receive a college scholarship because her coach knew a college coach, which allowed her to be noticed out of high school even though she was not from the United States. At times a coach also influenced an athlete to continue their sport in college. Jason had a high school coach he viewed as prominent in his decision to continue swimming in college. He said, “I didn’t really want to swim in college but my old high school coach thought there was somebody who could take me farther.” Jason took his coach’s advice and became very successful after being a walk-on for a collegiate swim team. He discussed how “coach gives a walk-on award now and I was the first one to receive it.” Amy’s junior coach also believed in her a great deal. She elaborated on her thoughts about her coaches with the following: “Sometimes you can pay a coach and
they can do a good job but just everything that [name] helped me out with showed me to believe, showed me he believed in me. I think that’s a sign.”

The participants’ current coaches also supported the athletes and helped them throughout their careers. Dennis offered the following about the support he received from his college coach, “He believed in me and it made me believe in myself and from there I just believed everything that he had to say and listened to him.” Tara’s college coach also believed in her and her potential to be successful. “The coach here said that I have the potential to reach far … so as long as he just keeps telling me that you know I can do this, I can keep going.” Jason’s collegiate coach “kept me going and made sure I could go to bed at night and know I gave it my all that day.”

Stemming from the social support/belief theme, the higher order theme of “coach/athlete relationship” emerged. The athletes developed close relationships with most of their coaches, kept in touch with high school and/or college coaches, and at times felt as if their coach served as a surrogate parent when they were away from home. Jason stayed in contact with his high school coach, who influenced him to swim in college. “He had a really big influence, we talked all the time my freshman and sophomore year.” Tommy also visited his high school coaches whenever he went home. “Every time I go back home I always go see them [my coaches] and it just makes me happy to see how proud they are.” David explained his relationship with his college coach, “We’re [coach and I] are very close. I talk to him a lot.” Michelle had experienced an unhappy time with her coach before she came to college and really felt that her college coaches allowed her to find her love for her sport again. She stated, “All four coaches here at college, I had a fantastic relationship with them. They helped me to enjoy the sport again, you
know laughing, joking, they kept me in high spirits.” Dennis felt that his relationship with his college coach was similar to a father/son relationship.

My relationship with him is kind of like a best friend slash father figure, like he wasn’t just my coach … He kind of took me under his wing like a father figure and he told me the things I needed to do, told me things in regard to life.

Interestingly, Jennifer’s father coached her up until she entered college. Jennifer felt that she and her father had a successful relationship both on and off the field. She elaborated on this by saying, “We set some ground rules and one thing we agreed on was whatever happens at the field stays at the field. We just talked about it, the open lines of communication was a great deal of help.” She felt that in a way she had the “best of both worlds.”

The first order theme of “coach traits” emerged because the athletes tended to discuss certain characteristics they felt were essential for someone to be a successful coach. With regard to coaches’ traits, the participant’s discussed information about the personalities of these influential individuals. These included “being positive,” “sincerity,” “making the sport fun,” “caring about them as a person on and off the field,” and “being able to instill a sense of hard work for success.” Michelle emphasized, “It’s very important for the coach to be positive. A negative coach doesn’t help situations and I’ve had the experience of having both. Being positive is a better atmosphere, it’s generally better to be in a positive environment.” Sincerity was another important trait mentioned by Jennifer. She said, “Coach is extremely sincere. She makes it apparent she cares about you as a person rather than just a player.” Finally, David mentioned the importance of being cared about in the following passage:

The other thing with coaches is that there’s a lot of things to be successful on the court, but in order to be successful on the court you’ve got to do the right things. And that kind of thing and my [youth] coaches did a good job of teaching us that
and Coach [name] is the same way. He teaches you about basketball but he teaches you a lot about life too and I think he’s a great coach and obviously knows his basketball but knows more than that.

From the above analysis, it is apparent that many of the athletes in this study had good relationships with coaches and respected them a great deal. This allowed the participants to enjoy their sport because they respected the coach they were working and training with day in and day out. However, not all of the participants were this fortunate. As part of the constant comparative method (Charmaz, 2000), discrepancies were actively explored between the participants’ responses. With regard to coach traits, some of the athletes shared information that revealed the challenges they experienced with certain coaches. Thus, negative experiences with coaches characterized the first order theme of “coach adversity.” For instance, Michelle had a coach who “put a lot of pressure on me and that in turn caused me not to want to swim anymore.” Once at college, Michelle began to enjoy swimming more and she felt her coaches had a lot to do with this situation. In contrast, Jason experienced some coach adversity, but he also respected his coach at the same time. Jason stated, “Coach and I to be honest don’t get along, he’s a great coach but we just had the same personalities so we butt heads all the time.” Despite these two adverse coaching situations, the majority of coach interactions were positive for the athletes, which showed that coaches play an important role not only physically, but also personally in an athlete’s development.

Teammates. The higher-order theme of “teammate influence” was defined by the first order themes of “teammate social support” and “team relationships.” This higher order theme emerged because the athletes’ teammates from high school and college had a great deal of influence on the participants’ development. The athletes felt that their teammates were able to “challenge them,” “bring out the best in them,” “support them,”
and “inspire them to work harder.” For instance, Michelle felt that teammates had a large influence on her career because she had experienced both perspectives.

Teammates are a big factor ... I’ve experience both international and college swimming and college swimming is by far more fun because you have your teammates behind you, your teammates are working toward the same goal. You don’t feel pressured because they’re there for you just as much as you’re there for them.

The first-order theme of “teammate social support” was characterized by important relationships with teammates that offered the athletes’ emotional support, confidence, and inspiration. Support from teammates sometimes helped the athletes compete better because they knew their team was behind them all the way. Dennis told a story about a time when the entire team cheered for him during a race when he was the only one racing. He was “so hyped and it really brought tears to my eyes because the whole team was out there.” Amy enjoyed being part of a team even though she played an individual sport. She elaborated by saying, “I loved being part of the team. I loved just pumping my teammates up next to me.” Amy indicated that she gained confidence from her teammates. “I think that’s the best about being in college, you take little things from every one of your teammates and try to build on that. We all gave each other confidence.” The participants felt their teammates were able to “boost their spirits” and “keep them going through difficult training and competition.” For instance, Jason stated “Teammates play a tremendous role in your success and trying to get you over that hump.” Jennifer declared, “They’ve [my team] been through the hardest times with you, they’ve seen you at your worst.” Amy declared, “We all gave each other confidence.”

Having teammates provided a family type atmosphere for the athletes when they went away to college. The first order theme of “team relationships” emerged because participants viewed their teams as a family. This was important because so many of the
participants had positive family support before coming to college. Thus, having a family
type atmosphere at college may have allowed the participants to adjust to their new
surroundings easier. Jennifer summarized this in the following passage:

We all could find common ground, like we were all working towards a common
goal. We had this bond between us and we saw past the differences. They’ve
[teammates] been through the hardest times with you, they’ve seen you at your
worst so I think that here particularly, especially because of the coaching staff, I
really felt like I had a family type atmosphere with my team and that’s what I
needed, that’s one of the reasons I chose to come here. That was important to me.

Similarly, David thought it was beneficial to have teammates and friends that enjoyed the
sport he loved. “I’ve been lucky because I was always around people that loved the game
and we [my friends and I] could always go to the park or the YMCA and play and have a
great time with it.” Tara felt having supportive teammates allowed her to be successful
because they would challenge her in practice and also support her in competitions. She
explained, “It’s like every time I go to practice it’s almost like a mini-competition and
that kind of helps as far as getting ready for competition because you know that they’re
there and they’re supporting you all the way also.” Overall, teammates were influential
because they challenged the athletes, yet also supported them like a surrogate family.

Personality/mental characteristics. This higher order theme was defined by the first
order themes of “positive mental characteristics” and “negative mental characteristics.”
The first order theme of “positive mental characteristics” emerged because participants
discussed a variety of mental skills or traits that allowed them to succeed in their sport.
For instance, it seemed that a strong sense of “competitiveness” and “determination” was
universal to the current sample. Jennifer talked about how her family stopped playing
board games with her because she was so competitive. She encapsulated this by stating,
“My family stopped playing board games with me because I was so competitive. I think
mostly I’m determined and very competitive, extremely competitive, to the fact
that my family doesn’t play board games with me anymore.” Tommy also described himself as competitive. “It’s just the competitiveness in me. I feel like I have, our coach always used to call it Kl’s, killer instinct.” When Tara was asked if there was anything else that influenced her she replied, “competition.” She went on to add, “I’m majorly competitive. I might be like a quiet person, easygoing as I said but I’m very competitive, very much so. It’s a different story when I’m on the track.” Additional positive mental characteristics mentioned were “working hard,” “not complaining,” “being positive,” “breaking down the sport like a test,” “focusing,” “relaxation,” “having goals,” “using visualization,” “believing in yourself,” “having heart,” “being easy going,” and “being anal and a perfectionist.” Amy said, “I think always having a purpose out there, always having a goal I think has helped me a lot.” Dennis also set goals and explained this by stating, “I would always go in her [my mom’s] room and take out lipstick and I’d write a daily goal or vice versa, a weekly goal on my mirror. I’d always have a daily goal and then a weekly goal.” Michelle felt that being positive helped her succeed in swimming. She elaborated by saying, “I tend to be positive most of the time. I try not to stress myself out too much.” David felt that working hard allowed him to progress and “Just being a tough hard worker let’s you fight through things.” Dennis summarized being mentally tough by saying, “Mentally I was just a tough bastard and that’s what my coach always said. I’m the only one who never complained about anything.” Jason developed an interesting interplay between his success in the classroom and his success in the pool. He elaborated on this:

Mental is a big part of swimming. I guess during the year it’s 90% physical and 10% mental but then when you’re at the meet its 20% physical and 80% mental. As for mental characteristics that help me succeed, I just kind of break down swimming like a test and if you’re prepared being nervous is normal but you just
have to stay focused, relaxed, and just not let it get to you. You have to think of other things.

The athletes also mentioned mental characteristics they felt hindered their development in sport. This led to the development of the first order theme labeled “negative mental characteristics.” It was important to note that the amount of positive mental characteristics mentioned outweighed the amount of negative mental characteristics. Some negative characteristics included “being non-confrontational,” “lacking confidence,” “being hard on themselves,” “being tentative or scared or nervous,” “thinking they knew everything,” and “negative self-talk.” Amy expressed, “I lost my goal in mind and just became tentative and kind of scared.” Tara agreed that at times “I might get a little edgy as far as nervousness but eventually I get it under control.” Jennifer talked about her struggle with confidence on the field, noting, “I don’t have the highest confidence in the world for some things. It’s not for everything but that was a thing I felt like I had to work on, is being confident when I played.” David thought that “just being sometimes too hard on myself” hindered him. Similarly, Dennis talked about his struggle with negative self-talk, stating

Negative self-talk. I hate that and I did it a lot. Basically when I knew there was somebody better than me out on the track I’d always think before I got on the line, oh I don’t know why I’m here I don’t know what I’m doing I’ve got to beat him. Then when I get on the line it’s just like I’m not going to win I’m not going to win at all you know. I’m not going to get my time or whatever but I’d overcome it once I’d start running but just that negative talk probably took one or two seconds away.

Coping with adversity. The higher-order theme labeled “coping with adversity” was defined by the first order themes of “personal adversity” and “overcoming adversity.” Each athlete in the current study had to overcome some type of adversity to become successful in college, which led to the first order theme labeled “personal adversity.” For instance, Michelle and Dennis dealt with adversity prior to entering
Michelle had to deal with an adverse coach, who as mentioned previously almost caused her to quit her sport. Dennis had a mother who did not support him at all and thereby caused him to engage in sports. “I was doing it [running] because I didn’t want to be at home.” Jason and David encountered adversity when they first began playing in college. Jason was a walk-on and had to struggle with a lack of confidence on his part because he did not feel like he fit in or was as prepared as the other athletes. David met adversity when he was “thrown into the fire” of the starting line up during his sophomore year because he was not sure if he was ready for that challenge.

Sadly, two athletes struggled with the passing of parents. Amy’s father passed away during her freshman year in college directly before she began her first national championship tournament. Tara’s parents both passed away within a year before she came to college. She felt that her parents passing helped motivate her to continue and her ideas were poignantly captured by the following passage:

As far as them being gone right now was like more motivation for me to continue because I know that they wouldn’t want me to stop … I was doing good when they were alive and now they’re not here it’s like, just continue doing it, just for the sake of them.

Tara also dealt with two injuries that required surgery during her collegiate years. During her freshman year she underwent ACL reconstructive surgery and during her junior year she underwent back surgery because of herniated discs. Tara was not the only athlete who had to deal with injuries and surgery. Tommy had to undergo foot surgery and red shirted his freshman year. Like Tara, Jennifer also had to undergo ACL surgery after her freshman year. Her surgery ended up causing greater adversity than normal due to the fact that there were complications after the surgery because she had a blood clot the length of her leg. She elaborated on this by saying
At that point I had come off a pretty successful freshman year and so I was living, eating, and breathing soccer. Everything I had was planned around soccer. And then that [the ACL injury] happened and I was getting ready to have surgery still gung ho, still had the whole mind set of how quickly can I get back. Then I ended up having complications after my surgery that sent me to the hospital for 11 days. I was in ICU for three days. I had a blood clot the length of my leg and they’re telling me how I may not live or I may lose my leg and last of all I might not play soccer again.

Although these difficulties were wide in scope, each athlete felt that they learned something or that overcoming their hardship allowed them to become successful in their sport as well as in life, and they were able to deal with adversities encountered. This was where the first order theme of “overcoming adversity” emerged. Jennifer exemplified this and continued her previous quote by stating:

Everything was put in perspective, everything was completely put into perspective at that point and it was like yeah I still love soccer and yeah I still had three years left of playing but it was like I needed to focus on my life as a whole. It became I don’t want to say less of a priority because it was still definitely a priority, but it became, it wasn’t everything I was and that made a big difference I think. And I was thankful for that. I think I grew so much spiritually. I grew so much with my family. It really made me grow as a person.

Michelle shared the idea expressed by Jennifer that something positive was gained from her personal adversity. As previously discussed, Michelle had a very difficult relationship with a previous coach. When reflecting on this adversity she said, “I’m kind of a firm believer of everything happens for a reason and everything that has happened to me has made me stronger as a person.” Dennis shared this viewpoint stating, “I think everything happens for a reason.” Amy felt like she changed after dealing with her father’s passing and noted the following:

I think my dad passing away just changed me overall, just really changed my perspective on everything. I’m more responsible now. Everything that used to be big to me, like bad moments or whatever, are just not big to me anymore. You just kind of realize what’s important in life.
Dennis experienced negative emotions because of adversities he had encountered over the years related to his parent’s divorce and the lack of support he received from his mother. He felt that sports provided him with a distraction or release from his difficulties, as well as allowing him to be away from the house. In fact, when he first began running he “felt like he could fly.” Dennis talked about how this adversity helped him during his competitions and how he used running to let his negative emotions because of adversity out saying:

Whatever is bothering me that day or was compiled up I’d let out in my races. Like I had a lot of problems with my real mother and every time I’d run it would just get me fired up and sometimes I’d finish crying and people thought I was just hurting because I ran so hard. But it really wasn’t that, it was because all my frustrations and emotions and everything goes into it and I think that’s what helps me run better, personally, everybody has their little niche and I think that’s what really helped me.

Even though many of the athletes had to overcome adversity to become successful in sports, they also felt that it was worth it and did not regret any aspect of their career. The participants felt that the hardships they faced had allowed them to be better athletes because they were stronger and had a more realistic perspective on life and sports. This perspective carried over and allowed them to feel as if they could deal with anything that occurred in the future.

Finally, religion and/or spirituality played a role in some of the participants’ lives. Jennifer talked about how her spirituality became more important to her after knee surgery. She illustrated this with the following:

I used to fit it into a box as far as my spirituality fit into a box of how it could help me rather than how I could help it kind of thing. I really think that my time in 1998 when I got hurt really flipped that around for me. I think it really helped me improve as a person, let alone a soccer player. I wanted it to be like she’s a Christian and a soccer player, not only a soccer player.
David agreed, “It helps to have spirituality when you’re facing adversity.” It seemed that the lessons the athletes learned, the friends they made, and the extensive travel opportunities they had were able to make up for any challenges or adversities they may have faced during their careers. Therefore, the athletes were afforded many opportunities because of their sport success, which will be discussed in the next section.

**Opportunities.** The higher order theme labeled “opportunities” was defined by the first order themes of “travel,” “friendships,” “monetary assistance,” and “other opportunities.” The first order theme of “travel” emerged because travel opportunities were viewed as an enjoyable aspect of being an elite athlete. Jennifer talked about how she was able to travel to Europe twice before the age of 16. She stated, “I got to see a lot of different places and a lot of different experiences just because of excelling at a sport.” Michelle said, “I’ve traveled to so many places you know a lot more places than someone with the best social life in the world, and I have friends all over the world.”

As Michelle mentioned, another opportunity talked about was meeting a variety of different people from a variety of backgrounds and learning to adapt and accept teammate’s differences. This led to the development of the first order theme labeled “friendships.” The athletes felt that being on a team allowed them to learn to work with others in a cooperative context. Jason described, “I feel comfortable a lot more than other people working in groups just because I’ve worked in one a lot.” David agreed, “It’s your development as a person and having to socially adapt to people you don’t know just helps develop you as a person.” Tommy felt that, “The best thing I’ve gained from football is the friends. People that you bleed with, blood, sweat, and tears as they always say. It’s almost like a brotherhood.”
The first order theme of “monetary assistance” developed when some athletes garnered college scholarships or monetary help with other expenses associated with the sport they played. Amy discussed her feelings about how playing tennis helped her and her family monetarily.

I got to go to train and my parents didn’t have to take all that cash out. They [the place I trained] paid for my food, they paid for everything so my parents saved a lot of money there. It gets expensive paying for stringing, paying for traveling, for tournaments, for training, for everything, but when I started getting good results I kind of got paid by getting those opportunities. And coming to college where everything was paid for, you know the stringing, everything, so that was a stress off of my parents because everything was taken care of … Now I’m making a living playing tennis. A lot of my friends who didn’t play a sport or who were just having fun in high school have a sorry ass job now. Now they’re like okay wow you were doing all that for something.

The first order theme labeled “other opportunities” emerged from opportunities the athletes received such as participating in the Olympics and helping with academics. Michelle realized her opportunities to compete internationally were special. She said, “I don’t regret anything. I can go away being like I did two Olympics, two Pan-Am Games, three World Championships, and NCAA’s.” Some of the participants talked about the importance of academics in their lives, as they realized that sports might not last forever. Jennifer described how, “Academics and sports were both so important to me. It was like both of them worked together to make me the person I was.” Jason was proud because, “We had the best G.P.A. in all the teams and I took pride in that because I was always a good student so I tried to get everyone else to be.” Dennis elaborated by saying, “I took a hard major. I wanted to take a major that I could succeed in life because running is not going to always be there.” Jason felt that his sport career helped him with admission to medical school. He said, “I know it [swimming] helped me get into med school just because it showed me I could do two things at one time.”
Overall, none of the athletes regretted their experiences with sports. In contrast, they seemed to relish in the opportunities they garnered because of sport. Amy noted, “Honestly I don’t regret a thing. I’ve traveled everywhere in the world, I’ve made great friends and now I’m making a living playing tennis.” Tara discussed, “I don’t have any regrets whatsoever. I mean I’m this far so far.” Jason stated, “I don’t regret it because I had so much fun and I wouldn’t trade all of the traveling, the experiences, the team atmosphere, the challenges, the awards, I wouldn’t trade any of that for anything in the world.” David reiterated the athlete’s sentiments by saying, “Obviously there are sacrifices you make by playing college sports but I think the rewards are greater.”

**Sport lessons.** The higher order theme of “sport lessons” was defined by the first order themes of “learning from sport” and “helping in the future.” The participants realized that they were able to learn many lessons from participating in sports and felt that the lessons they learned through sport carried over into other aspects of their lives, including academics and their career. The first order theme labeled “learning from sport” emerged because athletes mentioned acquiring skills from sport such as “time management,” “responsibility,” “team/group work,” “multi-tasking,” “a better perspective on life,” “focusing on tasks,” “being positive,” “taking things in stride,” “communication,” “discipline,” “commitment,” “determination,” “confidence,” and “a good work ethic.” Some of these will be elaborated upon below. For instance, Dennis described

It [track] showed me to be responsible, getting up, you have to be at practice at 5:00 in the morning. I mean that right there alone, that’s showing that you’re responsible. It showed me a good work ethic. I mean basically I’m willing to do whatever it takes to go far in life. Not only that but you deal with a lot of diversities with a team and no matter what type of problem came towards me or
whatever I worked around it and tried to make everybody happy so I learned a very
good thing.

Jason learned similar lessons and gained the “ability to have a perspective in life. I know
how to handle those adverse situations and I don’t worry about things as much. I can
multi-task, I know how to budget my time.” Tommy learned to be disciplined because of
sports. “I think it’s made me a decent football player but I think it’s made me a better
person. Football as a sport requires so much discipline.” Tara felt that the most
important thing that her sport allowed her to gain was “strength of character.” Some
participants felt that sports kept them out of trouble when they were young and this was
illustrated by Jennifer who said, “In high school and growing up I always was very active
and never had time to get into trouble so I never got in trouble. I think sports played a
part in that.” David thought that playing a sport allowed him to learn how to “socially
adapt to people you don’t know” and added that having to do that helped him to “develop
as a person.” Overall, David felt that the “best thing he gained from basketball was
personal development. It’s made me a complete person and it’s made me ready to take
on any situation I’ll face in the future.” Similarly, Jennifer talked about how she moved
around quite a bit when she was young and how playing a sport allowed her to feel
comfortable in many social circles.

It [my career] just gave me so many opportunities. It allowed me to meet so many
different people that I wouldn’t have met and go and do so many different things
that I wouldn’t have done. I think that it was a good thing for me just because it
allowed me to feel at some points that I fit in because I never really felt that
growing up. It was a good opportunity to break the ice with people.

As shown by the previous sections, participation in sport may have contributed to
the overall identity development of the athletes in this study. In other words, the athletes
felt that their participation in sport allowed them to develop other skills (e.g.,
psychological) and opportunities that may not have been afforded otherwise. For the athletes in the current study, participation in sport was seen as a vehicle of social empowerment that enabled them to gain other skills and opportunities that would contribute to their overall development as people. Therefore, the first order theme labeled “helping in the future” emerged because the athletes felt that sports would help them in their future endeavors. Jason felt that what he had learned from sport would help him in his future career. He emphasized this by saying:

> The best thing I gained I’d say is the ability to have a perspective in life. I’ve been through a lot, I know how to handle those adverse situations and I just don’t worry about things as much. I know if I put this much time in I’m going to be able to do this. I can multi-task, I know how to budget my time. So I think swimming has only enhanced what I’ll be doing when I’m a doctor.

David also felt sports would enhance his future. “The best thing [I gained] is just personal development. It’s made me a complete person and it’s made me ready to take on any situation I’ll face in the future.” Tommy changed as a person because of sport. “I think its [football] has helped me out as a person. I’m willing to give my neck out there for somebody else to get all the fame.”

**Other sports.** This higher order theme was defined by the first order theme of “other sport participation.” Every athlete interviewed participated in a variety of sports and activities when they were young. The range of these sports included soccer, basketball, baseball, swimming, softball, tennis, gymnastics, football, track, netball, karate, and golf. Some of the athletes also participated in activities such as dance, piano, and ballet. Some athletes also played two to four sports in high school. Participating in other sports allowed the participants to stay busy and not get bored with one sport. The following quote from Jennifer highlighted how playing multiple sports served to prevent boredom and/or burnout:
My parents kept me involved in other things so I was doing soccer as well as basketball and karate and baseball and stuff like that just so we [my brother and I] wouldn’t get burned out on one or that we could see which one we liked better. Up until I came to college I played 4 sports in high school so I was still doing all the various sports but I took a liking to soccer from the get go and so then I was much more serious about it, a lot more time commitment. I played that year round, where the other ones I would play intermittently at the same time as soccer … In high school I played soccer and basketball and they were the same season so we [my parents and I] would go to one game, I would change in the car, leave at half-time, and go and play the other game.

Jason enjoyed participating in many sports and said, “I was just the guy who liked to play all sports so I played baseball, basketball, and football. I try to be at least semi-decent in everything.” Some athletes decided to focus on a certain sport during their careers instead of engaging in multiple sports once they became older. The athletes discussed how this was their decision and not made because of pressure from outside sources. Michelle had to choose between ballet and swimming and elaborated with, “It was a difficult decision for me to make so I chose swimming.” David elaborated on his decision and stated the following:

I basically quit everything and decided to focus on basketball. That was my decision. I just decided I loved the game and that was the sport that I had the most fun doing and I was good at it so it was something that I just wanted to focus on and pursue.

Tommy felt that playing another sport, namely basketball, helped him become successful in football. “I kind of owe a lot to what I do now, I don’t want to say good but how well I’m doing now, has a lot to do with basketball, with the movements and stuff.”

As shown previously, the athletes mentioned a vast array of topics they felt influenced their athletic success. These included genetics, practice, parent and sibling influence, coach and teammate influence, psychological/mental characteristics, coping with adversity, opportunities and sport lessons, and other sport participation. The next
section of the results will discuss the raw data themes that emerged from the interviews with the parents of these highly successful collegiate athletes.

Parents

The results of the inductive analysis of the parent interviews resulted in 70 pages of text. As shown in Figure 2, the overall themes that resulted from focused coding included: genetics, practice, parental social support, parental roles, parental sacrifices, coach influence, teammate influence, children’s personality/mental characteristics, and priority on education.

Genetics. This higher order theme was defined by the first order themes of “family/gene influence” and “physical traits.” The parents agreed with the athlete’s viewpoint that genetics was the basis, but not the majority of the reason their children succeeded in sports. The first order theme of “family/gene influence” emerged because a majority of the father’s, and sometimes both parents, participated in sports when they were younger. The parents also mentioned they noticed a natural athletic ability in their children at a young age. Michelle’s father felt that she had a family background in sports and elaborated that, “She has sports in her genes, her grandfather played sports, I’ve [father] played a lot of sports, her aunt was involved in sport … She’s just very athletic.” David’s father said, “I played and I think my wife played at the time,” and his wife responded, “I think he [David] was in the womb.” Jennifer’s mother mentioned that her husband was “very athletic and Jennifer gets that [athleticism] from him.” Jennifer’s father added, “She gets her jock instinct naturally.” Tommy’s parents joked about the fact that they were both much shorter than their son. His father speculated, “I guess we put a pretty good combination together. We’re actually the tallest in our families both her and I.” His mother went on to add, “He did not get any athletic ability from me but I
think all his athletic ability gives him the edge.” Dennis’ father felt that his son “just had a lot of natural talent.” Amy’s mother related a story about her daughter having an abundance of energy and athleticism at a young age.

She was born an athlete somehow. I was pretty athletic but nothing like my children. And my husband was too; he was a gymnast and played soccer. But with her maybe more than her brothers she was born with that ability because she could start hitting or bouncing a ball at just two years old and things like that. And then of course her incredible energy, I don’t know where she got it from, not from me and I don’t think from my husband either.

Physical traits and characteristics were also mentioned as aiding in athletic talent development. As the athletes revealed previously, the parents also mentioned height and size as distinct advantages. David’s mother discussed that her son “had good eye-hand coordination and he had the size.” Dennis’ father said, “I definitely think his height really did a lot for him because he’s got these long legs.” He went on to add that he thought Dennis was “built to be a runner.” Jason’s parents felt their son had beneficial physical characteristics. His mother said, “I would just say being very tall, that’s very helpful, and lengthy and long. It’s a very good thing for a swimmer.” Tommy’s parents agreed and felt that “height was an advantage for Tommy, even though we aren’t very tall ourselves. His height and his size have a lot to do with his success.” Tommy’s father added, “I think he’s got the physical ability, he’s got the size, and he’s always had good eye-hand coordination.”

Practice. This higher order theme was defined by the first order theme of “practice importance.” Parents felt that practicing was important to the success of their children. Jason’s parents thought practice impacted him “a lot” and elaborated, “He never missed practice.” His mother continued:
Jason really took advantage of the amount of time that he was in the water. He realized that he didn’t have the natural talent that he could take off and not practice hard and succeed. He really needed to work at it and he was prepared to do that.

Michelle’s parents said she was “always keen to go swimming … She’s never been the type of person to make a fuss, she would always go swimming whenever you’d say lets go.” Amy’s mother thought that practice helped her “develop a lot of course.” Jennifer convinced her mother to be in on the action when she was practicing as a youngster. Her mother explained, “I had many jammed fingers because of Jennifer. I spent many Saturday’s out on the field where she [Jennifer] would just practice and practice.” Dennis’ father noticed how much his son practiced. He offered the following:

He [Dennis] would practice all the time. He would run all the time. I mean he always ran, the last few years when he would just run every day first thing in the morning when he was visiting and then at night, 10-15 miles a day.

David’s mother felt that practice “obviously was huge.” Tommy’s father agreed by saying, “That’s [practice] what it’s all about isn’t it. Just like with your school the more you study the better you do, the better you get.” Tommy’s mother discussed the importance of having good high school coaches who implemented regimented practices into Tommy’s life.

He had a regimen of practice going on before he got to college and the high school coach he had was a stickler for running. I mean he’d make these kids run and run and everybody would say oh my goodness why but by the time they would be playing a game they wouldn’t be exhausted in the middle of a game. They would be able to pull it out in the 4th quarter or at least hold it steady in the 3rd and 4th quarter because they weren’t exhausted by the end of the game. So when everybody would complain about the run, run, run, he’d say well wait and see we’ll show you what we can do. So Tommy was used to it, a pretty regimented practice program before he got to college.

Parental social support. This higher order theme was defined by the first order themes of “encouraging but not pressuring” and “always being there.” In support of the athletes’ testimonials, the parents interviewed for the current study were very supportive
of their children and their athletic endeavors. The importance of this theme will be discussed more in the grounded theory section (discussed below). The first order theme of “encouraging but not pressuring” evolved because parents felt that it was very important for their children to choose their own activities and decide if they enjoyed a certain activity or a variety of activities. In support of the athletes’ perceptions of their parents, some parents claimed they influenced their children to become involved in varied sports, but allowed their children to decide whether to continue or not. Jennifer’s mother, who shared the following experience, explained this:

We made sure that we always supported them [Jennifer and her brother] 100% as long as they gave 100%. Jennifer just showed a great love for soccer. I tried her in all the girlie things like tap and ballet and gymnastics but the minute they had to do any type of performance she’d want to quit and her excuse, even at the age of seven or eight was always it’s going to take away from my soccer.

Michelle’s parents were also very supportive of her trying many different activities. Her mother said, “We always tried to encourage her in everything that she wanted to do.”

Michelle chose swimming over ballet when she was young, and this decision to pursue swimming in high school was discussed by Michelle’s mother below.

One of the stories I always remember is that as I said she did ballet and she got up to her senior grade and she was still swimming, she would leave ballet and go swimming. Then one day she said to me, they had started to do toe work and her toes were stuffed in the shoes, and after about a month she said to me, ‘Mommy, I either do swimming or I do dancing. I can’t have my toes up one hour and then having to stretch them out when I’m swimming in the next hour.’ Her ballet teacher told her she was a very good dancer but that she had to make up her mind. Michelle sort of thought about it and the next day she said ‘you know I really think I’m going to stick to swimming. I like swimming.’ She did very well in both things though.

Amy also participated in a variety of sports that included gymnastics, dance, and soccer, but her mother let her decide which one was for her. “She always said no, she wanted to play tennis … I think the child should decide.” Jason’s parents allowed him to
make the decision to stop swimming in order to pursue other interests when he was
young. But later Jason decided to return to swimming because as his mother noted, “He
knew that he had the talent and he started to really kind of drive himself a little bit
further. Swimming kind of stood out from the other sports.” Tommy had a successful
youth career in basketball but decided that he would concentrate on football in high
school. His parents were surprised by this decision because they thought he enjoyed
basketball more than football. His mother talked of this:

I think it surprised us when he finally got to high school and he was going to go try
out for basketball but I think he was just so exhausted from playing football and
being there that when they had started basketball and he was going for 30 hours
more on top of his schoolwork he came to us and said you know ‘I’m really just
going to concentrate on football. I’m going to go to the weight room and get bigger
and stronger and I’m going to do this and I’m going to give up basketball.’ I think
it surprised us that he wanted to walk away from basketball but he was so
determined that he convinced us that he was going to do the weight lifting and get
better for football and that’s exactly what he did. He ended up quitting the
basketball and directed himself straight into football and that was the time I think
we really realized that this was very, very important to him because up until them
we thought he was following his brother’s footsteps more than it being that
important to himself. That’s about it, when he finally got to that point, he finally
made up his mind that this was where he wanted to go.

In short, the parents in this study appeared to offer support, rather than pressure, to
their children to help them become successful athletes. The parents empowered their
children to make their own decisions about which sport to pursue. Amy’s mother had
witnessed other parents who pushed their children too much:

See if the kids like it because many parents are completely controlling and I saw so
many parents push and push and push. I think the child should decide and you
have to accept that … it helps that we are always supporting her and we are always
interested in hearing where she plays and when she calls did she win or lose.

The first order theme labeled “always being there” emerged because the parents in
the current study offered continuous emotional support and were present to watch their
children compete. Similar to the descriptions offered by the athletes, this form of social
support was emphasized by the parents as well. Thus, the support, encouragement, and comfort given by parents were an important part of the developmental process for the athletes in this study. Parents sacrificed a great deal of time and money in order to attend their child’s competitions. David’s father said that competing in tournaments was “very expensive ... 3,000 dollars a year.” Both parents worked, but his mother alleged, “We don’t have an endless supply of income so that [tournaments] was kind of rough.”

Jason’s parents went to his swim meets and it had even become a family activity because Jason’s brother and sister would attend the meets also. Jason’s mother said, “We were both very supportive of anyplace he wanted to go. We all went to his swim meets and his brother and sister went along also. We always were there together for each other.

Jason’s parents enjoyed the time their family spent together around their child’s sport.

    I think just because he knew his family supported him the whole time. I think that we were always behind him. We didn’t care if he came in last; our rule was as long as you tried your best that’s all that mattered. It was just a fun family experience for us.

    Dennis’ father had to travel halfway across the country to be present at his son’s bigger high school track and cross-country meets. He traveled that far because he felt that he had “always done better when my mom and dad came to sporting events.” Therefore, he “tried to come to state championship races that he [Dennis] had to show support because that’s important to me and for him to do well.” Even when Dennis’ father was not able to attend his races, he still made sure to call his son and keep up with his results via telephone and the newspaper. Tommy’s parents were adamant about being at his games saying, “We support him 150%; we don’t ever miss anything he does. We go to all his games together.” During the interview with Tommy’s parents they claimed
they did not remember missing a game since he began playing football. Tommy’s parents discussed the importance of being positive and optimistic with their son:

> If they have a bad game we just talk positive and if they have a really good game and they do good that’s when we lay the bad stuff on him just to try to keep it even. But we’re always there for him and we let him be his own person as much as we can.

Jennifer’s parents summarized their experiences and observations of being a part of the youth sport sub-culture. Other parents sometimes thought that Jennifer’s parents were pushing her too far, but her father described how they were just trying to keep up.

> One of the biggest laughs we [her mother and I] would always have was parents who didn’t really know things would say don’t you all think you’re pushing Jennifer a little bit too much? And we’d say, we just grab on and go for the ride no one’s pushing her, if we’re doing anything we’re running hard to keep up.

**Parental roles.** The first order themes labeled “maternal roles” and “paternal roles” defined this higher order theme. Similar to the athlete’s views, these themes were characterized by the specific role related behaviors offered by the athletes’ parents. The majority of the families in the current study felt that the mother and the father had somewhat different roles during the development of their child. Both parents supported the child, but the mothers usually took the athlete to and from practices, woke them up in the morning, and provided sympathy and maternal support. The fathers tended to be stricter, more involved in the business or logistics side, and not quite as involved in their children’s sport. Amy’s mother talked about how she was “driving Amy around and picking her up” and also added that she “traveled with her to the bigger tournaments” because Amy’s father worked quite a bit. Michelle’s mother took her to and from practices. She mentioned that her husband worked early in the morning so it was “more convenient for me to take Michelle to swimming.” Jason’s mother was also the parent that took him to practices. “I was the one that mainly took him to the practices and
everything and I’m also the one he had to fight with when he didn’t want to go to practice.” David’s mother revealed that David likes to “talk to his father about basketball and to me about other topics like academics and movies and things.” The following quote illustrates the varying roles that Jennifer’s parents shared:

“We kind of had our respective roles. I was always in charge of logistics, tell me where you’ve got to be at and tell me when you’ve got to be there and I’ll tell you what time we’ve got to leave to get there. Then her mother would work with her to help her get her stuff together and whether it’s a two-hour drive or a three-hour drive it didn’t matter. Where are we going, when do we have to be there, and based on that, this is when we’ve got to leave and this is when we’re going to get there?

Parental sacrifices. The higher order theme labeled “parental sacrifices” was defined by the first order themes of “time” and “financial.” Parental sacrifices mainly focused on time, money, and lack of vacation time. The parents gave up a great deal of time and money to support their children’s sport endeavors. Even though the parents sacrificed a great deal, they felt the rewards and experiences with their children were well worth any sacrifice they may have incurred. For example, Jason’s mother discussed how:

“We kind of lived and breathed swimming with him [Jason] and at the time we also had a younger son who was swimming as well. And his older sister was involved in the watching of it so we pretty much 12 months of the year was involved with swimming … We all just kind of enjoyed the experience of what he was doing together. It was just a fun family experience for us. It’s always been a fun family-orientated thing.

Amy’s mother noted that providing support to an elite athlete is “expensive with all the training and travel.” She felt that “it was fun, it was something to do and you meet nice people.” Michelle’s parents agreed saying, “It was a giant effort by both of us. From the beginning it was a very expensive affair and the more progress she did competitively the higher the expenses.” Also, because one of Michelle’s parents would travel with her to all of her meets, national and international, her father knew it “got very expensive…yet also said, “We’re very proud of her.” Dennis’ father had a predicament
because he knew it would be difficult, financially, to send Dennis to college. Dennis was offered and accepted a scholarship, but after one year of success, decided to transfer. Dennis’ father tried to discourage him from transferring because “it was too expensive and I couldn’t afford it unless he had a full ride,” but his uncle contributed financially to the family’s efforts. Tommy’s parents also felt a financial strain and described, “we’re poor but we’re managing.” They described Tommy’s career as “fortunate, amazing, and exciting” despite any sacrifices they may have made.

As for giving up vacations, Jennifer’s parents related how they experienced this for many years. Her mother said, “They always had competitions down south at Thanksgiving and all the college coaches would come look at them, so for many years we spent our Thanksgiving vacation in a hotel.” Jason’s mother discussed how their family vacations consisted of attending swim meets and how others could not understand their sacrifices.

We probably gave up a lot of vacations and a lot of other things like that but we looked at those things as being kind of our fun family vacations. People thought we were kind of crazy but we kind of looked forward to them so it was just a fun thing for us.

The previous section exemplified the types of sacrifices the parents made as well as the support they gave while making these sacrifices. As discussed, the parents were happy to spend a great deal of time, money, and energy to support their children to help enhance their athletic careers.

Coach influence. The higher order theme labeled “coach influence” was defined by the first order themes of “coach social support,” “coach adversity,” and “parent as coach.” The parents in the current study thought that their children received exceptional coaching the majority of the time. The first order theme “coach social support” emerged
because the participants’ parents related many instances where their children were very close to their coaches and gave the coaches credit for developing their child’s talent.

Jason’s father said he had a coach in high school that was “like a buddy, he had a great relationship with his high school coach.” He added that the coach told Jason, “The more you practice the farther you are going to go.” As mentioned previously, Jason would not have become a collegiate swimmer without the influence of his high school coach. David also had a good relationship with his high school coach. His mother elaborated, “He had a family guy for a high school coach. He was an unbelievably excellent role model.” Dennis’ father felt that his son’s “high school coach was his biggest influence because his high school coach basically influenced him to say hey this is your ticket through to get a college degree.” Tommy’s parents felt that his high school coach was very influential in Tommy’s life. His mother said, “He had a high school coach that was a center and that’s what position he played so he was just a real good offensive line coach.” His father elaborated on this with the following:

They [Tommy and his high school teammates] say wow, the coaching we had in high school were so good. Sometimes they got mad at their coaches for what they made them do but in the end it was there and I think last year it really helped Tommy in comparing to some of his teammates that came in at the same time as he did. I think the background he had in coaching and practicing paid off and gave him that edge to be able to accomplish what he did this past year.

As discussed by the athletes, the parents perceived their children to have good relationships with their collegiate coaches. In general, the athletes’ coaches were viewed as supportive and influential, and at times like a parental figure away from home for the athletes. Michelle’s mother said, “I’ve never heard her complain about any of her coaches. I think she liked them very much.” Amy’s mother described how, “her college coaches influenced her, and they both have helped her a lot.” David’s mother felt that his
college coaches were very influential, adding “All of the coaches that coach there are such great examples of family comes first. You know just how to be a person in your spiritual life.” As for being like a parental figure, Dennis’ father explained, “He liked Coach [name] and they became really close.” Jennifer’s parents felt their daughter’s coach was special and described, “We kind of knew they [her coach and her] had a special camaraderie or Jennifer had a special feeling for her [coach].” At times the parents also thought that coaches were able to recognize talent in their children, even when the parents did not. For example, Michelle’s mother said, “I can’t say I recognized any talent. I think her coaches did you know. Coaches really did recognize that she was going to go places.” In addition, Amy’s mother discussed how “one of the coaches at her old academy moved to another academy and actually asked Amy if she wanted to train with him and she would get a scholarship.”

Some athletes did not always agree with their coaches but learned to deal with most of these adversities. Therefore the first order theme labeled “coach adversity” emerged from observations that the athletes had to handle a variety of challenges while working with their coaches. Again, the reader should note that with regard to this theme, the parents were corroborating the athletes’ experiences. For instance, Jason’s father related his viewpoint on the coach/athlete relationship. “At first he was really I guess afraid of Coach [name] but I think he really grew to like him and respect him and understand him and realize what a good coach he was.” Michelle’s mother discussed their daughter’s relationship with a tough coach.

Up to going to the Olympics she was very happy there but she found that after the Olympics she got a little disappointed with the coach and his attitude and got very frustrated and asked to be relieved of him.
Amy’s father was the only parent in the current study that coached their child in a sport. He coached Amy throughout her youth soccer career. Therefore, the first order theme labeled “parent as coach” emerged. Amy’s mother remembered when her husband first started coaching Amy. “She [Amy] couldn’t separate the father/coach relationship.” She told a story of Amy’s early experiences with her father as her coach by relating the following:

There were many times when he’d say to the team okay no one’s doing whatever and she’d come off the field crying and saying he’s yelling at me mom. And I’d say he’s not yelling at you, he’s yelling at the whole team. And she’d say yeah but I did it right so I’d say well what do you want him to say, everybody except Amy, she did it right. She’d say well yeah. It took almost a whole season of me talking to her and just kind of saying you have to know that you did the right thing but he has to generalize, he can’t just pick on one person. But it got to the point where their relationship got so good after awhile that I used to literally get jealous.

According to Amy’s parents, Amy referred to her coaches as “coach” rather than by their first names. Her mother said, “She [Amy] said ‘I can’t be friends with my coaches, they are my coaches. I have to expect them to discipline me if I do something.’” Her mother went on to add, “I think that stems from the early days when her dad coached her and in the early days she had a hard time with the dual role but it worked for her.” Overall, Amy and her father had a successful relationship with him as both her father and her coach. Jason’s mother felt it was beneficial for her to stay out of the coaching side of her son’s swimming career.

I tried to stay out of that [coaching] because there are many you know if you want to call them soccer moms out there in all the different sports. So I try to stay away from that [coaching] because I know that one time he wanted to quit, and let me tell you it was a fight between him and me, that I finally had to back down and let him have his free reign right then. Because you can’t force the kid to do something that they don’t want to do and they have to be happy doing it.

Teammates. This higher order theme labeled “teammate influence” was defined by the first order theme of “teammate social support.” The parents of the athletes, like the
athletes’ themselves, felt that their children had an influence on teammates and that teammates had an influence on their children as well. Overall, from the parent’s perspective, the athlete’s teammates were friends to the athletes and served as a social support mechanism. Therefore the first order theme labeled “teammate social support” emerged. Michelle’s mother was happy to hear that their daughter was well liked by her teammates and related, “She likes them all [her teammates] and her father was pleasantly surprised and happy to hear how well liked she was and what an example she used to give.” Jennifer’s parents remembered that their daughter was well liked and usually in a leadership position on her team. Her mother thought that, “Jennifer is very easy going, very easy person to get along with and she’s always gotten along really well with her teammates, to the point where I think every team she was ever on she was a captain.” When Jennifer was young her parents told stories of how they taught her to always be positive with her teammates on the field. One of their ground rules was that her she could only vent when they got into the family van and no one else could hear her.

She [Jennifer] really did just that [vent in the van], I mean we would sit after the game in the van, even if we had won, where she would just literally vent. But on the field she knew she had to be positive with her teammates and we wouldn’t allow it any other way.

Jason’s parents discussed how an older teammate was “someone Jason looked up to and probably helped him a lot.” His roommate was also a swimmer and Jason’s parents thought it “helped having a good friend and roommate that was also a top-level swimmer.” Jason also influenced his teammates and helped younger swimmers when he became an upperclassman. His mother elaborated, “I think a lot of the swimmers actually had a lot of respect for Jason because they know how hard he had worked to get where he
was.” Tommy’s parents also felt that teammates respected and influenced their son. His father offered the following:

> I think they’ve [teammates] kept him humble and I think they look up to him and respect him and I think they’ve had as much to do with his development into who and what he is as much as anybody else.

Overall, the parents did not seem to mention the influence of teammates as much as the athletes. However, like the other themes that have been discussed, the parents noticed the support and encouragement the athletes’ received from their teammates.

**Children’s personality/mental characteristics.** This higher order theme was defined by the first order themes of “positive mental characteristics” and “negative mental characteristics.” This higher order theme evolved because many parents mentioned mental characteristics that they felt helped their children, and other characteristics that hindered their child’s development. Overall, the parents felt that their children were very driven and determined to succeed from a very young age.

The first order theme labeled “positive mental characteristics” developed because the following traits were mentioned by parents as being beneficial: “working hard,” “being intelligent,” “wanting to succeed at everything,” “being tough,” “focused,” “always prepared,” “confidence,” “competitiveness,” “fear of failure,” “patience,” “self-driven,” “self-motivated,” “goal-orientated,” “willing to sacrifice,” “being a fighter,” “being positive,” “disciplined,” “being jovial,” “modesty,” “determination,” “not being over emotional,” “being a winner,” and “knowing what it takes to win.” For example, Michelle’s father described, “I think it [what helped her most] was her discipline and her determination. Michelle’s one of those people to my mind that she can do anything and achieve anything she sets her mind to do.” Amy’s mother felt that her daughter was very driven. “Amy never complained and she really liked it and we never had to push her
because she was so driven.” Jennifer’s father discussed the level of his daughter’s competitiveness in the following quotation:

I spent 24 years in the military and played sports everywhere up and down and coached sports up and down. If you gave me a piece of paper and told me to list the 12 most competitive people I’ve ever come into contact with in any type of situation, Jennifer’s name would be somewhere on that list. When she was a young kid we had to quit playing board games in this house because you couldn’t stop playing with her until she had won. And you couldn’t let her win because if you let her win she was smart enough to figure it out that you let her win and then she would just have a temper tantrum.

Jennifer’s father continued, “Jennifer was very focused, self-driven, self-motivated, very goal orientated, but very competitive, very high standards … She had to learn to have patience with others.” David’s father also described the importance of competitiveness, “He’s always been very competitive … His pure toughness, his discipline, his focus.” Tommy’s parents saw the drive in their son and his mother noted, “He’s always had a determination.” His father added:

Tommy’s a winner; I don’t know how else to say it. He knows how to win and he knows what it takes to win. A lot of athletes are good athletes, a lot of athletes are great athletes and only about 20% of all the great athletes are winners, that’s what I think of my son.

Some parents mentioned negative mental characteristics they thought their children possessed. The parent’s discussions about negative characteristics were fewer than the positive characteristics. Some of the negative traits mentioned by the parents included: "hard headedness," "being stubborn," "being too nice," "being unselfish," "not focusing when having a girlfriend," "nervousness," and "being shy." Dennis’ father talked about one example of the negative impact that his son’s lack of focus had. “To me sometimes you could tell that he didn’t have it in him psychologically to run well that day, and other days he did.” He went on to add, “Dennis would always run better when he didn’t have a girlfriend, because when he did he didn’t have his mind on running, it wasn’t important
to him.” Jason’s parents thought that his “hard headedness” and “being stubborn” sometimes hindered him, especially in relations with his collegiate coach. Jennifer’s father, who was also her coach, discussed his thoughts on her being too nice.

It’s so funny because part of it is the coach in me, but I think she would’ve been a much more, in some instances she’s too unselfish, too nice. But it was that kind of thing that kind of created her being an outstanding team player because she is so unselfish and I think it’s a two edged sword. In some instances she may have gone further or done better if she’d been a little bit more selfish.

Collectively, the parents’ felt that the mental aspect of their children’s sport was important to success and they believed their sons or daughters possessed more positive than negative mental traits. In addition, the parents confirmed many of the perceived traits or mental characteristics discussed by the athletes.

**Priority on education.** The higher order theme designated as “priority on education” emerged because the parents felt that academics were as important, if not more important, than athletics. The parents placed emphasis on education during the interviews and discussed how academics and athletics were important developmental experiences for their children. Therefore, the higher order theme of “priority on education” was defined by the first order themes of “emphasizing education” and “academic/athletic interdependence.” The parents felt that athletics may only last so long and encouraged their children to concentrate on academics as well. Interestingly, the first author did not mention academics during the interviews. Rather, all the parents brought up this topic on their own accord.

The first order theme labeled “emphasizing education” developed because parents placed emphasis on education for their children. For instance, Amy’s mother noted, “I also think school is just as important [as tennis], you know graduating from college is the most important.” Jennifer’s mother agreed saying, “Education was always a high
priority. It wasn’t where does this fit in, it was always on the top of the list, everything else has to be built off of that, the education always comes first.” David’s father realized his son “appreciated the free education” and that David “worked hard to get the best education that he could get.” Jason’s mother mentioned, “School was always number one with him.” He mother was also proud that “He worked very hard to get into medical school.” Tommy’s parents felt that education played a role in his decision of where to go to school. His mother elaborated,

I think the education side played a lot into it as well. He knows the value of the education. He’s up there right now taking two classes where some kids are only taking one. And he’s taking two harder classes because he can put the time in it because he realizes you’re only one play away from a football career being over. I think he realizes that because he’s seen between his brother finishing playing and his friends not getting opportunities to play in the future and other people, he realizes how short it is so he’s making every effort to keep ahead in credits so when his five years are done he’s going to have everything set in line for his education. So if he doesn’t want to play football anymore he can come back and get a job teaching and coaching and move on from there.

The parents felt that doing well academically helped their children to succeed athletically and vice versa. Therefore the first order theme named “academic/athletic interdependence” emerged. For example, Michelle’s mother said, “It [sport] helps them [Michelle and her siblings] in their schoolwork.” She felt that swimming helped keep Michelle on a schedule. “It [swimming] never seemed to have affected her work. She would come home in the evening, eat, do her homework and study, go to bed and then wake up at again at 4:30 and do it all over again.” Jennifer’s father saw that her competitive side on the field “rubbed over into her academics as well.” He added, “For her the classroom was just another place to compete.” Jennifer’s parents were particularly proud because her college scholarship was academic, not athletic. Her father explained, “I bragged on that more than Jennifer did,” and he told her, “Long after you’ve
kicked the last ball, the skills that you used to get that academic scholarship are still
going to be paying dividends for you.” Jason’s parents felt that swimming helped his
academics as well. His mother elaborated

I actually always said that swimming is a very good sport to get into. You learn
how to balance your time and be disciplined because you know you have to
practice all these hours and you have all these meets on the weekends and you have
school that you have to keep up with. And Jason knew how to balance his school
ethic of homework and everything and his practice ethic and he just learned how to
do that.

In summary, the interplay of academics and athletics was viewed as important in
preparing the athletes for the future. The parents perceived athletic and academic
challenges as influencing one another and offering the potential for life long gains. In
addition, the parents shared a number of social-contextual influences on the
developmental process of their children. Overall influences the parents perceived on the
athletes included genetics, practice, the parents own influence and support, coach and
teammate influence, mental/psychological characteristics of their child, and education.
What follows are the results from the interviews with the coaches.

Coaches

The results of the inductive analysis of the coach interviews resulted in 44 pages of
text. As shown in Figure 3, the overall themes that resulted from focused coding
included: genetics, practice, parental influence, coach influence, teammate influence,
athlete’s personality/mental characteristics, and overall athlete qualities.

Genetics. The higher order theme of “genetics” emerged because the coaches
discussed the importance of genetics in the development and the success of the athlete’s
they coached. Consistent with the athlete and parent interviews, two first order themes
emerged, which were labeled “family/gene influence” and “physical traits.” The coaches
talked more about sport specific genetic characteristics than the athletes or the parents, but perceived genetics to have less of a relative contribution to the athletes’ development than other factors such as practice and situational influences.

The first order theme labeled “family/gene influence” surfaced because coaches talked about the influence of the family genetics and the feeling that the athlete had innate athletic abilities. Amy’s coach perceived her genetics, “those things that are not learned, I mean she’s born with that, an unusual amount of talent,” to be very important in her development. He felt as if her biggest influences were that “she’s a very instinctive and intuitive player, very talented.” He added that he noticed she had a “very very natural feel for a ball and she reads the play very well.” Jennifer’s coach also saw a genetic influence, saying that Jennifer was “very talented … and certainly had some innate abilities.” Jason’s coach perceived genetics to be “his biggest asset and very important in his success.” Likewise, Tommy’s coach talked about how Tommy was able to do many things well because of his athletic ability. “Athletic ability, balance, speed, change of direction, just things of that nature is something that he possesses that is a God given talent that has been worked on throughout the years.” As in the previous athlete and coach sections, the above quote illustrated the interaction of early genetic influences with practice.

The coaches mentioned physical traits that allowed the athletes to achieve success in college athletics. This led to the adoption of the first order theme labeled “physical traits.” Tommy’s coach said, “He’s [Tommy] has a good size … obviously you have to have the size, that’s an uncontrollable factor.” Michelle’s coach noticed physical traits that allowed her to excel in the sport of swimming. He mentioned the fact that Michelle
was “very muscular, a very strong woman, tall, lanky, big hands, big feet, and had a real good natural quickness.” Similarly, Jason’s swimming coach felt that genetics was a large asset to him because he was “a tremendously big guy, real long limbs, big hands, big feet … that and he was smart.” David’s coach mentioned physical traits that helped him succeed, yet also felt he was not the most naturally athletic person.

I think he had good genetics in certain areas and maybe he was lacking in some genetics. Obviously the genetics that were positive is he was six foot ten, he was big, and he was strong. But wasn’t the most overly athletic guy. He took his frame, his height, and he created a niche for himself.

Practice. The higher order theme labeled “practice” was defined by the first order theme “practice importance.” As noted earlier, genetics were seen as important, but practice was perceived as more important in the overall development of the athletes. The coaches pushed their athletes to work very hard in practices and expected them to push themselves to become better athletes. Amy’s coach felt that practice “helped her without a doubt.” In general, he felt that practice had “given her the necessary tools to become successful and that practice gave her technique, which is very good.” Tommy’s coach thought that he “does a nice job in practice but could work a little harder.” In contrast, David’s coach thought that David’s work ethic was one of his greatest assets. As noted previously, David’s coach did not perceive him to be the most natural athlete from a physical standpoint but felt he was able to “overcome a lot of limitations by just sheer work, desire, and drive and just unbelievable effort.” Jennifer’s coach felt that she had “the work ethic to go along with her abilities.” Jason’s coach described how Jason “had to work his butt off in practice so he learned the value of hard work.” Michelle’s coach talked about the fact that she was “constantly striving for ways to get better and was very
coachable.” Overall, the coaches in the current study perceived practice and working hard in practice to be important in the talent development of the athletes.

**Parental influence.** The coaches in the current study mentioned parents to be considerable influences on the athletes. Because the coaches observed the important role that parents provided for their children, the first order theme classified as “parental social support” emerged. Although the coaches did not know the parents of the athletes extremely well, they noticed the impact that parents had in the lives of the athletes. In general, the parents provided a great deal of social support to their children both before and during their collegiate years. The coaches felt that the parents helped the athletes stay grounded and do well in college.

The first order theme called “parental social support” evolved as coaches discussed parents being supportive and influential in the athletes’ lives. For instance, Jennifer’s coach had known Jennifer’s family prior to college because of the Olympic Development Program. She discussed how, “Her family is pretty well known and her parents are just really concerned with doing what’s best for Jennifer. I think they are really family-centered and Jennifer carries that same thing.” The coach elaborated on Jennifer’s family in more detail later in the interview.

That [her family] was a big influence, their support, being there all the time and just they were the type of parents who were never really critical of Jennifer whether she played great or whether she played poorly. They just were there to support her and I think it was a really healthy environment for her to develop as a person and as a player. As a person in athletics you see kind of both extremes with parents and sometimes the parent inhibits player’s development. I think Jennifer’s parents really helped her develop a lot more than most parents, just by being there and being positive.

Michelle’s coach noticed that “she came from a real good background, good family background, had great parental support and a lot of belief in her.” He explained this by
saying, “My perspective is they [her parents] were highly supportive, provided the financial means for her to do whatever she wanted to do, and the mother especially was positive no matter what the situation was.” Jason’s coach perceived Jason’s parents to be “pretty supportive and certainly allowed him to do everything he wanted to do.” The support theme continued with Tommy’s coach, who described how, “His mom and dad are very supportive of him. They’re very interested in him and I think that obviously pays off because of the support factor.” David’s coach discussed how he felt that the influence of David’s parents during his youth years helped him succeed later because they had instilled a hard work ethic in David.

I think that to me I have to look back at his parents and their upbringing and what they were able to do there as far as instilling and establishing a work ethic for David. I think that as I look back on David’s four years here and then when he was in high school, knowing him his junior and senior year, I think a lot can be attributed to his family, his mom and dad, I mean they have three kids and they’re all going to college on scholarships … They were very proud of David and I think you could see the genuine support for David. I think they were very very supportive parents.

Finally, Amy’s coach viewed her mother’s support as important. He noted the impact that losing her father had on her during her freshman year saying, “Losing her father I know was obviously a tough go and I don’t know how she responded the way she did … Her mom was very supportive. Her mom is a great mom.” Overall, the coaches in this study realized that the impact parents had in the lives of the athletes and the strong social support they provided was fundamental to the athlete’s success. At times, coaches felt they took on the role of a parent to the athlete, which will be elaborated upon in the next section.

Coach influence. During the athlete’s collegiate career, the coach played a meaningful role in the development of the athlete as both a player and a person. As
discussed previously, the athlete’s felt that their coaches provided support as well as a parental influence away from home. Therefore, the higher order theme labeled “coach influence” was defined by the first order theme of “coach social support”.

The first order theme of “coach social support” emerged because coaches talked about believing in the athletes and their potential to be exceptional athletes in college. Tommy’s coach felt that respect was a two way street between Tommy and himself. He elaborated on this by saying, “I think there’s an amount of respect that he has for the coaching staff and what they’re trying to get done and obviously there’s a great deal of respect for what he’s getting done.” He went on to add that he really enjoyed that Tommy was a “blue collar laborer where he just gets it done.” Jason’s assistant coach mentioned that “I was his motivator” and was able to keep Jason’s spirits up whenever he became disillusioned. David’s coach related his feelings that he wanted his athletes to feel comfortable and welcome coming to his office and know that he supported all of them on and off the court. Therefore, he was intense on the court, but realized “they also have school and different things they’re dealing with so I think that I’ve tried to make a conscientious effort not to be intense like that away from the court.” Amy’s coach noticed that she needed to be on a looser reign so he tried to “let her loose” during her senior year and that he and the assistant coach “emphasized the good things and didn’t really worry so much about mistakes.” He felt as if she “really got a kick out of that.” Amy’s coach took on a parental support role since she had lost her father previously. He and the assistant coach did not try to be her father but he said they “knew that we needed to show her that we’re here for her if she needs something.”
Relationships between the athlete and the coach were central throughout the athlete’s college career. Through the time the coaches spent with the athletes, close or respectful relationships developed. For instance, Tommy’s coach didn’t think they were close from the beginning, but that the relationship had progressively become better. “Probably since the last year I have grown to like him because he’s kind of a throw back and there’s not many of them left.” Jason was closer to his assistant coach, and his assistant coach elaborated on the good guy/bad guy relationship he and the head coach had designed. “There’s always that as an assistant coach when the head coach is the bad cop you’ve got to be the good cop and in Jason’s situation I was the good cop more than I was the bad cop.” Jason’s head coach said, “It went anywhere from adversarial to an understanding and pretty good food for what we were trying to accomplish … It’s designed to be a balance. It’s a constant good guy, bad guy balance.” Jason’s coach also coached Michelle, but he had contrasting relationships with the two athletes. With Michelle, the relationship was closer because he realized that:

Her previous situation was so demanding, almost unreasonably so. So I was probably a little more tolerant of her in certain situations than I should’ve been. Certainly much more understanding about where she was in relationship to where she used to be. So I think our relationship was certainly coach and swimmer, but sometimes maybe even a little bit bordering on the parental side because I saw a young lady that had a lot of attributes to give other than just being able to compete fast.

David’s coach told a story of how he had to “break David down a little bit in terms of getting him to be himself in front of me.” At one point David wrote his coach a letter where he apologized for missing a non-mandatory pick-up game because he had to buy books for school. After David became more comfortable, the relationship evolved as discussed below.
Over time we became closer and closer … there was a bond that we built and developed over time that I think that’s very very close. I mean even today he calls and checks with me every other day to let me know how his workouts are going and he wants me to call different teams so I think our relationship is very good from that standpoint.

Jennifer and her coach also had a good relationship during her college career. Jennifer’s coach respected Jennifer because of her academic and athletic achievements, as well as her personality and work ethic. “She’s [Jennifer] is just a terrific role model. I enjoy spending time with Jennifer. She’s the type of person you would want your son or daughter to be.” Amy’s coach “enjoyed working with her” because she was so talented yet also willing to work hard and learn. He said they had a good relationship and that it was important for him that “she knows if something happens that she could always walk through these doors and we’d help her … We’ll do anything for that kid and it’s important to us that she knows that.”

As shown by the previous quotes, the coaches and athletes developed close relationships with one another. In addition, the athlete’s tended to stay in touch with the coaches after they graduated, which showed the impact of the role the coaches played in the athletes lives. The social support influences of the coaches were important to the athletes because it allowed them to enjoy their sport during college and to feel like they had a parental figure away from home. The coaches also discussed the important role that the athletes’ teammates had on the development of the athletes interviewed. These findings will be discussed next.

Teammate influence. The higher order theme labeled “teammate influence” was defined by the first order theme of “teammate social support.” Teammate social support developed because, according to the coaches, the athletes’ teammates provided friendship as well as camaraderie. The athletes in the current study provided leadership and support
for their teammates as well as obtaining support from them. An example of teammate social support goes back to Amy’s adversity when her father had passed away during her freshman year. Amy’s coach perceived her teammates to have had a “huge impact on her especially during that time in her life.” He described, “That [her teammates] was probably the one thing that kept her going after her father passed away, the support of her teammates and that fact that she played for a team.” He also described how Amy was “such a team player … she was all about the team first.” Jason’s coach mentioned that it helped Jason to have teammates that trained with him and that “a lot of them were influential on him.” Tommy’s coach mentioned that Tommy had “good interactions with his teammates … his teammates respect him because he’s a guy by actions.” David’s coach thought that he was a strong leader for the team. He said that David “provided great leadership, was a great role model, and was a great example for so many of our young kids.” Jennifer’s coach noted that she was “a terrific role model … she influences her peers but at the same time she definitely buys into the whole team concept. Her teammates have impacted her in the sense of the positive environment.”

Overall, the athletes in the current study were perceived by their coaches to be leaders on their teams who both provided and received support because of the sport they played. As Jason and Michelle’s coach described, “These are the type of people you would want to build a program around.” Teammates were important influences on the athletes, just as much as athletes were influences on their teammates.

Athlete’s personality/mental characteristics. The coach’s mentioned psychological characteristics they felt allowed the athletes to become successful in sports. Therefore, the higher order theme labeled “athlete’s personality/mental characteristics” emerged. In
addition, the coaches noted some mental characteristics that hindered the athlete’s success. Because of this, the first order themes labeled “positive mental characteristics” and “negative mental characteristics” were established. These were similar to those described by the athletes and parents. Again, the number of positive characteristics far outweighed the negative characteristics mentioned.

The “positive mental characteristics” that contributed to the athletes development and success included: “competitiveness,” “commitment,” “diligence,” “good work ethic,” “focus,” “stubbornness,” “confidence,” “maturity,” “diligence,” “self-motivated,” “self-sacrificing,” “self-disciplined,” “coachable,” “goal-orientated,” “analytical,” “intellectual,” “heart,” “desire,” “loyal,” and “driven.” For example, Jennifer’s coach said, “She’s got a real competitiveness … confidence helped her for sure and she’s able to concentrate and focus in games where there were a lot of distractions going on around her.” David’s coach thought that his “work ethic was the difference for him,” and also “his commitment, his attention to detail, his just so focused and so tedious so he’s just somebody that pays attention to every minute detail.” Tommy’s coach described the following:

Mentally wise and schematically what I call how to block and who to block and when to block … the intelligence factor of what to do and how to handle it and put it all together has made him a special player.

Amy’s coach described her as “very stubborn” but with an “open mind to improvement.” He felt that “mentally she definitely has what it takes to play at the highest levels.” Michelle’s coach described her mental attributes that allowed her to succeed as being “very coachable and very goal orientated.” Finally, Jason’s coach thought that he had a few mental characteristics that were benefits as well as liabilities. These characteristics included “his intelligence and the fact that he was very motivated and set high
expectation levels for himself.” The reason these became detrimental is discussed below.

Other positive mental characteristics mentioned by Jason’s coach were “loyalty, being a hard worker, and pride.”

The first order theme labeled “negative mental characteristics” included: “not being very outgoing,” “making excuses,” “being worried after an injury,” “not taking criticism well,” “not being assertive,” “being stubborn,” “having a temper,” “having a fear of failure,” “having a low self-image,” “not being cooperative,” and “not improvising well.”

For example, Amy’s coach noticed that Amy was “worried about coming back after the injury, like she was nervous about that.” David’s coach thought that his “biggest problems were his mental problems.” He went on to discuss this problem in more detail:

I think David could be an athlete, I think a lot of high work ethic, self-disciplined, self-motivated people probably carry around a lot of guilt and a lot of self-doubt. The reason they’re doing that is because of fear of failure. I think that falls in the case with David. David I think fears failure, fears not doing well, doesn’t like that feeling but at the same point in the back of his mind there’s a piece of him that feels like he may fail so he sometimes mentally can be his own worst enemy.

Tommy’s coach thought that he was “not a very outgoing guy” so he needed to learn to have “more authority and more assertiveness” in order to keep his success going at the next level. Amy’s coach thought that the only thing that hindered her was her “temper” but that they had worked hard on it her senior year to try to control it. Michelle’s coach thought that her “success at an early age” hindered her because she had to deal with high expectations after her early success and was not able to enjoy the success enough, which led to a “mental block for her the second time around.” As mentioned previously, Jason’s intelligence and high expectations for himself were both positive and negative mental characteristics. His coach described how Jason’s intelligence was detrimental as well as instrumental:
He could see the whole season, he could see where everything was going, so you couldn’t have those hey the guy in lane five was talking about your girlfriend and fire him up type conversations because it just wouldn’t work. So his intelligence got in the way a little bit.

Also, Jason’s high expectations led him to “be too hard on himself when he didn’t get there right away.” Overall, the coaches perceived mental characteristics to be important in the development of the athletes. These observations again confirmed the views previously expressed by the athletes and parents.

**Athlete qualities.** The higher order theme labeled “athlete qualities” emerged because the coaches in the current study thought the athletes possessed certain attributes that made them special as people. In general, the coaches had a good deal of respect for the athletes they coached and thought they were extraordinary people. Therefore, this higher order theme was defined by the first order theme called “athlete character qualities.” For example, Jason and Michelle’s coach discussed how the two of them were both people who a coach would want to build a program around because they are good examples of the interplay of an athlete and a student.

I think they’re both basically good people. Number one characteristic is that if you were building a program you would want to build a program around people like Jason and Michelle because they basically are good people, they’re goal-oriented, great family backgrounds, and they were good students.

Michelle’s coach went on to add that she was “a great team leader and key in the development of a team attitude.” As for Jason, his coach perceived him as having “some great characteristics from a team leadership standpoint … he’s a great guy.” Team leadership appeared as a characteristic that many athletes in the current study possessed, whether it was because of their successes on the court or field, or because of their character qualities. Tommy’s coach thought that his hidden intangibles were that “he’s a good guy, tough, plays hard, plays for the right reasons, enjoys what he does, and he’s a
leader. He’s a special player.” David’s coach elaborated that he was “one of the most
decorated athletes to ever play here … so as far as a student-athlete is concerned and
what college represents, there’s not more of a poster child than him.” He thought that
David got to where he was today because of “his mental mindset, because he’s totally
self-sacrificing and he’s total about the team and he has the heart of a champion and he’s
willing to do whatever he’s got to do to win.” Jason’s assistant coach thought Jason
really “had a love for the sport even though he had to work harder because he was a
walk-on.” This coach saw many swimmers that only swam for the money (scholarship)
but knew that Jason swam for “the love of swimming.” Amy’s coach discussed her
strength and resilience after the death of her father.

I don’t know how she responded the way she did, just incredibly tough to be able to
come back and play and play really well right after it happened. I mean that’s just
very rare for an 18-year-old to be able to do.

Her coach added that Amy was a “terrific team player” and was “all about the team first.”

Jennifer’s coach thought that Jennifer was “a real quality individual.” She then discussed
her feelings about Jennifer and described her “outstanding career” by saying:

I think Jennifer is one of the most valuable players we’ve ever had in the history of
our program. Not just because of her playing ability, although that was a big thing
she was certainly a great player for us, but just because of her legacy that she left as
a person and in the classroom and just being able to balance all of those things.
She was just the ultimate role model as an athlete, as a student-athlete. Somebody
that could get involved with community service, somebody that does great in the
classroom and cares about their work, and somebody who is a great teammate and
is so successful on the field as an individual as well.

The general feeling from the coaches was that the athletes in the current study were
well rounded, respectable, successful, and role models for others. The coaches
appreciated working with the athletes in the current study and enjoyed developing
relationships with them that they felt would continue to last far past their collegiate
careers. The overall influences the coaches perceived on the athletes included genetics, practice, parental influence, their own support as coaches, teammate influence, athlete’s personality/mental characteristics, and the athlete’s character qualities. The next section of the results will provide data describing the perceived ratings of the influence of different factors on the athletes.

**Overall Ratings by Participants**

The participants were asked to rate the percentage they felt three different factors (e.g., genetics, practice, situational) contributed to successful athletic development. This was their perceived rating about the relative influence of genetics, practice, and situational factors on the development of the athletes in this study. During the interviews, situational factors were described as family, coaches, and teammates. As shown in Table 1, the average overall rating of the athletes for genetics was 25%, practice was 49%, and situational factors were 26%. The parent’s average overall ratings were 27% for genetics, 41% for practice, and 32% for situational factors. The overall percentage rating from the coaches for genetics was 28%, practice was 35%, and situational factors were 37%. The highest and lowest perceived ratings by each subgroup are shown in parentheses.

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The following excerpts demonstrated explanations about the reasoning the athletes gave for their ratings. Jennifer rated all three factors fairly close.

Genetics I would give 30% because I know people who I don’t think are that athletic who have become good soccer players. So I think it’s [genetics] key as far as allowing you to have the base, the foundation to kind of start work with, but I’ve seen people who are great athletes not excel and I’ve seen people who are okay athletes excel. Then I would give work, the amount of work you put in and stuff, I would give that the most. I would say probably 40%. Then I’m left with 30% for situational. I think the reason why I was able to accomplish as much as I was is I was in the right situation. I was in the right place. I was in the place that helped me as far as nurtured me to improve.

Amy rated situational factors very high. “I think being around my three brothers influenced me the most.” Michelle had a slightly different perspective and perceived practice as the most important factor for her.

Eighty for practice, ten, and ten for the other ones. I know some people just don’t have the ability to do something but if someone, I think everyone has some ability to find one sport they’re pretty good at and if they just give it everything and they have everything work for them, obviously you need the right coaches, the right facilities, the right eating habits, the right this and that, but if all those things do click I think practice is the most important thing.

Dennis felt that genetics were important, stating, “I’d say genetics plays a huge role, that’s probably the biggest, I really think it has a lot to do with your make-up.” Overall, the athletes felt that all three factors played a role in their athletic talent development.

Parents placed fairly equal value on genetics, greater value on situational factors and less value on practice than the athletes did. Tommy’s father elaborated on his ratings by saying, “Family, coaches, friends, and his foundation around him I think 40%. His genetics and his practice are 30% apiece because you have to have the genetics to get there, and you have to have the practice.” Overall, like the athletes, the parents felt that all three factors played a role in their child’s athletic talent development.
Similar to the athletes and parents, genetics was rated the lowest of the three factors for the coaches, but situational factors were slightly higher than practice. Tommy’s coach felt that it was “a combination of all three” and rated them 33%, 33%, and 33% respectively. He added, “I think that all of it is a byproduct of the rest of it. It all goes back to your heart and mind and how you see things.” David’s coach thought that both situational factors and practice were the most important factors and rated them both 45%, with genetics receiving the remaining 10%. He discussed this by saying, “I would say practice, his work ethic, his drive, his unbelievable pain threshold for work and I’d say his parents instilling that in him [were most important] and the least important thing for him has been his genetics.” In conclusion, the coaches, analogous to the athletes and parents, felt that all three factors played a role, but that genetics had the least importance.

**Summary of the Major Findings**

As shown by the previous section of raw data results, many of the themes mentioned overlapped between the athletes, the parents, and the coaches. This allowed for favorable reliability, as well as triangulation between sources, because of the repeatability of many of the stories and accounts between the athletes, parents, and coaches. Overall, the participants felt that a favorable interaction between genetics, practice, situational factors (family, coach, and teammate support) and mental characteristics was ideal for becoming a highly successful collegiate athlete. The participants declared that it was an interaction of these factors, rather than only one or two factors, that allowed the athletes to develop.

The current study showed that genetics served as the basis or starting block for the athletes, but practice and support from family, coaches, and teammates was needed.
Genetic influences received the least percentage amounts for all three groups of participants, mainly because only height, size, and an innate athletic ability were perceived to truly influence the athlete from an innate standpoint. The consensus among the participants was that practice was a necessary tool to develop athletic talent. The participants felt that even if an athlete was born with talent, practice still played a very large role in developing the innate abilities that may be there. In fact, practice received the highest overall ratings of importance in the current study. Also, it was revealed that practicing a variety of sports and the amount of effort put into practice was very important.

Social support from parents, coaches, and teammates were also influential for the athletes in this study. Only one athlete had divorced parents, one athlete’s father had passed away during her college years, and one athlete’s mother and father had passed away prior to her coming to college. The five remaining athletes were from intact families. The parents, and in some cases siblings and coaches, introduced the athlete to sports. As the athletes grew older the parents continued to support and gently encourage the athletes to continue participation. The coaches became a type of surrogate parent away from home and offered support, encouragement and instilled confidence in the athletes. The athletes’ teammates were influential in the lives of athletes because they showed support and believed in the athlete, encouraged, pumped each other up, and made the sport like a family atmosphere. The athletes’ relationships with influential people were very important.

In addition, mental and personality characteristics such as competitiveness, determination, drive, heart, and desire to succeed were discussed at length as important
characteristics possessed by the athletes in this study. Another parallel finding was that all of the participants encountered a significant adversity or challenge during their sport careers. In all cases, the athletes had an extensive social support network and coping resources which allowed them to adapt to their adverse situations.

Two grounded theories emerged from the results of the study. First, a grounded theory depicting the development of talent for highly successful collegiate athletes emerged based on the data showing that each athlete went through a long developmental process. This process included a large amount of social support, which in turn led to coping and other skills that allowed the athlete to overcome an adverse situation. Because of the importance of social support in the lives of the athletes, a second grounded theory was developed to depict the important social support influences in the development of highly successful collegiate athletes. These grounded theories will be discussed in detail below.

**Grounded Theory A**

Consistent with the grounded theory analytic procedures described by Charmaz (2000, 2002) and Strauss and Corbin (1990, 1998), a theory will be presented that elucidates the athletic talent development process. This portion of the investigation explicates how the contextualized process of athletic talent development was linked to individual meanings attached to the participants’ experiences. The grounded theories depicted in Figures 4 and 5 were developed from the interview responses of all the participants and the extant literature discussed previously. Although the description that follows relies primarily on observations from the current study, previous theoretical and empirical work was also integrated into this theory through the use of sensitizing
concepts. As discussed in the methods section, the use of sensitizing concepts, or previous literature, is consistent with grounded theory procedures (Charmaz, 2000). In this study, this process allowed the research team to use previous stage theories of athletic skill development (e.g., Bloom, 1985, Côté, 1999) as a lens from which to interpret the present data. However, previous theory and research served only as starting points from which to interpret the present data. Specific points of departure from previous research will be noted throughout the following sections.

For Grounded Theory A, the first stage (Box A of Figure 4) of development involves the acquisition of important genetic predispositions to be successful in sport. This is the time when the person enters the world and is born with the physical (e.g., height and size) and mental (e.g., motivation, coping skills) characteristics that develop over lifetime.

The second stage (Box B of Figure 4) of the grounded theory revolves around early influences to begin participation in sport. The results of the current study and previous research by Côté (1999) demonstrate that many elite athletes are influenced to begin participation in their sport by siblings or parents. However, some of the participants also began participation during their high school years as a result of encouragement from coaches.

The third stage (Box C) of athletic development begins in middle to late adolescence and is characterized by a time period of environmental opportunities and critical social influences. It is during this time that sacrifices are made by the athlete and his/her family, the athlete begins to increase practice quantity and quality often times in multiple sports, greater emphasis is placed on education, and of particular concern here is
the development of effective social support systems for the athlete. The athletes were also fortunate to have access to critical and unique environmental opportunities (e.g., access to practice facilities, parental sacrifices, educational opportunities, participation in a variety of sports). While genetics and practice opportunities were viewed as essential for the athletes in this study, parental sacrifices and educational successes also contributed towards their skill development. The theory presented here predicts that having access to social resources (e.g., practice opportunities, parental sacrifices, social support networks) is an important situational variable that enables athletes to develop their full athletic potential. From this perspective, an interaction between one’s genetic potentials and situational opportunities allows for the development of important physical and psychological skills in sport (elaborated on below). Since the qualitative methods used in this investigation were ideally suited to focus on social-contextual factors in athletic talent development, the focus now turns to one key social variable: social support.

The theory that follows posits social support as a key social-contextual variable that influences athletic talent development. Consistent with the work of Rees and Hardy (2000), the development of social support networks facilitated the development of coping skills for the athletes in this study. The importance of critical social support influences as well as the environmental opportunities outlined above has also been shown in studies such as Bloom (1985), Côté (1999), Gould et al. (2002), and Durand-Bush and Salmela (2002).

The fourth stage (Box D) of the grounded theory predicts that youth athletes simultaneously experience early athletic success while they begin to develop important
psychological skills and characteristics such as motivation, coping skills, competitiveness, and self-regulatory skills. These skills may be partly inborn and continue to develop throughout the athlete’s career. Because of their early successes and the presence of supportive individuals (e.g., parents, coaches), the athletes in the current study were afforded the opportunity to travel, meet a variety of people, and receive scholarships. All of these opportunities were influential in stimulating further participation and enjoyment in sport. The lessons learned from early sport participation and success are predicted to facilitate the development of crucial psychological skills (e.g., time management, coping skills, responsibility, leadership, working with a variety of people, as well as developing their strengths as a person). While the development of important psychological skills in sport is most likely ongoing, it could be argued the decision to specialize in sport requires a greater level of focus and commitment on a single sport than previously experienced by youth participants. Thus, the psychological characteristics that develop during this time frame seem necessary for athletes as they specialize in sport.

The fifth stage (Box E) of the grounded theory transpires when the athlete chooses to specialize in one sport. This usually happens during the high school years or prior to the time the athlete enters college. The important aspect of this stage is that the athlete must decide to specialize and not be pressured by parents or coaches. The participants in the current study emphasized the importance of having control over their decision to specialize. At least one elite athlete from this study received pressure to participate from a coach. This traumatic experience caused her to quit her sport for a period of time. Overall, this stage of development is similar to Bloom’s stage of perfection and the
investment years by Côté, because the participants chose one sport and placed emphasis on success.

During the sixth (Box F) and seventh stages (Box G) of development, the athlete is faced with a critical or adverse life event. It is during this time that athletes apply the previously developed psychological skills and social support system previously described. Several of the athletes in the current study had to cope with adverse or challenging incidents such as the death or divorce of parents, injury and/or surgery, being a walk on or thrown into a starting role, or excessive stress or pressure from a coach. The development of coping skills and a social support system described in Boxes C and D helped the athletes in the current study adjust and adapt to these circumstances. It is during this stage of the athletes’ development where two possible outcomes are predicted to occur: the athlete will adjust and overcome adversity, or not. The outcome that occurs is dependent upon the athletes’ coping skills and social support system.

The eighth stage (Box H) of the grounded theory also has separate outcomes dependent on which path the athlete followed from the previous section. If the athlete possesses enough personal and social resources to successfully cope with the adverse situation, then a positive outcome is predicted. A lack of personal and social resources would most likely lead to lower levels of motivation and satisfaction. This concurs with Morgan’s (1980) mental health model, which shows that successful athletes exhibit greater positive mental health than less successful athletes. The results of the current study suggest that positive adaptational outcomes result in increased motivation, determination, and satisfaction in sport. In addition, a change in values or perspective about life was shown to occur during this stage.
The ninth and final stage (Box I) is self-explanatory. If the athlete was able to cope successfully with adverse critical incidents, then he or she will be better prepared to develop expertise in their chosen sport and other life domains. Thus, the coping skills gained from social support networks and exposure to adverse situations is predicted to be essential to athletic talent development. The empirical findings and theoretical predictions offered here are supported by contemporary sport psychology research (Bloom, 1985; Côté, 1999; Durand-Bush & Salmela, 2002; Gould et al. 2002; Giacobbi, Lynn, Wetherington, Jenkins, Bodendorf, & Langley, in press; Rees and Hardy, 2001). Because of the importance placed on social support by the athletes in the current study, another grounded theory was developed in order to elaborate upon the different functions and nature of social support for highly successful collegiate athletes.

Grounded Theory B

The athlete’s, parents, and coaches in the current study discussed a variety of social influences that allowed the athlete to emerge as successful and able to cope with stress and adversity in sport and life. An overall feeling of unconditional support and caring was apparent with the participants. The athletes in the current study were supported from an early age and throughout their careers. Therefore, the second grounded theory was developed to depict the unique role of social support in the sport development.

Section A of Grounded Theory B explains the “who” of the social support network. In the current study, parents, siblings, coaches, and teammates all offered support to the athletes. While the present findings supported the stage theories discussed by Bloom (1985) and Côté (1999), it was also found that the nature and importance of social
support changed and evolved as the participants grew older. For example, the parents began as very influential during the early years of the athletes’ careers. As time passed, the influence of the parents grew and they provided a great deal of support in a variety of different ways. As the athlete grew older and entered college, the influence of the parents became indirect. The parents continued to support the child unconditionally, but mainly provided emotional and tangible assistance.

From the current results, coaches appear to play an increasingly more important role as athletes grow older. During the high school years, coaches offer technical assistance and some emotional social support. The degree of technical and emotional social support provided by high school coaches to the athletes in this study varied. In some cases, high school coaches inspired the athlete to pursue college athletics. In college, the coach-athlete relationship became more important. For the athletes in this study, the coach became a parental figure away from home. However, the coaches were part of a larger social support network, as teammates were also shown to be important. The closest athlete-teammate relationships discussed by the participants in this study were in college. During this time, teammates became almost like siblings to the athletes. While previous research has shown that other support providers could include significant others (Rees & Hardy, 2000) and sport psychologists (Gould et al., 2002), the athletes in the current study did not make mention of these individuals.

Section B of the grounded theory depicts the “what” of the types of social support provided. In general, four types of social support are possible: emotional, esteem, informational, and tangible (Rees & Hardy, 2000). Each of these types of support was provided to the athletes in the current study. Multiple forms of social support allowed the
athletes to gain advice, feedback, and encouragement from different sources in differing manners. For instance, emotional support included looking to others for compassion and allowing the athlete to feel cared for by others. In the current study, all members of the social support network provided emotional support to the athletes. Emotional support emerged as unconditional support and caring for the athlete, and the knowledge that a social support network was there for them during times of adversity. In addition, coaches, parents, and teammates provided esteem support throughout the careers of the athletes in this study. In general, esteem support reinforced the athlete’s self-confidence and self-esteem. Consistent with previous coping research in sport (See e.g., Dale, 2000; Gould et al., 1993; Giacobbi et al., in press) emotional and esteem support promoted emotion-focused forms of coping.

Another form of support, informational support, provided athletes with advice, direction, challenge, acknowledgment, and reality confirmation. In support of Bianco and Eklund’s (2001) observations, the athletes in the current study most often received information support from their coaches and teammates. Both coaches and teammates were able to assist the athlete with technical information, advice about situations they had not experienced, and reality confirmation. Finally, tangible support was provided by parents and coaches, but varied as to the type of assistance provided. The parents furnished the athlete material assistance such as time, rides, and finances, especially prior to the athlete entering college. The coaches provided the athlete with technical/informational assistance through time, knowledge, expertise, and coaching. Tangible support, like informational support, promoted problem-focused forms of coping.
All of these types of support interacted and allowed the athlete to feel like they had a large support network and a variety of types of support.

Section C of the grounded theory depicts the “how” of the development of social support. As indicated by Bianco and Eklund (2001), instrumental goals and relational goals drive social support. Instrumental goals lead to enhanced coping and relief from distress and relational goals lead to relationship formation and maintenance. The “who” and “what” of social support allowed the athletes in the current study to achieve the “how” of social support. Instrumental goals were achieved when the athletes strengthened their coping skills through direct observation from coaches, teammates, and parents. On the other hand, relational goals allow individuals to directly enhance social support networks. In the current study, the relationships formed between athletes, coaches, and teammates continued to extend past the high school or collegiate years.

Section D of the grounded theory depicts the “benefits” of social support. Once the “who,” “what,” and “how” of social support has been established, the athlete is able to utilize the social support network. Consistent with Rees and Hardy (2000) social support was shown to be multidimensional and assisted in the identity and overall development of the athletes in the current study.

In summary, social support allowed the athletes in this study to adapt to various circumstances throughout their sport career. Rees and Hardy (2000) noted the importance of athletes utilizing the social support network proactively to cope with adversity. Likewise, Bianco and Ecklund (2001) demonstrated that social support could lead to improved health and well-being, which was also shown in the current study.
Therefore, the importance of social support cannot be overlooked during the development of athletic talent.
CHAPTER 5
DISCUSSION

The purpose of the current study was to utilize multiple perspectives to describe the major influences and important experiences in the development of highly successful collegiate athletes. Another purpose was to utilize these descriptions and experiences to create a theoretical framework that represented the most important social relationships and major influences in this process. In-depth interviews were conducted with highly successful college athletes, both male and female, from a variety of sports. The results provided evidence in support of the interactional account of athletic talent development (Durand-Bush & Salmela, 2001; Singer & Janelle, 1999). The following higher order themes emerged as important influences in the athletic development process of the athletes in this sample: genetics, practice, support from family, coaches, and teammates, mental characteristics, coping with adversity, opportunities, lessons from sport, other sport participation, priority on education, and athlete qualities. The results from the current study will be discussed with regard to the extant literature. Then, theoretical and practical implications from the grounded theory developed from this study will be offered. Finally, recommendations will be made for future research directions.

As shown by the multiple accounts of the athletes’ experiences, a wealth of data was observed. Much of these data concurred with previous research, whereas other data contradicted or extended previous research, which will be described in more detail later. Because of the qualitative methods used in this study, an in-depth glimpse into the lives and development of the athletes was ascertained. As such, more relevant information
was gleaned with regard to social-contextual influences on the participants’ experiences
than genetic explanations. However, many of the participants did discuss the importance
of genetic factors such as height, weight, body composition, personality, and the fact that
many parents of the athletes were athletic. While the results here place primary
importance on practice and social-contextual influences, genetic accounts cannot be
overruled.

Practice was viewed as the most important or key factor in the success of the
athletes in this study. This lends support to Ericsson’s viewpoint that practice is the most
important aspect to talent development. Many times a participant would give the opinion
that genetics provided the foundation from which to build and develop their skills.
However, practice and social accounts were seen as the most important aspects of the
athlete’s development. Some of the athletes did not meet the 10 year, 10,000 hour
deliberate practice requirement advocated by Ericsson (1996) because they started late in
the sport they played in college. Therefore, some athletes may be able to progress to
become highly successful college athletes in less time than 10 years or 10,000 hours. The
10-year rule did apply to six of the eight athletes, so it is not fully disregarded in the
current sample. While practice was seen as essential to the success of the athletes,
critical social influences, particularly social support, appeared to be just as important.

Social support from parents, coaches, and teammates was found as essential in the
current study. The importance of social support has been found by other studies as well
(Giacobbi et al., in press; Gould et al., 2002; Côté, 1999). In the current study, social
support helped the athletes develop coping skills that allowed the athletes to overcome
adversity. Taking social support a step further, it was found to aid in overall
development of identity, development of physical, psychological, coping, and life skills, and development of positive relationships that extend into the future.

In addition to genetics and practice, the participants discussed situational factors that impacted their athletic talent development. Interestingly, some of the athletes were influenced to begin participating in sports by their older sibling, their parents, or a high school teacher/coach. In fact, older siblings influenced five of the eight participants to begin sports. Not only was the family instrumental in getting the athletes started in sports, but they also provided support to the athletes throughout their athletic careers.

Support from parents was essential to the athletes in the current study. The parents, athletes, and coaches all agreed that parental support was very important to the development of the athletes. The provision of supportive parents provided the athletes with tangible assistance, a structured and stable home life, and the belief that they were cared about and were not being pressured to succeed. The parents in the current study were not perceived to be overbearing, and allowed the athletes to make decisions on their own. For example, many times the athletes had to choose between two sports, and the parents were adamant that it was important to allow the child to make the decision to specialize on their own. The athletes in the current study participated in at least two or three, and often more, sports when they were young. One participant even played four sports during her high school years. These results are consistent with Vernacchia et al. (2000), who found that participation in many sports was important for development.

The parents in the current study also placed high priority on education. Similar to findings by Côté (1999), the parents here felt that sports may not last forever and education will provide the basis for future skills and success. The opportunity to receive
a college scholarship because of sports was extremely beneficial in the eyes of the parents because not only was their child able to continue playing the sport they loved, but they were also able to receive an education for free. Most of the parents in the current study considered themselves to be middle class or lower middle class. Throughout the years leading up to college, the parents had to sacrifice a great deal of time and money to allow their children to participate in sports. These sacrifices were viewed as worthwhile financially and helped to develop relationships within the families.

Along with parental support, support from coaches was also found to be very influential in the lives of the athletes. The coaches were viewed as teachers, inspirers, motivators, and almost like parents away from the home. It was very important to the athletes in the current study that their coaches were positive and cared about them both on and off the field as athletes and people. This conclusion supported the findings of Vernacchia et al. (2000), who found that the coach-athlete relationship was extremely important and that coaches’ served an advisory role to their athletes. As in Bloom’s (1985) research, athletes and coaches developed strong relationships. Even when the coaches became stricter and demanding of enormous amounts of attention, as in Bloom’s “Stage of Perfection,” the athletes were still very fond of their coaches and felt they had a close bond. Durand-Bush and Salmela (2002) used Côté’s (1999) “Stages of Sport Participation” and ascertained that coaches were both motivating and demanding, which coincided with the results of the present study. Similarly, the coaches in the current study placed importance upon hard work and compassion for their athletes. These results are similar to the findings of Gould et al. (2002), who found that coaches of Olympic athletes provided encouragement, emphasized hard work and fun, and facilitated trust building.
In short, it seems apparent from the present study and previous literature that elite athletes require a combination of coaching expertise, tangible assistance, and emotional support from their coaches.

Teammate support also played a role in the lives of the athletes in the current study. The teammates of the athletes provided a variety of different forms of support, as well as friendship. Aside from Giacobbi et al.’s (2002) investigation of college coaches, teammates were not mentioned in other studies focused on collegiate athletes. The teammates for the athletes in this study taught the athletes many things and gave them competition during practice. The athletes also mentioned remaining friends with many of their high school and college teammates. In a way, it seemed as if being friends with teammates was made easier because they understood what the athlete was going through and spent so much time together. The teammates allowed the athletes in this study to stay grounded, to have fun, and helped them realize they are there to compete and pursue their goals.

One interesting non-finding from the current study was the influence of sport psychology consultants. The majority of the athletes in the current study had never worked with a sport psychology consultant. In one case, a participant had worked with a sport psychology consultant but it was only for a short period of time. This was interesting because Gould et al., (2002) and Durand-Bush and Salmela (2002) mentioned sport psychology as an important factor in the success of the participants. The difference between the findings of this study and the previous work mentioned may be a function of sampling differences as both previous studies assessed World or Olympic competitors,
where the athletes in the current sample were still in college. Therefore, the college
athletes, at least in this sample, appear to lack exposure to sport psychology consultants.

Although the athletes in the current study did not engage in sessions with sport
psychology consultants, they did mention a variety of mental/psychological
characteristics that helped and hindered their careers. The most often mentioned
characteristics that allowed the athletes in the current study to be successful were
competitiveness, drive, determination, heart, intelligence, focus, being positive, and being
easy going. The athletes also set goals, used visualization, and tried to relax before
competitions. Overall, the psychological skills mentioned by the athletes in the current
study paralleled some of those mentioned in the Orlick and Partington (1987),
Vernacchia et al. (2000), Durand-Bush and Salmela (2002), Giacobbi et al. (2002), and
Gould et al. (2002) studies. Interestingly, the athletes in the current study felt that some
mental characteristics were inborn, whereas others had developed over their years of
competition.

One aspect not explored by the previous studies was mental characteristics that
potentially hindered successful athletes. The mental characteristics mentioned that the
athletes felt hindered their performance were being hard-headed and stubborn,
nervousness, shyness, negative self-talk, being tentative, and a lack of confidence. It is
possible that working with a sport psychology consultant could have helped them
overcome some of these weaknesses. It would also be interesting to explore the roots of
these negative mental characteristics, as well as how the athletes are able to overcome
them to become successful. The athletes in the current study were usually able to
overcome these adverse mental thoughts.
Aside from overcoming mental roadblocks, all of the athletes in the current study had to overcome some type of adversity or critical incident during their careers. Some of these incidents occurred before college, but many occurred during college. Such situations as the death of one or two parents, injuries and surgeries, complications from surgery that almost caused death, divorced parents, having a coach that pressured too much and almost made the athlete quit the sport, and having to prove themselves as a walk-on or new starter. The range of these personal adversities was wide, but all of them played a significant role in the lives of the athletes in this study. For instance, adversity was mainly interpreted as a positive life lesson for the participants. As shown by the grounded theory developed from this study, the ability to successfully cope with critical incidents may be a key adaptational mechanism for the success of elite athletes.

As for sampling in the current study, a few of the athletes who were interviewed in this study would have been left out of studies such as the Durand-Bush and Salmela (2002) and Gould et al. (2002) studies. Even though they were successful in college, they would have been excluded because they chose to pursue alternate avenues rather than following the path of professional or Olympic athletics. It would be interesting to investigate what persuaded the athletes in the current study to veer off the path toward professional athletics. It seems as if many of the personality and psychological traits found in previous samples with elite athletes were found in this sample as well. It could be that other opportunities or lessons learned may have influenced my participants to focus on educational opportunities.

The results of the current study support the stage theories offered by Bloom (1985) and Côté (1999). For the first stage, the athletes in the current study began participating
when they were young and played a variety of sports. Their parents were supportive and
took their children to numerous practices. Early coaches were usually introductory
coaches and made the sport fun for the athlete. During the second stage, the athletes
became somewhat more serious about a few sports and began to compete more often.
The parents continued to support their children through time, travel, and monetary means
while the coaches became more intense and practice time increased. In the third stage,
the athletes chose to pursue and became immersed in one sport. Practice time greatly
increased as well as the amount and importance of competition and the coaches became
more involved in the athlete’s lives; especially during the high school and collegiate
years while the parents were less involved but continued to provide support and guidance
from afar.

The participants in the current study participated in a variety of sports when they
were younger, and even throughout their high school years. Previous research has also
shown that it is not necessary to specialize in one sport at a very young age (Durand-Bush
& Salmela, 2001). Janelle and Hillman (2003) called the training garnered by athletes
who participated in a variety of sports “deliberate experience.” It appears that when
athletes compete in an array of sports, they learn a variety of fundamental motor skills
that help them when they decide to specialize in one sport.

Participants in the current study also showed certain deviations from the stages
outlined by Bloom and Côté. One example was the two athletes who did not start the
sport they played in college until high school. Therefore, their progression through the
stages was skewed and/or occurred at an accelerated pace. Some athletes also chose to
specialize later in life, waiting until they entered college to play only one sport. For
example, one athlete played four sports in high school and a few others played two or three sports in high school. Therefore, the third stage of specialization occurred later for these athletes. In summary, the findings here both support and offer points of departure from the stage theories offered by Bloom (1985) and Côté (1999).

The unique findings that contraindicated or extended previous research included: the importance of the social support network in allowing the athlete to overcome adversity, the lack of sport psychology consultant and significant other influence, the emergence of mental characteristics that hindered successful college athletes, the large emphasis placed on education/academics, deviations from the 10 year rule and the stage theories, and that five of eight athletes began sport because of influence from their older sibling. Although Gould et al. (2002) mentioned overcoming adversity from their sample; it was not as salient as it was to the athletes in this study. The lack of sport psychology consultant or significant other influence can be deduced to the age and level of the sample. Olympic athletes have greater access to sport psychology consultants and are usually older, thereby having more time to find influence from a significant other. Negative mental characteristics emerged in the study, but most of the athletes had learned to control their negative emotions. Parents in Côté’s (1999) study placed emphasis on education, but every parent in this study brought up its importance on their own accord and emphasized that they had encouraged their child to do well in academics from a young age. This is important to athletes in order to stay eligible and be able to attend college. Because two athletes started their primary sport in high school they did not meet the criterion for Ericsson’s 10 year rule, nor Bloom and Côté’s stage theory ranges. This may be due to the nature of their sport (track and field and swimming) or interest in other
sports. Both athletes had played other sports prior to track and swimming. Finally, the large influence of older siblings was salient in this study because if the athlete had an older sibling, they were the influence that started the athlete. In cases where the athlete was the oldest sibling, the younger siblings also played. Overall, a number of findings from this study concurred with and/or extended previous literature, with a few converse findings as well. Overall, multiple factors should continue to be explored in talent development research.

**Study Limitations and Future Directions**

The limitations of the study included the retrospective nature of the interviews. Because all of the athletes in this study had experienced tremendous success, it is possible that the accounts provided by the athletes, coaches, and family members may have been overly positive and/or biased. Another limitation of this study was that only single interviews were conducted with each athlete. It is possible that multiple interviews conducted over a period of time with similarly skilled athletes could address both limitations previously mentioned. Thus, future research should follow young athletes for an extended period of time.

Because of the importance of social support, future studies should examine athletes who experienced difficulties when they were faced with a critical adverse incident. A comparison between two individuals who have varying levels of social support resources may help determine exactly how social support influences athletes cope with adverse situations. Similarly, comparisons of the social support networks between more and less successful athletes would also be interesting. Finally, future researchers should investigate the role of teammates in the social support process. While Giacobbi et al. (in
press) found that teammates provided enormous emotional benefits to freshmen athletes, following collegiate athletes throughout their careers to learn where, when, and how teammates benefit collegiate athletes would likely yield interesting findings. In general, both grounded theories serve as starting points for future research and provide a working framework for researchers to add, modify, and examine each grounded theory.

**Applied Implications**

Certain applied implications can be ascertained from this study. As a sport psychology consultant, it is important to examine the support system available to the athlete. The findings here offer support for a family systems approach to sport psychology consulting (Hellstedt, 2000). The general goals of family system approach to sport psychology consulting are to 1) to help teams identify sources of stress that may impact the group and/or individual, 2) help promote individual identity development within the team, 3) help teams negotiate important transitions and stressful circumstances, 4) improve communication and problem-solving, and 5) intervene to change the team as a source of stress to a coping resource (adapted from Hellstedt, 2000). An applied sport psychologist using this approach could promote communication processes that foster problem identification, social support, and help teams brainstorm problem-focused coping (Giacobbi et al., in press). Frequent team meetings that focus on communication processes between members and identifying and/or anticipating various sources of stress could facilitate this process. Many times the athlete’s supporting cast may be playing a role in the problem, or on the contrary, may be able to play a part in the solution. Most importantly, gaining access to collegiate athletes is essential to be able to implement research findings.
Summary

Overall, the current study supported and extended previous talent development literature. Overcoming adversity was an important aspect of the lives of the participants and should be examined further to determine if key moments could change the path of an athletic career. In addition, the importance of social support cannot be overlooked as an aid for coping with adversity. Continuing to explore the integral aspects of expertise is warranted on order to establish factors that will aid athletes in becoming the best they can possibly be in sports and in life. In conclusion, the multidimensionality of both talent development and social support was supported. Therefore, future research should take into account interactionist viewpoints for both topics.
Dad was really athletic and tall
Grandfather was pro cricketer
Brother is pretty athletic
Sister is athletic
Athletic gene
Grandfather played tennis
Blessed with something/natural talent
Kind of born athletic
Dad was a bodybuilder
Mom played cricket
Definitely has played an effect

Pretty coordinated
Being tall
Greater wing span
Longer reach
I’m so lanky
Have speed to go along with height
Tallness from my mom
Size for the event I do
Natural size helps a lot
Helped being taller

Practice was big role
Practice was main key
Practice makes perfect
Practice develops talent
Practice unbelievable role
Practice leads to success
Practice most important thing
Plays a very big role
Practice very important
Practice helps mental and physical
Practice is part I love
Practice is key
More important then genetics
Most important thing

Need to challenge yourself at practice
Working and training hard
Running many miles plays important role
Harder practices helped
Couldn’t do it without practice
Practice got me where I was
Invest time with right attitude
Don’t half ass practice
Especially large amount of practice
Practice how you want to play

Figure 1. Athlete Conceptual Framework
Never missed a practice
Practicing skills helped
Practice important for developing skills
Training really helps
More practice the better you get

Parents and sister influenced to start
Had pool so mom made sure could swim
Parents and coach main influences
Parents kept involved in other things
Parents encouraged doing other things
Let us do what we were interested in
Father started to teach me to swim
Family played big part
Dad fan he played so I played

Supported whether won or lost
Parents by far my biggest fans
Parents unbelievably supportive
Whatever I wanted to do I could do
Parents not let anything hold her back
Parents pretty supportive of me
Wasn’t big deal if we lost
Always there to encourage us
Always supportive, didn’t pressure
Can’t think of better family environment
to be in to excel
Parents never forced me at all
Mother was always there for me
Encouraging us to be our best
Always supportive and there for games
Always took me to practice
Parents very supportive
Their support pushed me to do more
Never missed a game
Parents behind me all the way

Father was my coach
Mom was influencing one on me
Mom was like the parent/cheerleader
Mom came with me, dad with brother
Mom had bigger part b/c dad worked
Mom took me back and forth
Parents put me in that situation
Mother influenced me the most
Only support I received was from dad
Dad stricter one in relationship
Mom gave me rides everyday
Mom more sympathy

Parents vacation time was swim meets
Parents vacations going to watch her
Mom is amazing budgeting person
Family came to all my meets

Figure 1. Athlete Conceptual Framework - Continued
Financial strain on family
Cost them a lot of money
Poor family

Parents good at constructive criticism
Good to share experiences with family
Parents and brother emphasized skills
Always looked up to my dad
Thinking of dad helps get through
Important to try hardest to parents
Also think of how strong mom is
Made relationship with parents grow
Went to college to be close to dad
Doing it for them

Parent/Child
Relationship Building

Didn’t get support from real mom
Parents divorced

Parental Adversity

Started b/c my older sister was doing it
Older brother played soccer
Brother had influence of getting started
Played with her three older brothers
Followed in older brothers footsteps
Sister took me to beach and taught
Sister made me feel comfortable
6 of 7 of us did track
Older brother started me
Play same position as brother
Brother biggest influence

Early Sibling
Influence
Sibling
Influence

HS coach noticed me
PE / high school coach influenced
HS coach was so influential
Wouldn’t be anywhere without coach
He started me out
Wanted me as part of his team
Coach recognized talent
Old high school coach influenced
All my coaches influenced me
Couldn’t have done it without HS coach
Impact on me in HS
HS teacher/coach got me started

Early Coach
Influence

Coach believed so I believed in myself
Told me you’ve got what it takes
Coach showed interest in me
Coach thought I could go farther
Coach only one who believed in me
He was telling me I could make it
Showed me he just believed in me
Going through a lot together helps
He just kept building me up

Coach Social
Support/Belief

Figure 1. Athlete Conceptual Framework - Continued
| Helped me enjoy the sport again  
| He’s proud of me no matter what  
| Told me I have potential to reach far  
| Like working with one who believes |

| Listened to everything he said  
| Told me the things I needed to do  
| Best friend slash father figure  
| He wasn’t just my coach  
| He took me under his wing  
| Fantastic relationship with coaches  
| He was like an older brother  
| Coaching staff made family atmosphere  
| My dad was my coach  
| Set ground rules w/dad as coach  
| Good communication made successful coach/parent/player relationship |

| Coach is extremely sincere  
| Coach not forcing me to do anything  
| Very important for coach to be positive  
| Makes it apparent she cares about you as a person not just a player  
| Demeanor that gets you motivated  
| Coach kept my spirit in  
| Coach motivated me  
| Learn to swim coach made it fun  
| Didn’t force me at all, was my favorite |

| Initially influential then a lot of pressure  
| Last bit of relationship grew apart  
| Honestly didn’t get along  
| Butt heads b/c same personalities |

| Teammates definitely bring out the best  
| Play tremendous role in your success  
| Play role in getting you over the hump  
| Leadership brings out the best  
| Play mental and physical role  
| Teammate inspired him to run faster  
| Learn from everyone on the team  
| Teammates challenge you to be better  
| Motivate by yelling at you in practice  
| Relaxing to cheer for teammates  
| Teammates are a big factor  
| College better, teammates behind you  
| Working towards same/common goal  
| Less pressure when on a team  
| Teammates make it more enjoyable  
| Believe in each other  
| Helped encourage during rehab  
| Loved pumping teammates up  
| Gave each other confidence  
| Help development as player and person |

Figure 1. Athlete Conceptual Framework - Continued
Team support is pretty amazing
Definitely had an influence on me
There for you to support you
Can push you in practice
Mini-competition at practice
Like a family atmosphere
Common ground / Bond between us
Loved being part of a team
Team is best thing about college
Laugh and enjoy each other
Made great friends
Awesome to have team camaraderie
Really close like best friends
Still friends with HS teammates
Football brings together no matter what

Wanted to succeed
Had the will to succeed
I was just a tough bastard
Never complained
Set goals, daily and weekly
Competitive
Having a purpose out there
Focused in the moment
Believe in yourself
Logical, anal, nerd person
Completely committed
Perfectionist
Diplomatic
Determined
Extremely competitive
Disciplined
Being positive
Try not to stress myself out
Breaking it down like a test
Relaxed / Laid back
Driven
Visualization
Not easily distracted
Very competitive
Easy going
Open minded
Tough hard worker
Having heart
Being smart (understanding/intelligence)
Proving people wrong
Able to shake things off
Competitor
Killer instinct
Thinking you know everything
Lack of confidence
Stubborn / Hard-headed

Figure 1. Athlete Conceptual Framework - Continued
<table>
<thead>
<tr>
<th>Non-confrontational</th>
<th>Negative Mental Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shy</td>
<td></td>
</tr>
<tr>
<td>Negative self-talk</td>
<td></td>
</tr>
<tr>
<td>Tentative / scared</td>
<td></td>
</tr>
<tr>
<td>Little edgy/nervous</td>
<td></td>
</tr>
<tr>
<td>Too hard on self</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parents were divorced</th>
<th>Personal Adversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>No support from real mom</td>
<td></td>
</tr>
<tr>
<td>Dad lived far away</td>
<td></td>
</tr>
<tr>
<td>Not serious until freshman yr. college</td>
<td></td>
</tr>
<tr>
<td>Dad passed away before first NCAA’s</td>
<td></td>
</tr>
<tr>
<td>Coach tended to break you down</td>
<td></td>
</tr>
<tr>
<td>Foot surgery</td>
<td></td>
</tr>
<tr>
<td>Two surgeries</td>
<td></td>
</tr>
<tr>
<td>Disc herniations and torn ACL</td>
<td></td>
</tr>
<tr>
<td>Tore my ACL</td>
<td></td>
</tr>
<tr>
<td>Complications after ACL surgery</td>
<td></td>
</tr>
<tr>
<td>In hospital for 11 days</td>
<td></td>
</tr>
<tr>
<td>May not live, may lose leg, may not play again</td>
<td></td>
</tr>
<tr>
<td>Red shirted in championship season</td>
<td></td>
</tr>
<tr>
<td>Frustrated because of coach’s pressure</td>
<td></td>
</tr>
<tr>
<td>Didn’t enjoy swimming anymore</td>
<td></td>
</tr>
<tr>
<td>Didn’t want to do it anymore</td>
<td></td>
</tr>
<tr>
<td>Completely hated the sport</td>
<td></td>
</tr>
<tr>
<td>Walked on to the team</td>
<td></td>
</tr>
<tr>
<td>Didn’t have big competition experience</td>
<td></td>
</tr>
<tr>
<td>Butt heads with coach</td>
<td></td>
</tr>
<tr>
<td>Thrown into the fire of the starting lineup</td>
<td></td>
</tr>
<tr>
<td>Both parents passed before college</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Great going from nothing to finalist</th>
<th>Coping With Adversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being able to overcome everything</td>
<td></td>
</tr>
<tr>
<td>Wanted to prove I could do it</td>
<td></td>
</tr>
<tr>
<td>Everything was put into perspective</td>
<td></td>
</tr>
<tr>
<td>New coaches helped enjoy sport again</td>
<td></td>
</tr>
<tr>
<td>Learned to be positive</td>
<td></td>
</tr>
<tr>
<td>Grew spiritually and with family</td>
<td></td>
</tr>
<tr>
<td>Made me grow as a person</td>
<td></td>
</tr>
<tr>
<td>Changed my outlook</td>
<td></td>
</tr>
<tr>
<td>Made me strong</td>
<td></td>
</tr>
<tr>
<td>Can deal with a lot bigger adversities</td>
<td></td>
</tr>
<tr>
<td>You really have to change as a person</td>
<td></td>
</tr>
<tr>
<td>Realize what’s important in life</td>
<td></td>
</tr>
<tr>
<td>Let emotions out during races</td>
<td></td>
</tr>
<tr>
<td>Made me a better person</td>
<td></td>
</tr>
<tr>
<td>Try to be positive no matter what</td>
<td></td>
</tr>
<tr>
<td>Parents not here more motivation</td>
<td></td>
</tr>
<tr>
<td>Continue doing it for their sake</td>
<td></td>
</tr>
<tr>
<td>Built strength of character</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Athlete Conceptual Framework - Continued
Traveling all over the world
Got to see a lot of different places
Had a lot of different experiences
Got to travel a lot

Made great friends through sport
Met so many different people
Allowed me to feel like I fit in
Helps break the ice with people
Friends best thing I gained
Have friends all over the world

Training for barely anything
Making a living playing tennis
Scholarship to college
Helping my parents out
Trained with all the best coaches

Went to two Olympics
Helped my grades in school
Helped me get into med school
Had so much fun
Love all the opportunities I got

Ability to have a perspective in life
Multi-tasking
Budgeting time
Never had time to get into trouble
Gave me confidence
Gave me an avenue to fit in
Leadership
How to be a good leader

Showed me to be responsible
Try not to stress myself out
Showed me a good work ethic
Willing to do whatever it takes to be successful in life
Learn to deal with diversities
Enhanced what doing as a doctor
Ready for any situation in future
Personal development
Helped me out as a person

Played basketball, soccer, tennis, and track
Did soccer, basketball, baseball, dance, and karate
Did swimming, ballet, tennis, and piano
Did basketball, swimming, football, and baseball
Played soccer, baseball, and basketball
Swimming/basketball/football/gymnastics/soccer/track

Figure 1. Athlete Conceptual Framework - Continued
It was born in her
Just that type of person
She has sports in her genes
Grandfather played a lot of sports
Just very athletic
Father played a lot of sports
Just had a lot of natural talent
He got athleticism from his father
Born with that energy
Born an athlete somehow
Father was a gymnast and soccer player
Born with that ability
Father was an athlete
Athletic ability gives him the edge
Father and mother played
Mother played when he was in womb
Got a lot of athletic ability from his dad
Size obviously was a genetic factor

Height really did a lot for him
Long legs
Built to be a runner
Being very tall
Being lengthy and long
He has the size
He has the physical ability
Good hand eye coordination
Height was an advantage
Good eye-hand coordination
He had the size

Always practicing
Did extra work and practices
Made mother help her practice
Very dedicated to practice
Understood correlation between
practice and improvement
She was always practicing
Practice influenced her a lot
Never complained about practice
Practice influenced him a lot
Never missed a practice
Worked really hard at practice
Took advantage of practices
He would practice all the time
Probably 80% of his development
He would run all the time
Always keen to go swimming
Never complained about practicing

Figure 2. Parent Conceptual Framework
Discipline and determination at practices
Practice obviously was huge
Practice is what it’s all about
He’s a student of the sport
Started weightlifting program in HS
Ran a lot
He had a regimen of practice

Supported 100%
No one was pushing her
Supporting kids is important
Don’t push them
Let them gravitate to what they want
Support was one of the biggest things
Encouraged her in everything she did
Give him the opportunity
Give kids encouragement
Assist them all the time
Important for parents to let kids
do what they want to do
We were very supportive
Knew family supported him whole time
We were always behind him
Be a part of what he’s doing
Supported all my children in whatever
they wanted to do
We were always supporting her
Being there for her the whole time
Support and help but don’t overdo it
We support him 150%
Can’t force them to do something

Traveled with her to tournaments
Driving her around and picking her up
Always interested in hearing how she did
We all went to his swim meets (mom, dad, brother, sister)
Came to state races to show support
There to watch his meets
We would always accompany her
Went to all her games
Stopped coaching, come to college games
Never missed a game since he started
Commitment as a family and couple
Very family involved
There together for each other
Fun family experience for us
Family-orientated thing
Sister and brother would go too
Whole family would go
Brother also very involved
Gone to all his games together

Figure 2. Parent Conceptual Framework - Continued
Mother would help get stuff together
Mother would take to practice
Mother always got her up in morning
Made her breakfast before practice
Mother mainly took him to practices
Talks to mother about academics and movies
Mother took her to practices
Mother was more sympathetic

Father in charge of logistics
Father as coach
Talks to father about basketball
Father worked more than mother
Father had to work
Father was role model
Father was stricter

Vacations were swim meets
Traveling just took over
12 months of year involved in swimming
Didn’t take any vacations
Traveled across country to see meets
Traveled internationally to watch
Thanksgiving vacations in hotels

We’re poor with two kids in college
Strain but we’re managing
Expensive training and traveling
 Couldn’t afford college for him
Very expensive affair
Travel very expensive
Hard because had only one salary
Had to sacrifice to pay for sport

Recognized she was Olympic material
Coach was nice and didn’t push her
Liked college coaches a lot
Never complained about coaches
HS coach was biggest influence
Encouraged him to run in college
He liked his college coach
They were really close
Coach was like a buddy to him
Coach told him he could go far
Great relationship with HS coach
Got opportunity to walk-on
Coach supported him
Coaches emphasized academics too
Coach wanted her to train with him
HS coach was role model
College coaches helped her a lot

Figure 2. Parent Conceptual Framework - Continued
College coaches great example
Worked with college coach in juniors
Developed special camaraderie
Special feeling for college coach
Very good HS coaches
Helped that coach played same position
Coaches helped prepared for college

After Olympics disappointed
Coach’s attitude was bad
She got very frustrated with coach
Asked to be relieved of him
Afraid of his college coach
Grew to like him and respect him
One coach was too tough

Father involved in coaching
Relationship with father/coach great
Had little signals to each other
Open lines of communication
Treated her as just another player on field
Had to separate father and coach roles
She knew what he wanted her to do

Teammates kept him humble
Look up to him and respect him
Helped shape who and what he is
Still close with HS teammates
Teammates in college respect him
Always positive with teammates
Got along really well with teammates
Really close friends on soccer team
Quiet leader so teammates appreciated that
Made so many friends through sport
Teammate helped him be better
Very close to roommate teammate
Helped having roommate on team
Opportunity to experience diversity
Learned from his teammates
Well liked by her teammates
Set example for teammates
Always teasing teammates
Enjoys being on a team

Focused
Disciplined
Modest
Amusing and jovial
Determination
Heart
Work ethic
Bright child

Figure 2. Parent Conceptual Framework - Continued
Pure toughness
Intense
Driven
Wants to succeed at everything he does
Always positive
Overcoming adversity
Such a fighter
Very competitive
Self-driven
Very focused
Being able to analyze a situation
Self-motivated
Being tough
Always prepared
Tremendous fear of failure
Knows what it takes to win
Not overly emotional

Hard headedness
Stubborn
Does what coach tells him to do too much
Low confidence
Learning to have patience with other
Too nice
Too unselfish
Nervousness
Not a big talker
Being too shy

Education played role in decision
Knows value of the education
Appreciated the free education
Education was always first
High priority on education
Everything else built off education
Emphasized her getting degree
School was always number one with him
Coaches made sure doing well in school
Scholarship was academic

Balances sport with academics
Taking harder summer classes
Keeping on line with education
Look at the education side first
Athletics rubbed over into academics
Classroom was another place to compete
Knew how to balance school and sport
Handled scholastics and athletics
Swimming helped with her education

Figure 2. Parent Conceptual Framework - Continued
Physically gifted
More like her dad than mom
Has some innate abilities
Very talented
Very instinctive and intuitive player
God given ability
He’s athletic
Athletic ability
Very natural feel for a ball
Biggest asset was genetics
Just a really good athlete
Obviously extremely talented

Reads the play really well
Very muscular
Stature
Natural quickness
Frying pan hands and flipper feet
Size and frame of her dad
Balance
Big and strong
Very tall
Very strong woman
Real long limbs
Tall
Lanky
Big hands and feet
Got a good size
Flexibility and speed
Movement on the court

Helped her without a doubt
Hit a lot of balls
Constantly striving for ways to get better
Made her a better player
Works hard in practice
Worked extremely hard
Practice gave her technique
Able to work with people around her in practice
Practice very good and key in improvement
Does a nice job in practice

Mom and dad are very supportive
Losing her father was a tough go
Mom was very supportive
Her mom is a great mom
Parents were highly supportive
Provided financial means for her to do it

Figure 3. Coach Conceptual Framework
Great family background
Mom was really really supportive
Real good relationship with his mom and dad
Mother especially was positive
A lot can be attributed to his family
Way he was raised, listens to coach
Genuine support for him
Came from a real good background
Allowed him to do everything he wanted to do
Good family background
Parents pretty supportive
Great parental support
Parents support molded him
Parents very positive and supportive
Parents concerned with doing what’s best for her
Really family-centered
Very very supportive parents

HS coaches very supportive of him
I had to be his motivator
He comes from a quality high school
Still calls and checks with me every other day
Tried to let her loose and believe in her
Supported her on and off the field
Emphasized the good thing
Respect for each other
Bordering on the parental side
Very demanding with him
We’ll do anything for that kid
Like him because he’s a throwback
Relationship grew and grew
Treated her a bit differently
More understanding with her
Great respect for authority
Knew needed to show her we’re here for her
Over time became closer and closer

Teammate influence was huge
Probably the one thing that kept her going
She’s such a team player
Close knit group
A lot of his teammates were influential
Teammates respect him
Good relationship with his teammates
Thinking about the team first
Teammate camaraderie
Teammates respect her a lot
Close to his teammates
Definitely buys into the whole team concept
Close group of friends

Figure 3. Coach Conceptual Framework - Continued
Self-motivated
Self-disciplined
Self-sacrificing
Very coachable
Very goal orientated
Analytical and intellectual
Heart and desire
Dominant personality
Work ethic
Over achiever
Real smart kid
Extremely loyal
Competitiveness
A lot of pride in what he did
Attention to detail
Intelligence factor of what to do
Commitment
Very diligent
Very focused
Very stubborn
Open mind to improvement
Doesn’t like to lose
Competitive
Driven in sport and school
Mentally sport is important to him
Unassuming kid
Unbelievable pain threshold
Great work ethic
Total focus on winning
Strong faith
Confidence
Very thoughtful
Focus
Very mature

Tended to make excuses
Hard for him to make changes
Stubborn/spirited males
Not a very outgoing guy
Worried after injury
Not very assertive/combative
Didn’t take criticism well
Can’t give more than three things
Have to give exactly what you want done
Biggest problems were his mental problems
Temper
Too much early success
Stubborn toward coach
Sometimes not cooperative
Didn’t enjoy it enough first time around
Fear of failure
Low self-image

Figure 3. Coach Conceptual Framework - Continued
Good guy, plays hard and for right reasons
Very compassionate and thoughtful
Great team leader
Highly motivated student
Key in development of team attitude
She’s just a quality individual
He’s a great guy
She’s a great kid to have in locker room
Enjoys what he does and he’s a leader
Heart of a champion
Never got frustrated, kept working hard
Provided great leadership
Real quality individual
He was a great role model
Able to do big things at a young age
Great example for many of our young kids
Appreciative of help and looking for help
Just basically a real good person
Would want to build a program around them
Great person on and off the field
Positive person and real encourager

Figure 3. Coach Conceptual Framework - Continued
Figure 4. A Grounded Theory Depicting the Development of Highly Successful Collegiate Athletes.
Social Support Network
Multidimensional, changes and evolves over time
Parents – direct influence in youth and high school, indirect in college
Siblings – very influential at youth, lessens as they become older
Coaches – grow in importance and directness as athlete becomes older
Teammates – similar influence in youth and high school, increases in college
Also possible to have support from sport psychologists and/or significant others

Types of Support Provided
Allowed athletes to gain advice, feedback, and encouragement from different sources in differing manners
1. Emotional – parents, coaches, teammates, and siblings
2. Esteem – coaches, parents, and teammates
3. Informational – coaches and teammates
4. Tangible – parents and coaches

Developing Support
Support allows athlete to achieve two goal types
1. Instrumental Goals – enhance coping and provide relief from distress and adversity
2. Relational Goals – provide relationship formation and maintenance

Social Support Benefits
Support Leads To:
1. Identity and overall development
2. Learning physical and psychological skills
3. Learning coping skills
4. Positive relationships that continue in the future
5. Learning life skills to adapt and cope in athletics or life after college

Highly Successful Collegiate Athlete

Figure 5. A Grounded Theory Depicting Important Social Support Influences in the Development of Highly Successful Collegiate Athletes
APPENDIX A
INFORMED CONSENT FORMS

INFORMED CONSENT

ATHLETE

PLEASE READ THIS DOCUMENT BEFORE YOU DECIDE TO PARTICIPATE IN THIS STUDY. YOU MAY KEEP THIS PAGE.

TO: All Research Participants
FROM: Taryn K. Lynn
RE: Informed Consent
STUDY TITLE: Multiple Perspectives and Influences on Talent Development

PURPOSE OF THIS STATEMENT: The purpose of this statement is to summarize the study I am conducting, explain what I am asking you to do, and to assure you that the information you and other participants share will be kept completely confidential to the extent permitted by law. Specifically, nobody besides the Principal Investigator and her supervisor will be able to identify you in this study and your name will not be used in any research reports that result from this project.

WHAT YOU WILL BE ASKED TO DO: If you agree to participate in this study, you will be asked to complete two interviews, one before your parent and coach are interviewed, and one after your parent and coach are interviewed. All interviews will occur between 5/1/2002 and 5/1/2003. The interviews will be audio tape-recorded and you will be asked a series of questions about your athletic talent development from a young age until your present collegiate years. You may also be asked about relationships with family, coaches, and peers during this development. You do not have to answer any questions you do not wish to answer. Your responses will be kept completely confidential to the extent permitted by law. The Principal investigator and her supervisor will be the only people to have access to these interviews. The principal investigator will transcribe the interviews and the tapes will be locked in a file cabinet. After your interviews have been transcribed, the tape will be destroyed. You will receive a copy of the transcribed interview, as well as a brief summary by the principal investigator.

TIME REQUIRED: Approximately 30 minutes for each interview for a total of 60 minutes per person.
RISKS AND BENEFITS: There are no risks expected from participating in this study. As a result of your participation, you may develop insights into the process of talent development in athletics. No more than minimal risks are anticipated from participation in this study.

COMPENSATION: No compensation will be given as a result of participating in this study.

CONFIDENTIALITY: Your identity will be kept confidential to the extent provided by law. Your transcribed interview will be assigned a code number. The tapes will be kept in my office in a locked file cabinet. When the study is completed and the transcripts have been analyzed, all tapes will be destroyed. Your name will not be used in any report.

VOLUNTARY PARTICIPATION: Your participation in this study is completely voluntary. There is no penalty for not participating.

RIGHT TO WITHDRAW: You have the right to withdraw from the study at anytime without consequence.

WHOM TO CONTACT IF YOU HAVE QUESTIONS ABOUT THIS STUDY:
Principal Investigator: Taryn K. Lynn, Department of Exercise and Sport Sciences, 100 Florida Gym, PO Box 118207, Gainesville, FL, 32611; ph. (352) 392-0580 x.1375
Supervisor: Dr Peter Giacobbi, Department of Exercise and Sport Sciences, 100 Florida Gym, PO Box 118207, Gainesville, FL, 32611; ph. (352) 392-0580 x.1324

WHOM TO CONTACT ABOUT YOUR RIGHTS AS A RESEARCH PARTICIPANT IN THE STUDY: UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; ph. 392-0433.

PLEASE SIGN AND LEAVE THIS PORTION OF THE FORM WITH US.

AGREEMENT:

I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

Participant:_____________________________________________Date:______________

Principal Investigator:____________________________________Date:______________
INFORMED CONSENT

COACH

PLEASE READ THIS DOCUMENT BEFORE YOU DECIDE TO PARTICIPATE IN THIS STUDY. YOU MAY KEEP THIS PAGE.

TO: All Research Participants
FROM: Taryn K. Lynn
RE: Informed Consent
STUDY TITLE: Multiple Perspectives and Influences on Talent Development

PURPOSE OF THIS STATEMENT: The purpose of this statement is to summarize the study I am conducting, explain what I am asking you to do, and to assure you that the information you and other participants share will be kept completely confidential to the extent permitted by law. Specifically, nobody besides the Principal Investigator and her supervisor will be able to identify you in this study and your name will not be used in any research reports that result from this project.

WHAT YOU WILL BE ASKED TO DO: If you agree to participate in this study, you will be asked to complete one interview. All interviews will occur between 5/1/2002 and 5/1/2003. The interviews will be audio tape-recorded and you will be asked a series of questions about your athlete’s athletic talent development from a young age until their present collegiate years that you have been involved in personally. You may also be asked about your relationship with your athlete, his/her family, and his/her peers during this development. You do not have to answer any questions you do not wish to answer. Your responses will be kept completely confidential to the extent permitted by law. The Principal investigator and her supervisor will be the only people to have access to these interviews. The principal investigator will transcribe the interviews and the tapes will be locked in a file cabinet. After your interviews have been transcribed, the tape will be destroyed. You will receive a copy of the transcribed interview, as well as a brief summary by the principal investigator.

TIME REQUIRED: Approximately 30 minutes for one interview for a total of 30 minutes per person.

RISKS AND BENEFITS: There are no risks expected from participating in this study. As a result of your participation, you may develop insights into the process of talent development in athletics. No more than minimal risks are anticipated from participation in this study.

COMPENSATION: No compensation will be given as a result of participating in this study.
CONFIDENTIALITY: Your identity will be kept confidential to the extent provided by law. Your transcribed interview will be assigned a code number. The tapes will be kept in my office in a locked file cabinet. When the study is completed and the transcripts have been analyzed, all tapes will be destroyed. Your name will not be used in any report.

VOLUNTARY PARTICIPATION: Your participation in this study is completely voluntary. There is no penalty for not participating.

RIGHT TO WITHDRAW: You have the right to withdraw from the study at anytime without consequence.

WHOM TO CONTACT IF YOU HAVE QUESTIONS ABOUT THIS STUDY: Principal Investigator: Taryn K. Lynn, Department of Exercise and Sport Sciences, 100 Florida Gym, PO Box 118207, Gainesville, FL, 32611; ph. (352) 392-0580 x.1375 Supervisor: Dr Peter Giacobbi, Department of Exercise and Sport Sciences, 100 Florida Gym, PO Box 118207, Gainesville, FL, 32611; ph. (352) 392-0580 x.1324

WHOM TO CONTACT ABOUT YOUR RIGHTS AS A RESEARCH PARTICIPANT IN THE STUDY: UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; ph. 392-0433.

PLEASE SIGN AND LEAVE THIS PORTION OF THE FORM WITH US.

AGREEMENT:

I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

Participant:__________________________ Date:___________

Principal Investigator:__________________________ Date:___________
INFORMED CONSENT

PARENT

PLEASE READ THIS DOCUMENT BEFORE YOU DECIDE TO PARTICIPATE IN THIS STUDY. YOU MAY KEEP THIS PAGE.

TO: All Research Participants
FROM: Taryn K. Lynn
RE: Informed Consent
STUDY TITLE: Multiple Perspectives and Influences on Talent Development

PURPOSE OF THIS STATEMENT: The purpose of this statement is to summarize the study I am conducting, explain what I am asking you to do, and to assure you that the information you and other participants share will be kept completely confidential to the extent permitted by law. Specifically, nobody besides the Principal Investigator and her supervisor will be able to identify you in this study and your name will not be used in any research reports that result from this project.

WHAT YOU WILL BE ASKED TO DO: If you agree to participate in this study, you will be asked to complete one interview. All interviews will occur between 5/1/2002 and 5/1/2003. The interviews will be audio tape-recorded and you will be asked a series of questions about your child’s athletic talent development from a young age until their present collegiate years. You may also be asked about your relationship with your child, coaches, and his/her peers during this development. You do not have to answer any questions you do not wish to answer. Your responses will be kept completely confidential to the extent permitted by law. The Principal investigator and her supervisor will be the only people to have access to these interviews. The principal investigator will transcribe the interviews and the tapes will be locked in a file cabinet. After your interviews have been transcribed, the tape will be destroyed. You will receive a copy of the transcribed interview, as well as a brief summary by the principal investigator.

TIME REQUIRED: Approximately 30 minutes for one interview for a total of 30 minutes per person.

RISKS AND BENEFITS: There are no risks expected from participating in this study. As a result of your participation, you may develop insights into the process of talent development in athletics. No more than minimal risks are anticipated form participation in this study.

COMPENSATION: No compensation will be given as a result of participating in this study.
CONFIDENTIALITY: Your identity will be kept confidential to the extent provided by law. Your transcribed interview will be assigned a code number. The tapes will be kept in my office in a locked file cabinet. When the study is completed and the transcripts have been analyzed, all tapes will be destroyed. Your name will not be used in any report.

VOLUNTARY PARTICIPATION: Your participation in this study is completely voluntary. There is no penalty for not participating.

RIGHT TO WITHDRAW: You have the right to withdraw from the study at anytime without consequence.

WHOM TO CONTACT IF YOU HAVE QUESTIONS ABOUT THIS STUDY:  
Principal Investigator: Taryn K. Lynn, Department of Exercise and Sport Sciences, 100 Florida Gym, PO Box 118207, Gainesville, FL, 32611; ph. (352) 392-0580 x.1375  
Supervisor: Dr Peter Giacobbi, Department of Exercise and Sport Sciences, 100 Florida Gym, PO Box 118207, Gainesville, FL, 32611; ph. (352) 392-0580 x.1324  

WHOM TO CONTACT ABOUT YOUR RIGHTS AS A RESEARCH PARTICIPANT IN THE STUDY: UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; ph. 392-0433.

PLEASE SIGN AND LEAVE THIS PORTION OF THE FORM WITH US.

AGREEMENT:

I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

Participant:________________________________________Date:___________

Principal Investigator:____________________________________Date:___________

*In the instance of a telephone interview with the parent, the following script was used in addition to the Informed Consent form:

**Parent Telephone Script**

Hello (parent’s name), my name is Taryn Lynn and I am calling from the University of Florida. I spoke with your son/daughter recently and they supplied me with your contact information.

The reason I am calling is to inform you of the nature of my study titled, “Multiple Perspectives and Influences on Talent Development.” In my study, I am interviewing
athletes, their parent(s), and their current coach about their athletic talent development from a young age to their collegiate years. If you agree to participate, you will be asked a series of questions pertaining to your relationship with your child, their coaches, and his/her peers during this development. This should take approximately 30 minutes.

All of your responses will be audio tape-recorded and transcribed following the interview. All responses will be kept completely confidential to the extent permitted by law. Nobody besides my supervisor, Dr. Peter Giacobbi, and myself will be able to identify you. You do not have to answer any questions you do not wish to and you can discontinue participation at any time without consequence.

If you have any questions about the study, you can contact:

Principal Investigator: Taryn K. Lynn, Department of Exercise and Sport Sciences, 100 Florida Gym, PO Box 118207, Gainesville, FL, 32611; ph. (352) 392-0580 x.1375

Supervisor: Dr Peter Giacobbi, Department of Exercise and Sport Sciences, 100 Florida Gym, PO Box 118207, Gainesville, FL, 32611; ph. (352) 392-0580 x.1324

UFIRB Office: PO Box 112250, University of Florida, Gainesville, FL 32611-2250; ph. (352) 392-0433; fax: (352) 392-9234; email: irb2@ufl.edu.

Principal Investigator: __________________________ Date: __________

Supervisor: __________________________ Date: __________

*Consent obtained from __________________________, who is the father/mother of __________________________ on ____________.
APPENDIX B
INTERVIEW GUIDES

Athlete Interview Guide

*Introduction of Study
Thank you for agreeing to participate. I’m just going to ask you some questions about your background and athletic career. Remember all of your answers are confidential and feel free to discuss anything you feel is important.

*Demographic Information (Separate Form at Bottom):

1. Name, age, gender, height, weight, race/ethnicity, hometown, high school, major, family members.

2. Year in school or year graduated, sport you participate in, position on team or event, years started, scholarship money (full/partial/none).

*Interview Questions:

I’m interested in exploring your viewpoint on your development in (sport they play) and how you got to the collegiate athletic level in (sport).

1. Beginning in Sport - Could you look back, remember, and tell me a little bit about how you got started in sport?
   a. Who got you started in sports? In the sport you play in college?
   b. When did you begin participating in sports? In the sport you play in college?
   c. Did you play other sports as a child/adolescent? What was your high school, junior, or club career like?
d. What contributed to you choosing to focus on the sport you play in college now?

Greatest/Worst Moments – What was your greatest sport moment ever? Your worst sports moment ever?

2. Sport Development/Influences - What do you feel are the most important things that helped you to excel to your level of play/talent/skill that you are at presently? Why? How did you get here?

a. Who has been most helpful? How?

b. Can you give examples of individuals or situations you feel have impacted your talent development?

c. Do you feel that genetics (what you were born with or inherited) impacted your development? What part?

d. Do you feel that practice impacted your development? How much time do you think you have spent practicing over the years? What has it consisted of?

e. Do you feel that situational factors impacted your development?

i. Family (Parents, Siblings, Grandparents) - Who the most?

ii. Significant Other

iii. Coaches - Relationship with present coach?

iv. Teammates

v. SES

vi. Sport Psychology consultants

vii. Other (Other athletes, Competitors, Etc.)
3. Do you feel that any psychological characteristics or mental skills have helped or contributed to your development?
   a. Do you feel that any have hindered it?
   b. Do you feel you were born with mental skills, did someone teach them to you, or did you just learn them?

4. Investments - How have you managed to invest a high level of effort and concentration into your learning and practicing in sport? How have you changed your practices throughout your lifespan and development in sport?
   a. Do you regret any of the choices you made about participating in sport?
   b. Do you feel like you missed out on anything by participating in sport?
   c. What is the best thing you have gained from participating in sport?

5. Future Plans - Where do you foresee your athletic career heading?
   a. Do you plan to/continue to plan to be a professional or Olympic athlete?
   b. If so, what do you think will help you succeed at the next level?

6. Ratings - If you had to put a percentage on the three factors (genetics, practice, and situational factors), what percentage of impact would you allocate to each in your development of talent? What percentage ratings would you give to physical and mental attributes and their contribution to your success?

7. Advice - What advice would you give to children if they hope to become skilled athletes and receive a college scholarship or become a professional or Olympian as you have?
8. How would you sum up your career to this point?

9. Is there anything else you would like to add about your development of talent? Thank you very much for your time.

Demographic Information

Name _______________________________                Date________________

Age      _____________

Gender  _____________

Race/Ethnicity _________________________

Height _______________

Weight _______________

Hometown ______________________________

High School ______________________________

Major in college ______________________________

Year in school or year graduated ______________________________

Sport you play ______________________________

Position or event on team ______________________________

Years started ______________________________

Have you participated in any Olympic sports? _____ If yes, when? ________

Do you receive a scholarship? ________ If yes – Full or Partial? ________

Family Information

Parents __________________________________________

Siblings __________________________________________

Address __________________________________________

________________________________________________
Coach Interview Guide

*Introduction of Study

Thank you for agreeing to participate. I’m just going to ask you some questions about (name of athlete)’s background and athletic career. Remember all of your answers are confidential and feel free to discuss anything you feel is important.

*Demographic Information (Separate Form):

1. Name, Years coaching overall, Years coaching athlete

Email address, Telephone number

*Interview Questions:

I’m interested in exploring your viewpoint on athlete’s development in (sport they play) and how they got to the collegiate athletic level in (sport).

1. Background of Athlete - Could you look back, remember, and tell me a little bit about when you met (athlete)?
   a. Was he or she highly recruited? How did you find out about the athlete?
   b. What made you think he or she would be an asset to your team?
   c. What was your overall 1st impression of the athlete?

2. Greatest/Worst Moments – What would you think is the athlete’s greatest sport moment ever? Worst sports moment ever?

3. Sport Development/Influences - What do you feel are the most important things that helped the athlete to excel to the level of play/talent/skill that he or she are at presently? Why? How did he or she get there?
   a. Who has been most helpful? How?
b. Can you give examples of individuals or situations you feel have impacted the athlete’s talent development?

c. Do you feel that genetics impacted his or her development? What part?

d. Do you feel that practice impacted his or her development? What type of practices did they respond well to? What has it consisted of?

e. Do you feel that situational factors impacted his or her development?

i. Family (Parents, Siblings, Grandparents) - Who the most?

ii. Significant Other

iii. Coaches - Relationship?

iv. Teammates

v. SES

vi. Sport Psychology consultants

vii. Other (Other athletes, Competitors, Etc.)

4. What types of psychological characteristics or mental game do you feel have helped or contributed to his or her development? What has hindered it?

5. Coaching Practices – What did you like about the athlete? What did you dislike about the athlete? Do you feel like you had a good relationship with the athlete?

6. Ratings - If you had to put a percentage on the three factors (genetics, practice, and situational factors), what percentage of impact would you allocate to each in the athlete’s development of talent?

7. How about percentages of the importance of physical and mental characteristics?
8. Advice - What advice would you give to children if they hope to become skilled athletes and receive a college scholarship or become a professional or Olympian as this athlete has?

9. How would you sum up his or her career as a player under your coaching?

10. Is there anything else you would like to add about the athlete’s development of talent? Thank you very much for your time.

Demographic Information

Name _______________________________                 Date ____________

Years coaching total ______________

Years coaching athlete _____________

Email address ____________________________________________

Phone # _________________________________________________

Parent Interview Guide

*Introduction of Study

Thank you for agreeing to participate. I’m just going to ask you some questions about your child’s background and athletic career. Remember all of your answers are confidential and feel free to discuss anything you feel is important.

*Interview Questions:

I’m interested in exploring your viewpoint on your child’s development in (sport they play) and how they got to the collegiate athletic level in (sport).

1. Beginning in Sport - Could you look back, remember, and tell me a little bit about how your child got started in sport?
1. Who got him or her started in sports? In the sport he or she plays in college? Who did he or she seem to take after more?

b. What role did you play in getting him or her started?

c. Did he or she play other sports as a child/adolescent? What was that like?

d. What contributed to your son or daughter choosing to focus on the sport they play in college now?

2. Greatest/Worst Moments – What was your child’s greatest sport moment ever? His or her worst sports moment ever?

3. Sport Development/Influences - What do you feel are the most important things that helped your child to excel to their level of play/talent/skill that they are at presently? Why?

a. Who has been most helpful? How?

b. Can you give examples of individuals or situations you feel have impacted your child’s talent development?

c. Do you feel that genetics impacted your child’s development? What part?

d. Do you feel that practice impacted your child’s development?

e. Do you feel that situational factors impacted your child’s development?

i. Family (Parents, Siblings, Grandparents) - Who the most?

ii. Significant Other

iii. Coaches - Relationship with coaches?

iv. Teammates
v. SES

vi. Sport Psychology consultants

vii. Other (Other athletes, Competitors, Etc.)

4. What types of psychological characteristics or mental game do you feel have helped or contributed to your child’s development? What has hindered it?

5. Investments – What type of investments have you made into your child’s athletic career?

6. Future Plans - Where do you foresee your child’s athletic career heading?

7. Advice - What advice would you give to children if they hope to become skilled athletes and receive a college scholarship or become a professional or Olympian as your child has?

8. How would you sum up your child’s career to this point?

9. Is there anything else you would like to add about your child’s development of talent? Thank you very much for your time.
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Taryn Kelly Lynn was born in Leesburg, Florida, on February 11, 1979. She received her Bachelor of Science degree in exercise science at Stetson University in Deland, Florida, where she competed in tennis and volleyball. She continued at Stetson University for one year after she graduated to finish a Bachelor of Arts degree in psychology and was the assistant tennis coach. She then relocated to the University of Florida in Gainesville, Florida, to pursue a Master of Science in Exercise and Sport Sciences degree, with a concentration in sport psychology. During her tenure as a graduate student, Taryn had the opportunity to serve as a graduate teaching assistant in the Department of Exercise and Sport Sciences’ sport and fitness program. In addition, she is a member of the Association for the Advancement of Applied Sport Psychology (AAASP). Taryn is moving to Knoxville, Tennessee, to attend the University of Tennessee to pursue a Doctor of Philosophy degree in education with a concentration in sport psychology.