ABSTRACT

GREENWOOD, PAUL BRIAN. Character And Caring in the Context of American Football: An Examination of the Relationship Between Positive Youth Development and Achievement Goal Theory. (Under the direction of Michael A. Kanters.)

The purpose of this research was to examine the relationship between the positive youth development constructs of character and caring with achievement goal orientation and ability level, variables associated with achievement goal theory, in the context of organized American football. A multiple methods-mixed data approach to the research was utilized with self-administered web-based questionnaires and face-to-face interviews in an effort to provide increased understanding of the relationship between these theoretical perspectives. Participants were male adolescents attending an intercollegiate football skills camp. Significant findings included a relationship between increased self-reported ability level and the measure of character as well as support for an interaction between ability level and orthogonal achievement goal orientation on the measure of character. Recommendations for the field and future research are included in light of the limitations of the study. This initial examination of the relationship between an emerging theoretical framework in positive youth development and achievement goal theory provides an important first step towards development of an applied and conceptual model for youth development through organized sport.
CHARACTER AND CARING IN THE CONTEXT OF AMERICAN FOOTBALL:
AN EXAMINATION OF THE RELATIONSHIP BETWEEN POSITIVE YOUTH
DEVELOPMENT AND ACHIEVEMENT GOAL THEORY

by

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DEDICATION

To my wonderful wife, Jerusha, and our two “girls” Zoe and Bella.
BIOGRAPHY

Brian Greenwood was born and raised in North Carolina. He developed an affinity for sports at a young age, playing baseball and football predominantly. Brian graduated from the University of North Carolina at Chapel Hill with a Bachelor of Arts in psychology in 1996. Following stints in coaching, marketing, and restaurant management, Brian matriculated to NC State and completed a Masters of Science in Parks, Recreation, and Tourism Management in 2001. After serving as an assistant director of Campus Recreation in charge of the Club Sports program, Brian started the doctoral program in Parks, Recreation, and Tourism Management at NC State under the tutelage of Dr. Michael Kanters. In the winter of 2003-2004, Brian accepted the interim executive director position of The First Tee of Wake County. He led the chapter founding and first year of this youth development program designed to teach life skills through the game of golf. Brian then served as the assistant internship coordinator for the Parks, Recreation, and Tourism Management department at NC State. In March of 2006, he married doctoral classmate and best friend Jerusha Bloyer in Henderson, NV. He and Jerusha departed North Carolina for the Central Coast of California and California Polytechnic State University at San Luis Obispo, where Jerusha began a tenure-track faculty position in Recreation, Parks, and Tourism Administration (RPTA). Brian served as a part-time lecturer while completing the dissertation, and he has been hired as an assistant professor at Cal Poly in the RPTA program starting in the fall of 2007.
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I am elated this phase of my life is complete. I have matured as a person, a scholar, a teacher, a husband, a son, a brother, a dog owner, and a friend; and I know that maturation will help me immeasurably in the next phase of my life. Thanks to all of you for your support on all levels!
# TABLE OF CONTENTS

List of Tables ................................................................................................................. ix  
List of Figures .................................................................................................................... x  

Chapter 1: Introduction ................................................................................................. 1  
  Significance ......................................................................................................................... 7  
  Research Purpose ............................................................................................................... 9  
  Research Questions .......................................................................................................... 10  
  Summary ............................................................................................................................. 10  

Chapter 2: Review of Literature ..................................................................................... 12  
  History of Youth Development Through Leisure ......................................................... 13  
    Defining Youth Development ......................................................................................... 13  
    Play and Youth Development ....................................................................................... 15  
    Defining Recreation and Sport(s) .................................................................................. 16  
    Recreation and Youth Development ............................................................................. 17  
    Sport and Youth Development ..................................................................................... 18  
  Positive Youth Development .......................................................................................... 22  
    Theoretical and Historical Evolution ............................................................................. 22  
      Resiliency ...................................................................................................................... 23  
      Intervention and Prevention ...................................................................................... 25  
      Emergence of Positive Youth Development ................................................................ 25  
      Developmental Assets ................................................................................................. 27  
      Towards Conceptual and Typological Unity ............................................................... 28  
      Developmental Systems Theory .................................................................................. 29  
    Five C’s of Positive Youth Development ......................................................................... 31  
      Character ..................................................................................................................... 35  
      Caring (or Compassion) ............................................................................................... 38  
    Contexts (or Settings) for Youth .................................................................................... 39  
      Unstructured Leisure and Leisure Boredom ................................................................ 40  
      Structured Extracurricular Activities ......................................................................... 41  
      Organized Sport ............................................................................................................ 42  
  Achievement Goal Theory ............................................................................................... 49  
    Definition and Theoretical Evolution ............................................................................ 50  
    Application of Achievement Goal Theory to Sport .................................................... 52  
      Perceived Competence or Ability Level .................................................................... 54  
      Goal Orientations and Developmental Outcomes ..................................................... 55  
      Role of Competition ...................................................................................................... 58  
  Multiple Methods-Mixed Data Approach to Research .................................................... 62  
    Taxonomy ....................................................................................................................... 62  
    Pragmatism ..................................................................................................................... 63  
    Multilevel Implementation ............................................................................................. 64  
    Methodology in Youth Development ............................................................................ 65  
    Dearth of Multiple Methods-Mixed Data Research .................................................... 65
Chapter 5: Discussion ......................................................................................................................... 120
Summary of Findings ......................................................................................................................... 120
  Relationship Between Ability Level and Measures of Achievement Goal Orientation, Character, and Caring .......................................................... 121
  Relationship Between Orthogonal Achievement Goal Orientation Categories and Measures of Character and Caring .................................................. 122
  Interaction Between Ability Level and Achievement Goal Orientation On Measures of Character and Caring .............................................................. 122
  Lessons Learned from American Football .................................................................................... 123
Significance of Findings ..................................................................................................................... 124
Limitations of the Research ............................................................................................................... 130
Interpretation of Findings ................................................................................................................ 135
Recommendations for the Field ....................................................................................................... 137
Recommendations for Future Research .......................................................................................... 140
Conclusion ........................................................................................................................................ 142

References ......................................................................................................................................... 144

Appendices ........................................................................................................................................ 167
  Appendix A. Copy of Web-Based Questionnaire ................................................................. 170
  Appendix B. Interview Guide ................................................................................................. 176
  Appendix C. Parent/Guardian Passive Consent Letter ....................................................... 179
  Appendix D. Parent/Guardian Decline Participation in Research Form ....................... 182
  Appendix E. Parent/Guardian Informed Consent Form ..................................................... 184
  Appendix F. Participant Assent Form for Interviews ......................................................... 187
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.1</td>
<td>Working Definitions of the Five C’s of Positive Youth Development</td>
<td>33</td>
</tr>
<tr>
<td>Table 3.1</td>
<td>Indicator and Respective Items Measuring Character</td>
<td>82</td>
</tr>
<tr>
<td>Table 3.2</td>
<td>Items in the Perception of Success Questionnaire-Children’s Version by Goal Orientation and Theoretical Definition</td>
<td>86</td>
</tr>
<tr>
<td>Table 4.1</td>
<td>Demographic Summary of Participants Completing the Questionnaire</td>
<td>93</td>
</tr>
<tr>
<td>Table 4.2</td>
<td>Reliability Coefficients and Respective Means for Indicator Variables Associated with Measures of Achievement Goal Orientation, Character, and Caring</td>
<td>95</td>
</tr>
<tr>
<td>Table 4.3</td>
<td>Correlation Matrix for Indicators of Character and Caring</td>
<td>97</td>
</tr>
<tr>
<td>Table 4.4</td>
<td>Two-Step Cluster Analysis for Task and Ego Goal Orientation</td>
<td>98</td>
</tr>
<tr>
<td>Table 4.5</td>
<td>Cross-Tabulation of Ability Level and Goal Orientation According to Frequencies and Percentages</td>
<td>100</td>
</tr>
<tr>
<td>Table 4.6</td>
<td>Mean Scores on Measures of Character and Caring by Self-Reported Ability Level</td>
<td>104</td>
</tr>
<tr>
<td>Table 4.7</td>
<td>Mean Scores on Measures of Character and Caring by Achievement Goal Orientation</td>
<td>105</td>
</tr>
<tr>
<td>Table 4.8</td>
<td>Bonferroni Post Hoc Tests of Multiple Comparisons Between Achievement Goal Orientation and Character</td>
<td>107</td>
</tr>
<tr>
<td>Table 4.9</td>
<td>Mean Scores on Measures of Character and Caring by Ability Level and Achievement Goal Orientation</td>
<td>109</td>
</tr>
<tr>
<td>Table 4.10</td>
<td>Multiple Comparisons of Goal Orientation Categories Divided by Ability Level for the Measure of Character</td>
<td>112</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 2.1 Five C’s of Positive Youth Development as Theorized Within Developmental Systems Theory .......................................................... 31
CHAPTER 1: INTRODUCTION

Youth throughout the world spend countless hours of their childhood and adolescence on playing fields and in sport facilities practicing and playing their favorite sports. More than half of all children aged 6-17 in the United States participated in organized team sports in 2004 (Jacobsen, 2005). According to the National Federation of State High School Associations (NFHS), over 7.1 million high school students participated in interscholastic sports in 2005-2006. These participation numbers show the potential of sport not only as a training ground for physical skills but also skills that teach children about life. The Canadian Centre for Ethics in Sports (CCES) found in a survey in 2002 that Canadians believed community sport to rank above school and religion in teaching positive values to youth (CCES, 2002). This finding is not surprising, as sport advocates, former athletes, and coaches have for many years unabashedly promoted the benefits or lessons learned from sport such as character, discipline, teamwork, work ethic, and leadership skills (Coakley, 2002; Tutko & Burns, 1979). Yet, research related to sport as a developmental context for youth is equivocal.

Sport critics have pointed to aggressive and violent tendencies (e.g., Conroy, Silva, Newcomer, Walker, & Johnson, 2001; Endresen & Olweus, 2005; Rees, Howell, & Miracle, 1990; Widmeyer, Bray, Dorsch, & McGuire, 2001), decreased moral reasoning (e.g., Beller and Stoll, 1995; Rees, 2001; Shields & Bredemeier, 2005; Shields, Bredemeier, & Power, 2002), and the win-at-all-costs attitude indicative of the professional model of sport (e.g., Leonard, 1998; Lumpkin & Cuneen, 2001) as several associated costs of participation in sport. Wankel and Berger (1990) noted, “Sport, like most activities, is not ‘a priori’ good or bad but has the potential for producing both
positive and negative outcomes” (p. 167). Sport has been shown to be a positive developmental context for youth if taught, organized, managed, and led in a manner consistent with sound developmental principles (Brunelle, Danish, & Forneris, 2007; Petitpas, Van Raalte, Cornelius, & Presbrey, 2004; Rutten, Stams, Biesta, Schuengel, Dirks, & Hoeksma, 2007). For male youth in particular, the developmental lessons learned through sport may be critical. Research on males has highlighted some troubling trends.

Across a number of developmental indicators, boys are falling behind girls. According to Pollack (1998, p. xxiv), male reading scores are significantly lower than females; male self-esteem is more fragile, and confidence as learners is less than females. Males are twice as likely as females to possess learning disabilities, represent the majority in special education tracks, and are significantly more likely to be diagnosed with attention deficit disorder and exhibit school disciplinary problems (i.e., suspended, expelled, or drop out of school) than females. Park (2004) contended that male character scores are lower than females, and Lerner et al. (2005b) reported boys scored lower than girls across a range of developmental variables including character, caring, competence, and connection. Boys have been found to possess significantly lower expressive identity scores for school and work when compared to females (Coatsworth, Palen, Sharp, & Ferrer-Wreder, 2006), and boys are more likely to label themselves as “jocks,” which in turn has yielded a significant relationship with higher levels of nonfamily violence (Miller, Melnick, Farrell, Sabo, and Barnes, 2006). Peter, Horn, and Carroll (2005) documented the educational outcomes associated with these gender differences in highlighting higher levels of undergraduate enrollment and degree attainment for females.
than males. Males, by virtue of numerous benchmarks, appear to be falling behind females in many important developmental categories. Yet, participation in sports remains higher for males than females at all levels (Gill, 2004).

Female participation numbers in organized team sports have risen exponentially since the passing of the Title IX Education Amendments of 1972, closing the participation gap between males and females in high school athletics alone from 3.5 million in 1971-1972 to less than 1.3 million in 2005-2006 (NFHS, 2006). Yet, males still considerably outnumber females across all levels of sport. (Gill, 2004). Female sport participation is estimated as one-third of the total sport participants (Gill). The sheer numbers of males participating in sport offers an opportunity to combat the developmentally troubling trends mentioned above on a widespread basis. Male high school students represented the highest percentage of sport participants in 2005 with 61.8% reporting participation on a sports team at school or in the community (Eaton et al., 2006). Overall participation in high school sports increased or remained relatively constant for male adolescents, vacillating since 1971 between 3.6 million and the current total of 4.2 million participants in 2005-2006 (NFHS). Among high school sports, American football is the most popular American sport based on these participation numbers.

According to the NFHS (2006), the number of high school males participating in organized American football topped the 1 million mark in 2005-2006. The number of high school males participating in organized football (1,071,775) nearly doubled the next closest organized sport in basketball (546,335). With such large numbers of participants, American football offers potential as a training ground for counteracting lagging
developmental strengths and outcomes for male adolescents. Yet, empirical evidence for
the place of sport in general (e.g., Fredericks & Eccles, 2006; Marsh & Kleitman, 2003;
Rees et al., 1990; Steiner, McQuivey, Pavelski, Pitts, & Kraemer, 2000) and football or
contact sports specifically (e.g., Conroy et al., 2001; Dunn & Dunn, 1999; Endresen &
Olweus, 2005; Miller et al., 2006) as a developmentally positive or negative context is
mixed and highlights the need for increased research in an effort to better understand the
conceptual basis and programmatic structures to provide for optimal youth development.
Rather than target the potential for negative consequences associated with sport
participation, my research is focused on the potential of sport as a developmental context.
This focus is aligned with the central tenets of positive youth development, the theoretical
perspective that forms the basis for the research.

Over the last decade, the collective discourse towards youth has shifted from a
deficit-oriented approach where youth are viewed as problems to be fixed to a more
positive mentality where youth are viewed as resources to be developed has been labeled
positive youth development (PYD; see Benson, Scales, Hamilton, & Sesma, 2006;
Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Damon, 2004; Lerner, Almerigi,
Theokas, & Lerner, 2005; Lerner, Brentano, Dowling, & Anderson, 2002; Pittman, Irby,
& Ferber, 2001). PYD is comprised of the following developmental indicators that form
the conceptual basis for the theoretical perspective (known collectively as the “five C’s”):
connection, character, competence, confidence, caring or compassion (Lerner et al., 2000;
Pittman et al., 2001). Proponents of PYD view all youth to possess the potential to
develop into contributing adult members of society (e.g., Benson, 2002; Benson &
Pittman, 2001; Damon, 2004; Park, 2004). Based on developmental systems theory,
individuals are deemed active and dynamic agents engaged in a bidirectional process with their community contexts (Lerner, 2002).

Sport is considered an achievement domain, which creates an imperative for achievement motivation to be considered in the course of establishing a conceptual understanding of the developmental processes of youth involved in sport contexts.

Achievement goal theory (AGT) was first developed in the achievement context of academics and later applied to competitive sport settings (e.g., Ames, 1992a, 1992b; Duda, 2001; Duda & Nicholls, 1992; Dweck, 1986; Nicholls, 1989). AGT asserts that individuals are actively pursuing goals based on orthogonal achievement goal orientations and perceived ability or competence. Achievement motivation is divided according to an individual’s assessment of perceived ability or competence with either a task (i.e., personal mastery) or ego (i.e., normative ranking) orientation. Research on achievement motivation has yielded significant developmental differences between individuals displaying tendencies towards task or ego orientation (e.g., Duda & Ntoumanis, 2005; Dunn & Dunn, 1999; Ntoumanis, 2001; Roberts, 2001; Sage, Kavussanu, & Duda, 2006). High levels of ego orientation were predictive of low morality or antisocial functioning (Sage et al.), aggressive tendencies and low sportspersonship (Dunn & Dunn), and served a mediating effect in the relationship between participation in contact sports and low levels of moral functioning (Kavussanu & Ntoumanis, 2003). The value of task orientation on morality is not as clear (Kavussanu & Ntoumanis; Sage et al.). Further research is needed to determine the relationship. Kavussanu and Ntoumanis stated, “…our findings underscore the importance of examining interaction effects between task and ego orientation in predicting moral
variables” (p. 465). The latent constructs of character and caring under consideration in my study represent the constructs of PYD most closely associated with morality and fuel the impetus for examining the relationship between AGT and PYD.

Nicholls (1989) believed an explicit relationship existed between achievement goal orientation and moral values. Character has come to symbolize the embodiment of morality. Despite a great deal of interest in the subject, the elusive construct of character has yet to be fully conceptualized (Shields et al., 2002). Based on Rest’s (1984) model, Shields et al. postulated that character was comprised of four processes with accompanying psychological competencies or characteristics. The processes will be explained in greater detail in Chapter 2, but three of the competencies relate directly to my research and further support the rationale for conceptual integration of PYD and AGT.

Character was theorized as supported, particularly in an achievement context such as sports, by the dimensions of empathy, moral reasoning, motivational orientation, and ego strength (Shields et al., 2002). Based on this model of character, examining achievement motivation is not only appropriate but imperative to a conceptual understanding of the very construct of character. The presence of empathy, a core tenet of caring as conceptualized in PYD, provides added justification for highlighting this variable as a developmental construct interrelated to character. The sport context is naturally an achievement setting, so consideration of achievement motivation when examining issues related to development and morality in sport is integral to an understanding of the conceptual framework.
Shields and Bredemeier (1995) proposed the theory of *bracketed morality* to describe insulated and lower morality levels in sports competition that do not necessarily translate to real life moral judgment or action. This notion of bracketed morality in sport contexts has since been expanded by Shields and Bredemeier (2005) through recognition of an “achievement ethic” (p. 130) pervasive in sport contexts. Shields and Bredemeier postulated that the bracketed morality seen within sport is intricately tied generally to AGT and specifically to an individual’s goal orientation. By examining the interaction of PYD constructs character and caring with the sport-specific achievement motivation variables of achievement goal orientation and self-reported ability level, an important step can be taken towards the conceptual integration of PYD with AGT.

**Significance**

Positive youth development through competitive sport offers the potential to begin addressing the growing problem of male adolescent development. By examining developmental and achievement motivation variables in the context of American football, the sport most commonly positioned to counteract the problem based on participation totals in interscholastic sport, my study will begin the process of addressing questions related to the conceptual relationship between variables associated with PYD and AGT. PYD is the goal, and AGT provides a proposed pathway towards that goal. By adding insight into this relationship through examination of a sample of American football players, a step towards conceptual unification can be made in moving towards development of an integrated theoretical model. Although research into sport-specific morality is important in examining sport contexts, my research has adopted the morality-based framework of PYD. The PYD constructs of character and caring are not sport-
specific but aimed towards measurement of an adolescent’s developmental or moral self. By combining these measures with sport-specific achievement variables associated with achievement motivation or AGT, the research will expand the current body of knowledge and provide further insight into sport as a developmental context.

General agreement exists that sport can play a positive role in the development of adolescents if structured in a manner consistent with developmental principles (e.g., Brunelle et al., 2007; Caldwell, 2005; Fraser-Thomas, Côté, & Deakin, 2005; Petitpas et al., 2004; Petitpas, Cornelius, Van Raalte, & Jones, 2005; Rutten et al., 2007). Taylor (1996) advocated for recreation and sport to play a major role in the positive development of inner-city Detroit youth. Taylor stated:

Sports and recreation programs have been able to and can once again serve to provide communities with the means to foster positive personality, physical, social, and moral development in youth and to counter disruptive, violent and criminal behavior...Most important, sports and recreation programs can repay their costs – in human and financial capital – many times over. (p. 349)

William Pollack, one of the country’s leading researchers and authorities on male adolescents, echoed Taylor:

When sports are kept in proper perspective – when we see sports primarily as a chance for boys to come together for joyful, spirited, high-energy play – they can help boys discover new competencies, buttress their feelings of self-worth, and reunite them with their authentic voices, enabling them to express the deepest stirrings of emotion in their hearts, widening their circle of connections” (p. 273)
Many questions related to sport’s context as a medium for psychosocial development have yet to be answered. The interaction between developmental constructs such as character and caring with achievement motivation variables such as goal orientation and ability level may provide added insight to aid this discovery process.

Research Purpose

Positive youth development has become the guiding theoretical foundation for developmental attributes in youth. The central tenet of PYD is the belief that children and adolescents are capable of growing and prospering into well-rounded adults, and this development is examined in light of the developmental assets or inputs afforded through home, community, and school settings (Benson & Pittman, 2001a; Lerner et al., 2005a). Youth sport is one of many contexts in the lives of children and adolescents. The purpose of this research was to examine the relationships between the PYD constructs of character and caring with achievement goal orientation and ability level, variables associated with AGT, in the context of organized American football. Through the course of the study, various research questions were addressed and tested in an effort to more closely examine the interaction and value of AGT on developmental constructs associated with PYD. Through utilization of multiple methods (i.e., self-administered questionnaires and personal interviews) to collect mixed data (i.e., quantitative and qualitative), my research attempted to unravel the complex interplay between multiple variables in an effort to further the conceptual and applied understanding of sport’s context in developing responsible and caring adult citizens.
Research Questions

Research questions provide a framework to support and guide research. As mentioned, multiple methods were employed with the intent for the qualitative data obtained from interviews to supplement the quantitative data from questionnaires. The deductive orientation of the research in testing existing theory was offset by the exploratory nature of the study. These aspects combined to provide that the multiple methods-mixed data approach to the research fell within the positivist paradigm. Despite the exploratory nature of the study, the research questions were framed to be deductive rather than generative. The following research questions (RQ) guided my research:

RQ1: Does a significant relationship exist between self-reported ability level and measures of achievement goal orientation, character, and caring?

RQ2: Does a significant relationship exist between orthogonal achievement goal orientation categories and measures of character and caring?

RQ3: Does a significant interaction exist between self-reported ability level and achievement goal orientation on measures of character and caring?

RQ4: Are the lessons participants report learning from football framed more by winning/competition or more consistent with the constructs of PYD?

The insight gained from addressing these research questions will provide insight into future sport and developmental research related to the respective constructs.

Summary

The vast number of sport participants establishes sport as an important developmental context for youth. Yet, research on sport’s place in promoting youth development is mixed and coupled with troubling indicators related to male adolescent
development creates the need for additional research. The emerging theoretical framework of PYD represents a shift away from deficit-based viewpoints of youth. In order for sport to effectively promote PYD, the pathway to reach that developmental goal must be further examined. Sport is an achievement domain, and AGT has been utilized in sport contexts to establish an individual’s task and ego achievement goal orientation relative to conceptions of ability. Research on task and ego goal orientation has yielded differing developmental outcomes, prompting the need for additional research. My study represents the initial examination of the relationship between variables associated with PYD and AGT in utilizing multiple methods to answer the respective research questions.

The purpose of this research was to examine the relationships between the PYD constructs of character and caring with achievement goal orientation and ability level, variables associated with AGT, in the context of organized American football. Prior to proceeding with the methods, results, and discussion of my research, a review of the relevant literature associated with recreation and sport, PYD, AGT, and multiple methods research is included to provide the empirical and conceptual underpinning to the study.
CHAPTER 2: REVIEW OF LITERATURE

The purpose of this research was to examine the relationships between the positive youth development (PYD) constructs of character and caring with achievement goal orientation and ability level, variables associated with achievement goal theory (AGT), in the context of organized American football. The origins of organized sport for youth in the United States were marked by progressive reform, and youth development was firmly entrenched as a central component of the idealism associated with youth sport (Wiggins, 2002). Sport advocates and critics are at odds as to the current state of sport as a developmental context for youth. My research did not purport to settle that debate but aimed instead to focus on competitive sport in general and American football in particular as a potentially positive developmental context for youth.

The research was framed to more closely examine the relationship between variables associated with two theoretical perspectives in PYD and AGT. Achievement goal theory has been studied extensively in the sport literature (e.g., Duda & Nicholls, 1992; Duda & Ntoumanis, 2005; McArdle & Duda, 2002; Roberts, 2001; Treasure, 2001), but the relationship between AGT and PYD has not been examined in detail. PYD offers an active and dynamic process for individuals and a potential framework for reform of sport environments. My study focused on two of the five developmental tenets of PYD, character and caring. In studying the relationship between these PYD constructs and achievement motivation variables such as goal orientations and ability level in the context of American football, insight was gained into the complex interplay between these complimentary theoretical perspectives. A multiple methods research design was employed to gain increased understanding through collection of both quantitative and
qualitative data.

The review of literature was organized according to the following sections (divided into appropriate subsections): history of youth development through leisure, PYD, AGT, character and caring in competitive sport, and multiple methods-mixed data approach to research.

History of Youth Development Through Leisure

The history of youth development through leisure is organized into the subsections of play, recreation, and sport. These subsections are interrelated and the demarcation into separate sections does not denote divergent evolutionary paths. The progression from play to recreation to sports and accompanying increased detail is aimed instead towards an evolutionary representation both of the focus of the research and the increased role of competitive sport in our society.

Defining Youth Development

Youth development – a movement, a process, a series of activities and experiences, a journey, a program, an outcome, a philosophy - has taken and will continue to take many forms. Latent constructs are dynamic and open to perception and interpretation. As noted by Larson and Walker (2005):

The process of human change is not something any of us can observe… It is an abstract process unfolding over long periods of time, and partly occurring within the private thoughts and feelings of youth. We only catch glimpses. (p. 131)

A definition for youth development is imperative to laying a framework for its study, but one of the problems with a relatively new area of scientific inquiry is agreement on what constitutes such a broad concept as youth development. The study of the developmental
processes of children and adolescents has commenced for centuries, but youth
development as the buzzword for this field of study evolved over the last two decades
(Pittman, Irby, & Ferber, 2001) within psychology and related fields such as education
and leisure studies. A wealth of foundations, nonprofit organizations, and government
agencies have funded and driven research and created a vast array of resources (Benson
& Pittman, 2001a) during this time period.

Numerous definitions of youth development have emerged from these
organizations and academic researchers. These definitions provide rich contexts in which
to frame research and practice, but MacDonald & Valdivieso (2001) summarized the
central mission of youth development as, “…what we want our children to acquire is a
rich array of social and intellectual knowledge, attitudes, and competencies that will
enable them to be caring people and productive citizens” (p. 172). The National
Collaboration for Youth Members (NCYM) approved the following most widely cited
definition for youth development in March of 1998:

A process which prepares young people to meet the challenges of adolescence and
adulthood through a coordinated, progressive series of activities and experiences
which help them to become socially, morally, emotionally, physically, and
cognitively competent. Positive youth development addresses the broader
developmental needs of youth, in contrast to deficit-based models, which focus
solely on youth problems (para. 1).

The NCYM’s definition highlights the addition of the word positive as a descriptor
preceding youth development, which has evolved to signify an alternative to the deficit-
based view of youth. PYD has become a guiding perspective for research on children and
adolescents (see Catalano et al., 2004; Lerner, Almerigi, Theokas, & Lerner, 2005; Lerner, Brentano, Dowling, & Anderson, 2002; Pittman et al., 2001). Youth spend time in different settings ranging from school to home to extracurricular programs. Recreation and sport environments fall into the extracurricular program category with targeted research focused on youth development in this context or setting. Participation in recreation and sport are integral elements in the lives of children and adolescents around the world and provide a rich context in which to study youth development.

Play and Youth Development

Plato made reference to youth development through leisure activity or play in ancient Greece in stating, “Education should begin with the right direction of children’s sports. The plays of childhood have a great deal to do with the maintenance or nonmaintenance of laws” (Plato, 1961, as cited in McLean, Hurd, & Rogers, 2005, p. 55). Joseph Lee, considered to be the founder of the playground movement in the United States, was instrumental in advocacy for the value of play as a positive context for youth development. McLean et al. stated:

Joseph Lee believed that play contributed to the wholesome development of personal character because it involved lessons of discipline, sacrifice, and morality. He saw it as more than a mere pleasurable pastime, but rather as a serious element in the lives of children… (p. 27)

Barnett (1990) summarized the developmental benefits of play for children by citing empirical research on play and cognitive, social, emotional, and physical development. The definition of play is illusive due to numerous overlapping and contradictory theories but is generally associated with amusement and enjoyment as central tenets supporting an
organizational climate of less structure than its typological brethren recreation and sport or sports. Differentiation between these interrelated constructs is necessary prior to proceeding.

Defining Recreation and Sport(s)

One of the inherent problems in framing a discussion of issues or theories related to the two disciplines of recreation and sport is the blurred line between the two entities. Recreation has been defined as, “…voluntary participation in leisure activities that are meaningful and enjoyable to the person involved” (Cordes & Ibrahim, 2003, p. 7). Sport is encompassed within the definition of recreation, yet differentiation even exists between sport and sports with the former being considered more of an all-inclusive concept and the latter in reference to separate activities (Parks, Zanger, & Quarterman, 1998). Coakley (2004) posited a definition that incorporated both of these aspects but reflected more of an orientation towards the division between recreation and sports:

Sports are institutionalized competitive activities that involve rigorous physical exertion or the use of relatively complex physical skills by participants motivated by internal and external rewards. (p. 21)

For recreation, fun and enjoyment is generally emphasized over competition. For sport, competition and physical activity are generally the central components. Elements of each discipline preside within the programs and practices of the other. Yet, the differences and separation between recreation and sport are often highlighted by the status of sport in our society. “…sport has become less a recreational outlet and more a vehicle for business and entertainment for far too many in the U.S.” (Danish, Forneris, Hodge, & Heke, 2004,
In recent years, a potential unifying factor has emerged in the form of an increased and renewed emphasis on youth development through both recreation and sport.

**Recreation and Youth Development**

Recreation has a rich history of youth development dating back as far as the *Recreation Renaissance* period (1840-1880) that marked the formation of such important youth development programs as the Young Men’s Christian Association (YMCA) in 1851 and the Young Women’s Christian Association (YWCA) in 1866 (Edgington, Jordan, DeGraaf, & Edgington, 2002). The ensuing *Golden Era of Recreation* (1880-1920) was marked by an onset of federal funding of public recreation, and the formation of the Hull House, one of the earliest and most influential settlement houses, founded by Jane Addams in downtown Chicago (Edgington et al., 2002). Early settlement houses such as Hull House were the precursors to modern community recreation centers.

Recreation continued to play a role in youth development over the years, but a recent renewed emphasis was sparked in the 1990’s. The National Recreation and Parks Association (NRPA) published a book, *Beyond Fun & Games: Emerging Roles of Public Recreation*, in 1994. The NRPA book included detailed programming strategies for implementing youth development elements into a program’s organizational structure (Witt & Crompton, 2002).

Witt and Caldwell (2005a) have led the research efforts devoted to recreation and youth development, in publishing an edited book devoted to the topic and developing a definition and research agenda for NRPA. As noted by Caldwell (2005), “recreation contributes to youth development when the right elements of context, activity, and experience exist” (p. 172). This message is being made clear to parks and recreation
departments: “Agencies that cling to the ‘fun and games’ orientation will fail to position themselves as relevant to community efforts to develop a comprehensive system of positive youth development services” (Witt & Crompton, 2003, p. 7). Leisure and recreation researchers seem firmly attuned to the youth development movement, as evident in recent research related to the construct appearing in the journal most aligned with the recreation field, *Journal of Park and Recreation Administration* (JPRA; e.g., Bocarro & Witt, 2003; Henderson, Powell, & Scanlin, 2005) and highlighted by a special youth development issue of *JPRA* scheduled in 2007. Youth development may be a buzzword coined within the last two decades, but the significance of teaching youth skills beyond “fun and games” was integral at the beginning of the recreation movement and has witnessed a resurgence fueled by concomitant growth in psychology and sport research on youth development.

*Sport and Youth Development*

The history of sport and youth development in the United States can be traced to the emergence of the Muscular Christianity movement of the mid-nineteenth century and manifested itself through a shift in focus led by Luther Gulick of the YMCA (Wiggins, 2002). A “shift in focus” was descriptive both of the changing thought by Protestant religious leaders in embracing physical activity as a means for promoting manliness and Christian values (McLean et al., 2005; Wiggins) and the YMCA’s departure from their original opposition to organized youth sport for children (Wiggins). Although modern sport critics lament the character-building association with sport and point to the tie as a myth (Leonard, 1998; Rees, 2001), the ideology originally associated with organized youth sport in this country was firmly rooted in character development through the
Muscular Christianity movement (Wiggins). However, another shift was evident by the 1920’s, as youth sport programs became increasingly competitive. Wiggins, in describing the changes in youth sport by 1920, stated, “These programs, rather than ideologically based or intentionally reformist, were usually highly competitive and geared toward elite performers and championship play.” This overt competitiveness witnessed in the 1920’s represented a swift departure from the progressive ideological roots firmly embedded within organized sport. Some scholars would argue that the departure has been lasting. The context of sport has increasingly become an area of emphasis for research by academics.

As evident by an increasingly diverse pool of academic journals, research on sport has developed considerably in the United States within the last several decades with sport-focused academic fields or specializations such as sport psychology, kinesiology and physical education, sociology of sport, and sport management contributing in varying degrees to the literature and research base. Within the broad academic realm of psychology, sport has also been a context of study for psychologists focused predominantly on applied developmental psychology or program evaluation (e.g., Brunelle et al., 2007; Duda & Ntoumanis, 2005; Sage et al., 2006; Shields et al., 2002). Youth development as a theoretical frame or focal point to guide sport research has not been as widely researched in the broad sport psychology or sport management literature as evident by limited attention paid to the subject in sport management (Gillentine & Crow, 2005) or sport psychology (Weinberg & Gould, 2003) academic textbooks.

Researchers in sport management, sport psychology, and kinesiology or physical education have focused predominantly on collegiate and professional sport
administration, peak performance and individual psychosocial differences of athletes, and skill/motor development respectively (Gillentine & Crow, 2005; Weinberg & Gould, 2003). Sport psychologists represent a subsection of sport research most closely aligned with youth development. Sport psychology, apart from research on peak performance, is largely focused on individual psychosocial differences of athletes. Morality or character development (e.g., Beller & Stoll, 1995; Rees, 2001; Shields & Bredemeier, 2005; Shields et al., 2002), achievement motivation (e.g., Duda & Nicholls, 1992; Duda & Ntoumanis, 2005; McArdle & Duda, 2002; Roberts, 2001; Treasure, 2001) and sportspersonship (e.g., Weinberg & Gould, 2003; Weiss & Smith, 2002) are the dominant focus areas for sport psychologists. These psychosocial differences have largely been examined in isolation rather than fully adopting the youth development framework, but several researchers focused primarily on sport have led efforts to promote youth development and sport as a viable arena for research.

Danish and colleagues were essentially pioneers of research integrating sport and youth development through the implementation of life skills into organized sport settings (Danish, 1996, 2002; Danish et al., 2004; Danish & Nellen, 1997; Danish, Petitpas, & Hale, 1993). Life skills were operationalized as, “…those skills that enable individuals to succeed in the different environments in which they live such as school, home, and in their neighborhoods” (p. 40). The original manifestation of teaching life skills through sport arose from Life Development Intervention (LDI; Danish et al., 1993), which was grounded in the life span perspective of human development and essentially carried the same assumption as that of PYD – constancy of human growth and change. While youth development was actually being studied, the constructs were established independently
and not integrated with the rest of psychological research on youth development. Recently, this trend began to shift as researchers studying sport adopted the “youth development” label to describe their respective research (Danish et al., 2004; Ewing, Gano-Overway, Branta, and Seefeldt, 2002; Petitpas et al., 2005), if not the theoretical framework of PYD.

The gradual shift towards more integration of research on youth development through sport likely began after the release of a meeting report of the Carnegie Corporation of New York in 1996 that focused on the role of sports in youth development (Poinsett, 1996). The questions and direction of future research included in this report were aligned more with further examination of the developmental benefits associated with organized sport and less towards implementation of a youth development ethic into the very fabric of sport delivery. Fraser-Thomas et al. (2005) purportedly became the first to implement PYD into research on sport settings. As noted by Kuhn (1970), paradigm shifts can take many years. Before probing PYD more in depth in the context of sport, a closer examination of the evolution of PYD is necessary to establish a firm conceptual basis for its study through sport. The next section of the review of literature will examine PYD beginning with the theoretical and historical evolution of PYD from early roots in resiliency and intervention and prevention research to the theory’s emergence over the last decade including the role of developmental assets, the quest for typological and conceptual unity, and the role of developmental systems theory. The five C’s of PYD are examined with a closer adherence to character and caring (or compassion) as the two primary developmental strengths examined in my research. Finally, the contexts or
settings in which youth develop are examined including unstructured leisure or leisure boredom, structured extracurricular activities, and organized sport.

Positive Youth Development

As mentioned in the introductory chapter, PYD is represented most distinctly by a shift from viewing youth as problems in need of fixing to resources in need of development. As an overarching and guiding perspective based on developmental systems theory, PYD centers on the belief that all youth have the potential to develop in a positive manner when aligned with the proper inputs or developmental assets (Lerner et al., 2005ab). The developmental systems approach is based on the concept of plasticity or the “potential for systematic change” (Lerner et al., 2005a, p. 11). Damon (2004) stated:

The positive youth development approach aims at understanding, educating, and engaging children in productive activities rather than at correcting, curing, or treating them for maladaptive tendencies or so-called disabilities. (p. 15)

The emergence of PYD as a viable perspective has also shifted the outlook towards youth in research and policy circles to more of an optimistic viewpoint. The shift to PYD is best understood by examining the historical and theoretical evolution that led to its widespread acceptance.

Theoretical and Historical Evolution

Child and developmental psychology has traditionally been focused on problems and deficits of youth rather than on young people’s strengths (e.g., Benson et al., 2006; Damon, 2004; Lerner et al., 2005b). Historically, the deficit-based approach was likely a relic of mental health models focused on psychoanalysis and criminal justice models focused on punishment rather than prevention (Damon). The deficit-based perspective
was centered on the notion that adolescents who were void of problems or negative behaviors such as drug and alcohol use, crime and violence, unsafe sexual practices, cigarette smoking, or other deviant acts were essentially developing in a positive manner (Lerner et al.). “‘Normal’ development was thought not to provide much interest or scope for study, compared with development that was maladjusted or downright aberrant” (Benson et al., p. 1). Further, the modern view of youth had evolved into a characterization typically described as fragile and vulnerable to risks. However, Norman Garmezy followed by Emmy Werner helped to accentuate a shift in introducing the terms and theories of *invulnerability* and *resiliency* respectively into the vernacular of developmental psychology (Damon).

**Resiliency.** The theory of resiliency as described by Werner and Smith (1982) was predated by the study of stress and coping by children and the notion of the invulnerable child by Garmezy (Damon, 2004). Coping skills were defined as, “adaptation under difficult circumstances in the face of challenges, frustrations, and threats (White, 1974 as cited in Werner & Smith, p. 3). The notion of the invulnerable child was essentially recognition that some children exhibited what was termed as *invincibility* in the face of serious stress (Damon; Werner & Smith). Werner and Smith solidified and extended the invulnerable child notion by presenting longitudinal data supportive of Garmezy’s research and proposed resiliency to be defined as, “…capacity to cope effectively with the internal stresses of their vulnerabilities (such as labile patterns of autonomic reactivity, developmental imbalances, unusual sensitivities) and external stresses (such as illness, major losses, and dissolution of the family)” (p. 4). Werner and Smith specified that *some* children exhibited resiliency. Through this groundbreaking research, Delgado
(2002) credited Werner and colleagues with founding the modern-day youth development movement. Researchers such as Benard (2004) extended and expanded on the seminal research by Werner and Smith by advocating that all young people possess the capacity for resiliency. Along with this expansion to all children, researchers examined and categorized certain factors and processes involved with resiliency.

Resiliency factors (i.e., life occurrences) and processes (i.e., education) were classified as individual or environmental in nature and divided into two categories, risk and protective (Benard, 2004; Perkins & Caldwell, 2005). Risk factors and processes were defined as “individual or environmental hazards” (Perkins & Caldwell, p. 155), elements ingrained through an individual’s personal traits and place in society. Individual hazards may be an adolescent’s proclivity towards aggressive behavior or being extremely introverted. Environmental hazards may be low socioeconomic status with accompanying potential vulnerability such as surrounding violence in the neighborhood and/or parental neglect or abuse (Benard; Perkins & Caldwell). Protective factors and processes were aligned or paired with risk factors and processes in serving as protection against risk (Benard; Perkins & Caldwell). This aspect is especially pertinent from a PYD standpoint, as all youth are viewed as “at-risk” rather than viewing only certain demographic segments in that light (e.g., Benson, 2002; Benson & Pittman, 2001; Damon, 2004; Park, 2004). Further, protective factors and processes are associated with an individual’s personal and community context and represent malleability rather than the more fixed nature of risk factors and processes. The optimistic inclination of resiliency in recognizing the capabilities of all children coupled with community contexts serving an instrumental role as protective factors and processes are the most relevant tenets of
resiliency that helped to pave a path for the historical evolution of PYD. Concurrently, PYD also evolved as an accepted approach in part by recognized gaps in prevention research and efforts by prevention researchers (Catalano et al., 2004).

**Intervention and prevention.** Interventions have long been and continue to be a major element of psychological research, as researchers and practitioners observe individual, group, or societal problems and take steps to address those problems through targeted efforts. Prevention research, “with an emphasis on supporting youth before problem behaviors occurred” (Catalano et al., 2004, p. 99), emerged out of recognition that interventions were essentially stopgap measures void of substance if not paired with prevention measures. Prevention research in the 1980’s initially focused on single problems such as substance abuse or teen pregnancy, but this singular approach encountered criticism (Catalano et al.). The realization that all youth were capable of resiliency combined with the need for a more holistic and positive approach naturally led youth workers, academic researchers, and prevention scientists among others to call for alternative developmental solutions (Catalano et al.; Damon, 2004; Lerner et al., 2005a). Funding and policy initiatives answered the call (Lerner et al.), and PYD as a guiding applied and theoretical perspective for youth issues emerged.

**Emergence of positive youth development.** Through concerted youth advocacy by organizations such as the Forum for Youth Investment, the Children’s Defense Fund (Scott, Deschenes, Hopkins, Newman, McLaughlin, 2006) and the Search Institute (Benson et al., 2006), the national discourse has shifted towards this more positive embodiment of youth across multiple spectrums including youth sport. Advocates for PYD provided a counter to deficit-oriented views with the most well known direct
challenge coming from Pittman in noting, “problem free is not fully prepared” (Pittman et al., 2001, p. 5). To replace the problem-free approach, researchers proposed a set of developmental outcomes associated with PYD. These developmental outcomes form the conceptual backbone for the study of PYD. Lerner et al. (2005a) presented the following summary of PYD:

The theory of PYD that has emerged in the adolescent development literature specifies that if young people have mutually beneficial relations with the people and institutions of their social world, they will be on the way to a hopeful future marked by positive contributions to self, family, community, and civil society. Young people will thrive. (p. 12)

In recent years, research with PYD as a theoretical base has burgeoned in the developmental psychology literature focused on adolescents in particular (e.g., Catalano et al., 2004; Damon, 2004; Morrissey & Werner-Wilson, 2005; Roth & Brooks-Gunn, 2003), highlighted by a special issue of *Journal of Early Adolescence* (JEA) in February of 2005.

With a relatively new theoretical perspective void both of an established theoretical model to guide research and accepted measures to frame methodology, early inductive efforts were somewhat fragmented. The special issue of JEA included a report of the findings of the first wave of the 4-H study of PYD, longitudinal research led by Richard and Jacqueline Lerner (Lerner et al., 2005b). Until this report, most of the published work on PYD had been either theoretical (e.g., Benson, 2002; Benson & Pittman, 2001; Damon, 2004; Park, 2004), applied program evaluation (e.g., Catalano et al; Eccles & Gootman, 2002; Roth & Brooks-Gunn, 2003), or developmental assets
research (e.g., Benson, 2002; Benson, Leffert, Scales, & Blyth, 2000; Benson, Scales, Leffert, & Roehlkepartain, 1999). The longitudinal research published by Lerner et al. featured some of the first empirical research documenting both support for the theoretical constructs of PYD and scale development of an instrument to measure the five C’s of PYD. Research by youth advocacy organizations has strengthened the conceptual base but also contributed to fragmentation. The Search Institute established forty developmental assets for adolescents, and these assets have become an integral foundation for research associated with PYD (see Benson, 2002; Benson, Leffert, Scales, & Blyth, 2000; Benson, Scales, Leffert, & Roehlkepartain, 1999; Leffert, Benson, Scales, Sharma, Drake, & Blyth, 1998; Scales, Benson, Leffert, & Blyth, 2000).

**Developmental assets.** The Search Institute has become synonymous with developmental assets, as researchers coined and copyrighted the term and developed established inputs or developmental assets helpful to youth developing in a positive manner. Developmental assets have been widely utilized and researched in developmental psychology (e.g., Benson, 2002; Benson et al., 2000; Benson et al., 1999; Leffert et al., 1998; Scales et al., 2000). The Search Institute’s research into developmental assets evolved into the creation of forty developmental assets for adolescents through large nationwide surveys of children in grades six to twelve (see Benson et al., 1998; Scales et al., 2000). These forty developmental assets have served as a model to guide research on adolescents. The assets are divided evenly into external and internal asset types and further subdivided into categories. Research has shown strong delineated associations between higher levels of developmental assets and increased developmental benefits or positive outcomes, and conversely lower levels of
developmental assets are strongly correlated with developmental costs or negative outcomes (Benson et al., 1999; Leffert et al.; Scales et al.). Adolescents with “desirable positive developmental outcomes” (Scales et al., p. 27) are said to be thriving. With a novel theoretical perspective like PYD, consistency can become an issue, as researchers and advocacy organizations coin their own phrases or labels to represent similar concepts within the vernacular of the perspective. PYD is no exception, but researchers are working to develop a consistent conceptualization and typology based on developmental systems theory and centered on the “five C’s” of PYD.

Towards conceptual and typological unity. Developmental outcomes (i.e., attributes, thriving indicators, success) have been labeled, operationalized, and conceptualized differently by different researchers and advocacy organizations (Benson et al., 2006; Catalano et al., 2004). Catalano et al. stated, “While negative behavior outcomes are more standardized, measures of positive youth development tend to be more idiosyncratic to each study or investigator” (p. 118). For example, research on developmental assets is considered to be within the theoretical umbrella of the PYD perspective (see King et al., 2005), yet research by the Search Institute on developmental assets included separate thriving indicators (Scales et al., 2000). Benson et al. recognized this troubling aspect and attempted to bridge the seeming divide by summarizing the current lexicon and organizing existing research into seven core hypotheses with implications for applied and policy constituencies. The message espoused by Catalano et al. and Benson et al. was echoed in a sense by Lerner et al. (2005b) but framed more by a lack of empirical support of the core theoretical constructs associated with PYD. Although organized around the developmental systems approach with plasticity of youth
at its core, PYD lacks its own theoretical model that has been tested and verified through empirical research. Lerner and colleagues (King et al.; Lerner et al., 2000; Lerner et al., 2005ab) along with the Forum for Youth Investment have addressed this issue in a twofold manner in an effort to develop a central theory of PYD.

*Developmental systems theory.* First, researchers have adopted “the five C’s” of PYD in competence, confidence, connection, character, and caring or compassion (Lerner et al., 2000; Pittman et al., 2001) with a “sixth C” of contribution being included in the most recent discussion of PYD (Lerner et al., 2005b). These constructs are based on developmental systems theory. The five C’s have become synonymous with PYD and filtered into the vernacular of authors studying PYD outside developmental psychology such as recreation (e.g., Henderson et al., 2005; Perkins & Caldwell, 2005) and sport (e.g., Fraser-Thomas et al., 2005). Further, the 4-H longitudinal study of PYD (Lerner et al., 2005b) utilized developmental contextualism to frame an instance of developmental systems theory (Lerner, 2002). Developmental systems theories of human development emphasize the active and dynamic role of the individual in interaction with their environment, and likewise, the active and dynamic environment influencing the individual (Lerner, 2002; Lerner et al., 2005b). Lerner et al. (2005b) described developmental contextualism:

This instance of developmental systems theory stresses the inherent plasticity of human development, that is, the potential for systematic change throughout development. This potential exists as a consequence of mutually influential relationships between the developing person and his or her biological,
psychological, ecological (family, community, culture) and historical niche. (p. 20)

Hence, youth are viewed as active agents in their own development and the focus on context (i.e., community) becomes an imperative and active element in this bidirectional process. A conceptual map of PYD synthesizing the developmental tenets described by Benson et al. (2006) and the five C’s of PYD is included as Figure 2.1.
**Five C’s of Positive Youth Development**

As discussed in the previous section, the five C’s of PYD (PYD) are the defining constructs of the PYD theoretical perspective. As shown in Figure 2.1, each of the constructs fits into the overall theoretical model (adapted from Benson et al., 2006; Lerner et al., 2005b; Pittman et al., 2001) through context (connection), developmental strengths (competence, character, confidence), and developmental success (caring or compassion and contribution). The relative youth of PYD as a theoretical perspective...
dictates that this model is evolving. A sixth C in contribution was first included by Pittman et al. (2001) with the rationale being, “to underscore that fact that fully prepared is not enough – young people need to find ways to become fully engaged. This requires access to pathways to full participation in the community, the workplace, and the broader society.” (p. 6). Contribution has been included in this adapted version of the model and postulated by Lerner (2004) and colleagues (Lerner et al., 2005b) as a developmental outcome if all of the five C’s are present and active for an individual (Lerner et al., 2005b). The “five C’s” label has persisted in the PYD vernacular due in part to the sixth C of contribution being viewed as an indicator of thriving in youth (Lerner, 2004). The working definitions proposed for each of the constructs were derived from research and practice (Lerner, 2004; Lerner et al., 2005b; Roth & Brooks-Gunn, 2003). These definitions are included as Table 2.1.
Table 2.1

*Working Definitions of the Five C’s of Positive Youth Development*

<table>
<thead>
<tr>
<th>Five C’s</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Positive view of one’s actions in domain specific areas including social, academic, cognitive, and vocational. Social competence pertains to interpersonal skills (e.g., conflict resolution). Cognitive competence pertains to cognitive abilities (e.g., decision making). School grades, attendance, and test scores are part of academic competence. Vocational competence involves work habits and career choice explorations</td>
</tr>
<tr>
<td>Confidence</td>
<td>An internal sense of overall positive self-worth and self-efficacy; one’s global self-regard, as opposed to domain specific beliefs.</td>
</tr>
<tr>
<td>Connection</td>
<td>Positive bonds with people and institutions that are reflected in bidirectional exchanges between the individual and peers, family, school, and community in which both parties contribute to the relationship.</td>
</tr>
<tr>
<td>Character</td>
<td>Respect for societal and cultural rules, possession of standards for correct behaviors, a sense of right and wrong (morality), and integrity.</td>
</tr>
<tr>
<td>Caring or Compassion</td>
<td>A sense of sympathy and empathy for others</td>
</tr>
<tr>
<td>Contribution</td>
<td>Convergence of behaviors associated with five C’s in contributing in a positive manner to self, family, community, and civil society (Lerner, 2004). Behavioral and ideological component (Lerner et al., 2005b)</td>
</tr>
</tbody>
</table>

Note. See Lerner, 2004; Lerner et al., 2005b, p. 23; Roth & Brooks-Gunn, 2003

The short-term goal with PYD is developmental success, which is represented by a reduction in risk behaviors and positive development or thriving from a cross-sectional
perspective at a given time and place. However, development is an ongoing process and the ultimate objective is progression to become responsible adults. Therefore, longitudinal research becomes a key component for theory development (Lerner et al., 2005b). Witt and Caldwell (2005b) include “vision of a fully functioning adult” (p. 12) as one of the major principles of PYD with the five C’s contributing to that goal as follows:

To move toward these goals individuals must become educated to their highest potential, be able to foster a positive identity, have a personal sense of well-being and self-efficacy, and develop the habits associated with good citizenship (e.g., voting, caring, contributions to others). (p. 12)

Connection, competence, character, and confidence contribute in the model towards the goal of developmental success in creating caring and contributing youth and adolescents who develop into fully functioning adults.

Connection refers to an individual’s bidirectional interaction with the community context represented by family, peers, schools, and most importantly for this study, programs. The bidirectional nature of connection between youth and their community context has been called the principle of reciprocal interaction (Perkins & Caldwell, 2005). The developmental constructs of competence, character, and confidence contribute to the PYD model as interrelated developmental strengths as well as concurrently in a symbiotic sense as developmental outcomes (Lerner et al., 2005b; Pittman et al., 2001). Baumrind (1998) noted, “The intertwined constructs of character and competence focus on positive values, abilities, and proficiencies of the self in social contexts” (p. 1).
Although the model’s typology detailed in Figure 2.1 may imply a causal relationship, the developmental constructs of PYD are more aptly viewed as holistic pieces in a complex puzzle that has yet to be “solved.”

Competence is conceptualized as ability across a number of domains (Lerner, 2004). Competence will be discussed in greater detail when examining AGT and the accompanying achievement goal orientations, and the interrelation between perceived athletic competence and character and caring will be further examined through the course of the study. Whereas competence is viewed in the PYD framework as domain specific, confidence is operationalized through a global lens manifested by the interrelated constructs of self-efficacy and self worth (Lerner, 2004; Lerner et al., 2005b). For the purposes of my research two of the PYD constructs, character and caring (or compassion), have been identified as targeted tenets for the study sample of American football players. The sport literature, developmental model proposed by Lerner et al. (2005b), and the context of the study provide strong justification for inclusion of these variables in my study. The rationale for this choice will become clearer as research into the concepts of character and caring are examined more closely within the PYD framework and context of sport and stated succinctly in Chapter 3 when discussing the chosen measures.

Character. Character is a complex and elusive construct debated heavily in the academic fields of education and psychology (e.g., Baumrind, 1998; Lapsley & Power, 2005; Lerner, 2004; Shields et al., 2002). Moral reasoning, moral judgment, ethical behavior, moral development, moral action, virtues, moral sensitivity, and character strengths comprise a cross-sectional glimpse into the typology and interrelated concepts
associated with the developmental construct of character (e.g., Park, 2004; Rees, 2001; Shields & Bredemeier, 2005). Most modern conceptions of character and morality relate back to early work by Aristotle, Kant, Dewey, Piaget, and finally Kohlberg (Shields & Bredemeier, 2005; Lerner, 2004; Park, 2004; Rees, 2001). Kohlberg is most closely associated and identified with moral development in the literature, but scholars have criticized Kohlberg for developing a perspective focused too narrowly on justice for all people (Rees, 2001) and moral judgment (Shields et al., 2002). The complexity and ambiguity of character is evident in definitions from the literature, “a complex of virtues that help to define the person as a whole” (Shields et al., 2002, p. 537) or “the ethical estimate of an individual” (Baumrind, 1998, p. 3). Virtues, relevant to a PYD theoretical framework, were defined as, “the core characteristics valued by moral philosophers and religious thinkers: wisdom, courage, humanity, justice, temperance, and transcendence” (Park, 2004, p. 46). The latter definition of character highlights the component most closely associated with character in morality.

Shields et al. (2002) built on early work by Aristotle and Dewey related to character in asserting, “Not only is character revealed in action, but many also assume that character is developed through action” (p. 538). Kohlberg’s work on moral development drew on a Piagetian perspective (Lerner, 2004) and formed the basis for Lerner’s conceptualization of character in a PYD theoretical framework in purposely violating the naturalistic fallacy of what is and what ought to be. Lerner asserted his conception of character as moral and civic duty and allowed for both a comparative function with moral judgment or reasoning and scientific support for morality (hence, violation of the naturalistic fallacy). These debates and conflicting yet interrelated aspects
to the study of character highlight the ambiguity and ultimately point to character as a multi-dimensional developmental outcome. Park (2004) stated:

Empirical studies to date shed some light on the development of individual components of character, although there are no investigations of the development of character as a family of positive traits – as a multidimensional construct.

Regardless, we can be sure that a variety of influences contribute to development of character. (p. 44)

Shields and Bredemeier (2005) and Shields et al. (2002) have examined character extensively in a sport context.

Bredemeier and Shields (1998) also lamented the lack of conceptual agreement related to character, but offered a definition of morality in stating, “Morality pertains to those prescriptive aspects of social relations that respond to images or ideals of a right or good relationship” (Bredemeier & Shields, 1998, p. 257). Within a sport context, Shields and Bredemeier (2005) provided further support for the notion of character as a multidimensional construct in postulating integration of an achievement ethic with character. Shields and Bredemeier stated, “When we say that a person “has character” we mean that they have a coherent sense of themselves, together with those personal competencies that enable them to act consistently with regard to moral and achievement virtues” (p. 132).

Shields et al. (2002) built on Rest’s (1984) model and theorized character as a multidimensional construct comprised of the following primary processes and accompanying psychological competencies or characteristics underlining and supporting the process: interpretation-empathy, moral judgment-moral reasoning, moral motivation-motivational orientation, and implementation-ego strength. This conceptualization
highlighted elements imperative to the research design employed in my research. Shields et al. (2002) theorized that an achievement ethic was essential to studying character in a sport context, providing support for the examination of the relationship between variables associated with PYD and achievement goal theory. This conceptual tie will be explored further in the ensuing subsection Goal Orientation and Developmental Outcomes.

Further, the conceptualization of character by Rest (1984) and Shields et al. (2002) also provided support for the conceptual tie between character and caring. Empathy was posited as a psychological competency supporting the interpretation process in the construct of character. Empathy is a central component of caring (or compassion), as conceptualized in the PYD theoretical framework.

Caring (or compassion). Caring (or compassion) in PYD research has been conceptualized through the interrelated constructs of empathy and sympathy. Eisenberg and colleagues (e.g., Eisenberg, Fabes, Murphy, Karbon, Smith, & Maszk, 1996; Eisenberg, Fabes, Shepard, Murphy, Jones & Guthrie, 1998) have led efforts in developmental psychology to study sympathy in youth with sympathy considered to be a byproduct of empathy (Eisenberg et al., 1996, 1998). Damon (2004) proffered a definition of empathy as, “Empathy is the capacity to vicariously experience another person’s pleasure or pain. It is an emotion that provides the child with powerful incentives for positive social interaction” (p. 18). Sympathy is defined as, “feelings of sorrow for another or concern based on the perception of another’s emotional state or condition” (Eisenberg et al., 1996, p. 195).

Werner and Smith (1982) found the presence of empathy and caring to be an essential developmental strength and distinguishing attribute in resilient 18-year old
males. However, research has suggested that caring diminishes through the adolescent aging process (Benson, 1997). Benson found that 61% of sixth to eighth grade students self-report caring as a personal value while only 46% of high school students (grades 9-12) reported caring as a personal value. As noted by Benson, this research is troubling but provides further support for the need for PYD settings. Benson stated, “These numbers suggest that we graduate into adulthood a majority of youth who have lost…the values of caring and compassion” (p. 48). In many cases, the contexts in which youth are engaged are not purposively structured to promote developmental success. A closer examination of these contexts or settings for youth development provides a backdrop by which to more closely study youth in particular environments.

*Contexts (or Settings) for Youth*

Youth do not develop in a vacuum. Each child functions within a dynamic community context. As shown in Figure 2.1, the community context includes family, peers, school, neighborhoods, congregations, workplace, and programs (Benson et al., 2006). Context in the lives of young people matters, as Benson et al. stated, “Developmental theory posits that person and context are mutually interactive, such that increasing development strengths of one kind tends to increase the other” (p. 5). Each of these ecological contexts contributes to the broader community and promotes positive development if the influences are appropriate. Therefore, the systems-based approach characteristic of PYD has fostered specialized study into each context. The context of particular interest in my study is programs, specifically competitive sport programs. Before focusing on youth development and competitive sport, a closer review of the research into more general programmatic contexts is necessary to establish a rationale for
the developmental benefits of extra-curricular participation in programs as opposed to non-participation. Program evaluation is a critical component in establishment of value-added benefits of participation, and research related to unstructured leisure and leisure boredom validates the rationale for participation in extracurricular programs.

Unstructured leisure and leisure boredom. Research into adolescents engaged primarily in unstructured leisure or “hanging out” has yielded a characterization associated with higher levels of problem behavior (Osgood, Anderson, & Shaffer, 2005) than youth participating in structured activities. The after-school movement has promoted the benefits of participation in structured programs, with research supporting negative outcomes associated with unsupervised and unstructured after-school time (Reisner, Vandell, Pechman, Pierce, Brown, & Bolt, 2007). Across various age groups, Reisner et al. found negative behavioral tendencies including increased drug use in older age groups. Larson (2004) stated:

The underlying reality is that, left to themselves, children and adolescents often choose to spend time in unchallenging activities, like hanging out with friends and watching TV. Although some social interaction and time for relaxation are undoubtedly useful, it seems unlikely that spending many hours in unchallenging contexts fosters development. (p. 139)

But, Larson cautioned, “The task of future research is to illuminate how quantities and qualities of experiences in different activities act in combination to affect development” (p. 139).

Hunter and Csikszentmihalyi (2003) compared youth who were chronically interested to youth who were bored and concluded, “Interested youth present a picture of
vitality and well-being that stands in sharp contrast to their Bored [sic] counterparts” (p. 34). The concept of leisure boredom was defined by Iso-Ahola and Weissinger (1990) as, “A negative mood or state of mind that reflects a mismatch between optimal experiences that are perceptually available to an individual…The subjective perception that available leisure experiences are not sufficient to instrumentally satisfy needs for optimal arousal” (pp. 4-5). Research on leisure boredom has yielded empirical support for substance abusers exhibiting higher levels of leisure boredom than those individuals not abusing drugs (Iso-Ahola & Crowley, 1991). The focus on PYD in my study lends itself to not dwelling on the negative aspects of unstructured leisure or asserting that all leisure outside of the realm of structured activity is even necessarily negative. Yet, the results of empirical research provide a strong rationale for more involvement in structured programs and less unstructured and unsupervised free time for youth.

Structured extracurricular activities. A wealth of research has supported claims of developmental benefits for youth participating in structured extracurricular activities (e.g., Darling, Caldwell, & Smith, 2005; Kleiber, 1999; Mahoney, Larson, & Eccles, 2005). Extracurricular activity denotes structured programs, activities, or organizations taking place outside normal school curriculum and generally in the after school hours (Mahoney et al.). Mahoney and Stattin (2000) defined structured activity as, “…regular participation schedules, rule-guided engagement, direction by one or more adult activity leaders, an emphasis on skill development that is continually increasing in complexity and challenge, activity performance that requires sustained active attention, and clear feedback on performance” (pp. 114-115). Studies have reported greater academic achievement and academic aspiration (Darling et al.; Zaff, Moore, Papillo, & Williams,
better attitudes toward school (Darling et al.; Zaff et al.), and higher levels of civic engagement (Zaff et al.) among extracurricular activity participants compared to non-participants. Morrissey and Werner-Wilson (2005) provided further support: “While families are clearly important in many aspects of adolescents’ lives, it was found here that participation in structured activities had the most significant influence on pro-social behavior” (p. 82). Further, research has also shown reduction of negative behaviors associated with increased extracurricular activity participation (Mahoney et al.). The structured activity of the most interest for my study is organized sport, yet research on organized sport as a positive developmental context has yielded mixed results.

Organized sport. Youth development through sport in the United States has historically revolved around a notion that sport prepares children and adolescents for life (Danish et al., 2004). Questions about whether sport builds or reveals character have been ubiquitous in popular print (e.g., Gerdy, 2006; Gough, 1997; Telander, 1989), academic texts (e.g., Coakley, 2004; Leonard, 1998; Weinberg & Gould, 2003), and empirical research related to sport and morality (e.g., Beller & Stoll, 1995; Rees, 2001; Shields & Bredemeier, 2005; Shields et al., 2002). Scholars have disagreed over the issue of whether sport builds or reveals character, and empirical research has done little to settle the debate given the equivocal results. As mentioned previously, character is a multidimensional construct not easily defined, and therefore this subsection will explore the research related to sport and youth development across a wide swath of developmental indicators including character.

Despite omnipresent sport news coverage highlighting every negative incident in sport, the prevailing popular notion seems to be that sport builds character or supports the
development of youth. Tutko and Burns (1979) asserted that former athletes, people working in positions of power with sport (i.e., coaches, athletic directors, team executives), and individuals in the spotlight (i.e., politicians, journalists, and motivational speakers) in the course of celebrating their own positive experiences through sport falsely lead the general public to believe that sport is a bastion of positive development. These admonitions about sport’s developmental place are even romanticized in a religious sense, as evident in this advocacy for high school football by Pampa High School (Pampa, TX) head coach Andy Cavalier in a December 29, 2006 edition of Dateline NBC entitled The Pride of Pampa:

I think God created football with a very specific purpose and that is to train young men. It’s a game that symbolizes life. When these young boys go off to become men, they will have to overcome adversity and do many of the things that they do on the football field on Friday night.

The overarching assumption of sport advocates is that social learning obtained through sport is overwhelmingly positive, and some empirical research has backed that notion (Marsh & Kleitman, 2003; Steiner et al. 2000; Whitley, 1999).

Marsh and Kleitman touted their research utilizing the National Education Longitudinal Study (NELS) as the most comprehensive and generalizeable study to date on organized sport participation. Findings revealed subjects participating in athletics scored significantly higher on academic (e.g., grades, coursework selection), postsecondary (e.g., number of college applications, college enrollment) and nonacademic (e.g., self-esteem) outcomes than non-participants. Steiner et al. analyzed data from 1769 high school students completing the Juvenile Wellness and Health
Inventory (JWHS-76). The JWHS-76 was designed to measure general physical and mental health and risk behaviors, and results showed significantly positive findings for students participating in organized sports. Organized sport participants exhibited mental and physical health benefits and lower levels of risk behavior than nonathletes. The only negative aspect found for athletes was an increased risk of physical injury. Whitley conducted a longitudinal study of North Carolina high schools over a three-year period from 1993-1996 with data on 285,805 students and found definitive results indicative of higher grade point average and attendance rates and lower discipline referrals and dropout rates for athletes over nonathletes. Several aspects in particular set this research apart from other research on sport contexts. The baseline comparison group for the aforementioned studies was those individuals who do not participate in organized sports. Therefore, based on the research findings provided on unstructured leisure, participation in structured activity is preferable to non-participation. Research exploring the developmental differences between athletes and participants in non-athletic extracurricular activity has yielded different results.

Researchers examining extracurricular activity participation have found support for increased psychological adjustment, academic achievement, and occupational outcomes from adolescents participating in sport (Barber, Eccles, & Stone, 2001; Bartko & Eccles, 2003; Darling et al., 2005) when compared to non-participants or those students who are involved in non-sport extracurricular activity. Yet, research has also shown support for increased alcohol use (Barber et al.; Bartko & Eccles; Darling et al.), problem behavior (Bartko & Eccles), tendencies toward aggression (e.g., Conroy et al., 2001; Widmeyer et al., 2001); and decreased moral reasoning (e.g., Beller and Stoll,
1995; Rees, 2001; Shields & Bredemeier, 2005; Shields et al., 2002) for organized sport participants when compared to those students participating in non-sport extracurricular activity. Yet, these studies examined sport generally rather than specific contexts. Research by Hansen, Larson, and Dworkin (2003) and replication by Larson, Hansen, and Moneta (2006) both highlighted a dearth in comparative youth development research by activity contexts and the equivocal nature of research related to youth development and sport.

Hansen et al. (2003) originally sampled 450 high school students in a small yet diverse midwestern city. The study examined youth development measures across a spectrum of activity contexts (i.e., sports, arts, academic clubs, community service, and church) and attempted to validate the Youth Experiences Survey (YES) developed by the researchers. Results indicated higher rates for sport participants in positive learning experiences such as self-knowledge (i.e., participants learned about personal competence), emotional regulation (i.e., participants learned to control emotions in situations), and physical skills. Sport participants also reported higher rates of negative experiences in both the areas of negative peer and adult interaction (i.e., being pressured by peers and adults to act in an inappropriate or immoral manner).

Larson et al. (2006) replicated the previous study with a refined version of YES and an increased sample size of 2,280 eleventh grade high school students from nineteen different schools. Larson et al. again found support for positive developmental attributes in sport contexts, as sport participants scored relatively high on initiative (i.e., participants learned to push themselves) emotional regulation, and teamwork experiences when compared to other activity domains. Yet, Larson et al. also found support for
significantly lower rates of positive experiences such as identity (i.e., participants learned more about who they are), positive relationships (i.e., participants made friends with someone of the opposite gender or a different ethnic background), and adult networking (i.e., participation in the activity led to increased interaction with parents, community, or college networking opportunities). For negative experiences, sport participants reported significantly higher levels of stress than those subjects in other activity domains.

When considering the active and dynamic interplay between the person and context characteristic of developmental contextualism, the degree of specificity in examining comparative groups must be enhanced to avoid grouping all activity contexts under the label “sport.” For example, female athletes participating in cross-country running may exhibit vastly different developmental strengths than male athletes participating in American football. Researchers focused on specific sport activities (e.g., soccer, swimming, etc.), specific sport groupings (e.g., contact versus non-contact), or sociocultural aspects (i.e., identification with “jock” or “macho” culture) have yielded mixed developmental results.

Rees et al. (1990) collected longitudinal data on 1628 high school males in structuring a quasi-experimental research design with questionnaires completed in the sophomore year of high school serving as the “pre-test” and questionnaires collected after the senior year of high school serving as the “post-test.” Participants were broken down according to varsity athletic participation and non-participation and further subdivided based on participation in football, basketball, baseball, and an “other” sport category. Results found that varsity athletic participants and baseball players exhibited higher levels of aggression, but football, basketball, and other sport athletes did not yield
significantly higher aggressions levels. Rees et al. concluded that participation in interscholastic sports at the high school level had a minimal effect overall on prosocial or antiisocial functioning. Endresen and Olweus (2005) conducted a longitudinal study sampling 477 males involved in boxing, wrestling, weightlifting, and oriental martial arts (labeled “power sports”) and found evidence for an enhancement effect for both violent and non-violent antisocial behavior outside the sports context. The macho culture surrounding these particular sports was believed to be enhancing the negative effects. Similar results have been found for certain sports and when athletes self-identify with the “jock” stereotype.

Miller et al. (2006) analyzed data from 699 adolescent respondents from the longitudinal Family and Adolescent Study conducted from 1989-1996 and found self-identification with the “jock” label to be a significant predictor of nonfamily violence. Athletic participation alone did not show value for nonfamily violence, highlighting support for a similar conclusion drawn by Nixon (1997) in studying college athletes. Nixon found a positive relationship between participation in contact and team sports and levels of aggression in daily life. These results highlight the highly contextual basis for research on sport and youth development. Rutten et al. (2007) provided further support for contextual factors in discovering that positive coach-athlete relationships and high levels of sociomoral reasoning in the sport environment led to higher levels of prosocial behavior in 260 male and female competitive soccer and swimming athletes (ages 12-18). Yet, contextual research with a small sample size like the research by Rutten et al. is accompanied by a lack of generalization to larger populations.
In a competitive capitalistic society sport is naturally celebrated, yet like most contexts or settings discussed previously in this chapter, sport does not by default promote developmental success. Ewing et al. (2002) stated:

Comparative research has revealed that being involved in sport alone is not sufficient to ensure that participants will learn sportsmanlike [sic] attitudes and behaviors. In fact, sport may be a domain that suspends moral obligations or encourages unethical behavior for strategic gain in competition particularly when winning is overemphasized. (p. 38)

Further, even when youth learn positive lessons by default through sport, the transferability of lessons to other domains is believed to be rare (Petitpas et al., 2005). Youth development through sport provides an opportunity to teach positive developmental principles in a more cogent manner that will hopefully lead to increased transference of the purported life lessons into the academic and personal domains. Implied transference, as it is currently modeled, does not seem to work, but overt transference has been shown to yield developmental success in many programmatic contexts (Benson et al., 2006; Roth & Brooks-Gunn, 2002) and conceptualized by Walker, Marczak, Blyth, and Borden (2005) into the theory of developmental intentionality. Walker et al. (2005) postulated:

The framework captures the dynamic relationship between developmental outcomes, youth engagement, and intentionality in the philosophy, design, and delivery of program supports and opportunities for young people. The theory of developmental intentionality focuses on the design and daily implementation of effective learning opportunities for young people. (pp. 399-400)
The primary hurdle to overcome in structuring sport contexts to meet these developmental needs is an overemphasis placed on winning and competition. Yet, sport’s place as an achievement context provides for difficulty in that endeavor. The aforementioned research in this subsection highlights the equivocal nature of research on sport and youth development but also continues to draw attention to the important conceptual link between PYD and examination of achievement motivation.

Sport is an achievement domain in which participants strive to win and/or improve on personal skills. Research on AGT in a sport-specific domain or context has burgeoned over the last two decades (e.g., Duda & Nicholls, 1992; Duda & Ntoumanis, 2005; McArdle & Duda, 2002; Roberts, 2001; Treasure, 2001) with findings including empirical support for a connection between developmental strengths or outcomes such as character and caring and the goal orientation of AGT (e.g., Duda & Ntoumanis, 2005; Dunn & Dunn, 1999; Ntoumanis, 2001; Roberts, 2001; Sage et al., 2006). The next section of the review of literature will examine AGT beginning with the definition and evolution of the theory in academics, the application to sports including individual differences related to perceived competence, and implications of goal orientations on developmental outcomes including morality.

Achievement Goal Theory

Achievement goal theory has been researched extensively in the sport literature (e.g., Duda & Nicholls, 1992; Duda & Ntoumanis, 2005; McArdle & Duda, 2002; Roberts, 2001; Treasure, 2001), as achievement is a core construct associated with sporting environments. This line of research becomes important when examining PYD through sport, as researchers and practitioners strive for theoretical models and applied
program structures promoting in youth both optimal achievement motivation and developmental strengths such as strong character and caring. Achievement goal theory was first postulated in an academic setting.

*Definition and Theoretical Evolution*

The foundation of current psychological theories related to motivation was built in the academic achievement domain (Molden & Dweck, 2000). These theories have since expanded to encompass the sport arena (e.g., Duda & Ntoumains, 2002; Treasure, 2001). A wealth of research has been conducted on motivational constructs with numerous theories in numerous disciplines. Roberts (2001) lamented this aspect of research on motivation and stated, “It [motivation] is defined so broadly by some that it incorporates the whole field of psychology, so narrowly by others that it is almost useless as an organizing construct” (p. 3). Roberts defined motivation and its effect on achievement as, “…the investigation of the *energization, direction, and regulation* of behavior” (p. 3). The theoretical evolution of modern motivation research allows for the development of a comprehensive understanding of the applicable constructs forming the basis of current theory.

“Early” motivation drive theorists such as Atkinson believed achievement was a drive of humans, much like our most basic needs of food and water, in a “need to achieve” and a “fear of failure” (Molden & Dweck, 2000, p. 132). The drive theories were examined extensively, with theorists realizing the necessity of an expansion into the psychological mechanisms underlying achievement motivation (Molden & Dweck). Self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000) shared the biological quality of drive theory and held that individuals have an innate tendency for intrinsic
motivation and actively assess and integrate social and physical stimuli. Further, Ryan and Deci (2000) believed that extrinsic motivation or rewards negatively impact the actualizing and self-regulatory process associated with self-determination theory.

Weiner’s attribution theory of motivation (Weiner, 1985) expanded drive theory and examined the outcomes associated with achievement, introducing the concept of meaning into the equation. Weiner posited that the questions surrounding the meaning attributed to the outcomes (i.e., success or failure) affected behavior. Yet, attribution theory failed to address the initial reasoning compelling individuals to achieve, so goal theories evolved as a more holistic theory to add explanatory power to the origins as well as outcomes of achievement motivation (Molden & Dweck).

The central assumption of AGT is that the individual is a rational being intentionally directed towards goals, with these goals leading to achievement beliefs that direct decisions and behavior in achievement contexts or settings such as academics or athletics (e.g., Ames, 1992a, 1992b; Duda, 2001; Duda & Nicholls, 1992; Dweck, 1986; Nicholls, 1989). Further, AGT postulates that two goal orientations, ego and task, emerge dependent on a person’s conception of ability in achievement contexts. Goal orientations are defined as, “…dispositional tendencies reflecting different ways of cognitively processing achievement in a given activity” (Ntoumanis, 2001, p. 39). Individuals exhibit more salient ego and task orientations towards goal achievement motivation dependent on a personal conception or perceived competence of ability. The ego orientation emphasizes the display of competence or demonstration of ability with an overemphasis on normative ranking compared to peers. The ego orientation also encompasses the avoidance mechanism with individuals shying away from a display of incompetence. In
the task orientation, the individual is more likely to engage in adaptive achievement strategies that promote mastery of the task with improvement as the goal rather than normative ranking (Duda, 2001; Nicholls, 1989; Ntoumanis, 2001; Roberts, 2001).

Nicholls (1989) detailed the framework of the AGT from a developmental perspective in establishing a child’s typical developmental patterns related to the tenets of AGT.

As an educator, the impetus for Nicholl’s research was maximizing achievement motivation in students through an understanding of the developmental processes. In normative development, Nicholls (1989) believed children under the age of twelve to be incapable of an ego orientation towards goal achievement motivation. The natural inclination of children under age twelve is to display an intrinsic or task orientation towards achievement motivation followed by the development around age twelve or thirteen of a mature understanding of ability. This principle is based on differentiation between effort and ability, luck and ability, and difficulty of the task. Based on various socialization processes during childhood, children around the age of twelve or thirteen develop an inclination toward a strong or weak ego or task orientation. The core principle of Nicholls’ AGT as it relates to sport is an individual’s perception of competence and the subjective meaning placed on success and failure. The constructs of AGT have been applied to the physical domain with support through research on sports for the central tenets established by Nicholls.

Application of Achievement Goal Theory to Sport

Achievement goal theory has been researched extensively in the youth sport domain (e.g., Duda & Nicholls, 1992; Duda & Ntoumanis, 2005; McArdle & Duda, 2002; Roberts, 2001; Treasure, 2001). McArdle and Duda stated, “A viable platform for
understanding variations in young people’s interpretations of and responses to the youth sport setting is the achievement goal framework” (p. 410). An ego orientation as applied to sport denotes an athlete motivated predominantly by ego-enhancing aspects of sport associated with winning and defeating others. Task orientation represents more of a motivational focus on skill development and personal mastery of the task at hand (e.g., Duda & Ntoumanis, 2005; Roberts, 2001; Treasure, 2001). Achievement goal orientations are considered orthogonal in nature rather than dichotomous or polar (Duda, 2001; Nicholls, 1989; Sage et al., 2006). Sage et al. stated, “…one can be high on one goal orientation and low on the other, high on both, or low on both” (p. 457).

In predicting long-term involvement in sport and physical activity, Nicholls (1989) originally postulated that individuals with high task orientation would have more long-term motivation to continue with a sport or physical activity and more positive benefits. Researchers (e.g., Duda, 2001; Duda & Ntoumanis, 2005) have subsequently provided support for these postulates. The difference between task orientation versus ego orientation was summarized succinctly by Duda and Ntoumanis:

…task orientation is related to the beliefs that sports participation should foster cooperation, the value of striving for mastery, skill development, and lifetime health. In contrast, ego orientation is positively related to beliefs that sport should enhance social status, self-importance and career mobility, and is negatively related to the view that sport should foster good citizenship. (p. 319)

Nicholls (1989) believed individual differences and situational factors to be at the base of the achievement goal framework, as children by age twelve were predisposed to various socialization forces in childhood (i.e., parental expectations and style, social
environment, peers, coaches, teachers) and consequently display more of an ego or task orientation towards their perception of ability and motivation for achievement. Further, individual differences and situational factors are such that an athlete’s degree of achievement orientation is dynamic rather than static and may be wholly different in the academic domain as opposed to the sport domain depending on these differences and factors (McArdle & Duda, 2002; Treasure, 2001). Individual differences (i.e., perception of ability or perceived competence) and situational factors (i.e., motivational climate with accompanying socialization influences such as coaches, parents, peers) impacting achievement goal orientation are core components of AGT. Perceived competence is examined as an individual difference affecting AGT, and motivational climate is more closely scrutinized as a situational factor for AGT.

Perceived competence or ability level. Competence in the achievement motivation literature is redefined in sport contexts as perception of ability in the respective sport (Duda, 2005; Duda & Nicholls, 1992). Competence in an achievement setting such as education or sport is central to the tenets of AGT, as individuals directed towards goals judge their personal competency in a sport with adherence to task and ego orientation (Elliot, 2005; Elliot & Dweck, 2005; Nicholls, 1989). Elliot and Dweck believed competence to be the central tenet of achievement motivation research and even proposed re-labeling achievement motivation as “competence motivation” (p. 6). Duda and Whitehead (1998) in summarizing research related to achievement motivation stated, “Each of these educational psychologists agrees that a major focus in achievement settings is to demonstrate competence, and thus, the salience of perceptions of ability is a central feature of achievement settings” (p. 21). Sports settings are naturally achievement
settings in which an individual has a plethora of opportunities to assess competence or ability level.

A competitive team sport context provides opportunities for participants with a higher degree of ego orientation to measure their perceived ability either against teammates, opposing team members, or even athletes in their respective sport on television. Likewise, participants with a higher degree of task orientation have many opportunities to test their personal mastery of certain tasks in practice and game situations. Yet, individuals participating in sports display varying degrees of task or ego orientation, and perceived competence in the sport domain contributes to these varying levels (Elliot; Elliot & Dweck). Surprisingly, perceived competence has most often been considered an implied aspect of research on AGT in the sport domain with the setting (e.g., contact sports) or ability level of all athletes in sample (e.g., elite) being the frame of interest (e.g., Dunn & Dunn, 1999; Harwood, Cumming, & Fletcher, 2004) rather than individual differences.

**Goal orientations and developmental outcomes.** Roberts (2001) summarized previous research on AGT and believed the literature clearly indicated the implications of higher task orientation as far more positive than higher ego orientation across a number of developmental and behavioral strengths and outcomes. The positive implications of a higher degree of task orientation included belief in sport to promote cooperation and citizenship and more intrinsic motivation (with the accompanying positive benefits as outlined by self determination theory). In contrast, research on athletes displaying higher levels of ego orientation revealed a belief that sport was a vehicle for social status, lower “sportspersonship” with higher incidence of cheating behavior among these athletes, and
overall lower levels of moral reasoning (Roberts). Research related to goal orientation and morality has yielded similar but less definitive conclusions than the ones espoused by Roberts.

Sage et al. (2006) found support in adult male soccer players (ages 16-40) with a higher degree of competitive level to be associated with ego orientation and a significant predictor of antisocial functioning. These results supported similar results found by Dunn and Dunn (1999) with ice hockey players in finding that high ego and low task orientation was the orthogonal goal orientation yielding the lowest levels of sportspersonship. Kavussanu and Ntoumanis (2003) also found negative developmental consequences associated with ego orientation in conducting a study of 221 college athletes participating in contact sports (basketball, soccer, field hockey, and rugby). Ego orientation was a mediator for the relationship between participation in these sports and lower morality levels. Yet, Sage et al. found that task orientation was a weak predictor of prosocial behavior, only becoming a significant predictor in light of high task orientation and low ego orientation. This contradicted other research that found a significant relationship between task orientation and positive moral variables (Dunn & Dunn; Kavussanu & Ntoumanis; Roberts, 2001). This line of research examining sport-specific morality in light of achievement motivation has also highlighted an athlete’s length of involvement with a sport as predictive of higher ego orientation and lower levels of morality (Dunn & Dunn; Kavussanu & Ntoumanis; Sage et al.).

White and Duda (1994) found that females, regardless of the involvement level (youth recreational sports to intercollegiate athletics) exhibited higher levels of task orientation and lower levels of ego orientation than male athletes. These gender
differences are not surprising considering the omnipresent media coverage of male collegiate and professional sport and an overemphasis placed on winning above all else in these sporting environments. Those individuals participating in competitive sports that garner increased media coverage and pressure to win at all costs are accompanied by situational factors that naturally create a motivational environment more aligned towards ego orientation. Therefore, if PYD is the goal of sport programs structured for youth development, an applied model in which task orientation is promoted may be the pathway to achieve this goal or ideal, particularly in male-dominated sporting environments.

The implications associated with the formation of an achievement motivation high in ego orientation are disturbing and point to the need for adults to foster situational factors promoting more of a task orientation to achievement motivation. These results point to the need for more careful consideration of the competitive sport environments provided for youth. Kavussanu and Ntoumanis (2003) provided perhaps the most cogent justification for examination of the relationship between AGT and the PYD constructs most closely associated with morality in character and caring. Kavussanu and Ntoumanis stated:

…there is nothing inherently moral or immoral about performing sport skills. Other factors associated with competitive sport influence the relationship between participation in certain sports and various aspects of morality. Identifying these factors would enhance our understanding of the processes that operate in the sport context. Achievement goal theory can shed some light on these processes. (p. 502)
The discussion of the implications associated with achievement goal orientation would be incomplete without reflection on the role of competition as a fundamental element of organized sport. The following subsection of the review of literature will examine the role of competition in relation to achievement goal orientation.

**Role of competition.** Competition through sport naturally aligns with an ego orientation towards achievement motivation. Passer and Wilson (2002) explained, “At its heart, competition is a social comparison process” (p. 85). After review of the social comparison developmental literature, Passer and Wilson suggested age six or seven as an appropriate age guideline to begin phasing children into competitive youth sport. Although different constructs, the age guideline provided by Passer and Wilson contrasts with Nicholls (1989) assessment of age twelve or thirteen as the normative age at which children develop an achievement goal orientation. Hence, these normative ages for two important constructs in social comparison and goal achievement orientation point to an age range of 6-13 as a critical time period for youth development through sport. During this age range, the factors detailed by Petitpas et al. (2005) may become even more pertinent for youth involved in sport:

The difference between whether sports build character or character disorders has less to do with the playing of the sport and more to do with the philosophy of the sport organization, quality of coaching, nature of parental involvement, and participants’ individual experiences and resources. (p. 63)

Competition and pressure in youth sport is often not as high at the outset (age 5-6), but a progression generally ensues as children age and parents and coaches have an increased tendency to “live vicariously through their kids.” For example, Powell (2003) spent over
a year closely examining the environment surrounding Pop Warner (i.e., youth ages 6-14) football in Miami and discovered a culture in which football was viewed in lower income neighborhoods as a vehicle for upward social mobility. The serious nature, utter corruption, and overt competitiveness associated with this youth football league were reflective of a motivational climate wholly supportive of an ego orientation. This example highlights the need for closer examination of the competitive element in youth sport from an achievement motivation and developmental standpoint in terms of character development.

Shields and Bredemeier (1996) supported integration of competition and cooperation in advocating for a more counterbalanced approach to the delivery of sport and lamented the antithetical notion of the two constructs that has evolved in 21st century sport:

One problem with the way that competition is usually understood by competitors and spectators is that competition is thought to exist in a simple bipolar relation with cooperation: If a situation is competitive than [sic] it cannot also be cooperative. But competition can be viewed as a process whereby competitors seek to enhance their own performance and enjoyment through meeting the challenge posed by a worthy competitor. The root meaning of competition is “to strive with” not “to strive against.” (p. 379)

As children age, the organized sport opportunities become increasingly competitive, as interscholastic sport opportunities increase and recreational sport opportunities decrease.

The primary sport outlet for high-school aged adolescents is interscholastic sport, where competition is generally emphasized above fun and enjoyment. Shields and
Bredemeier (1996) discussed that interscholastic sport is too ingrained with a competitive win-at-all costs mentality. Orlick (2002) stated:

Many children are funneled through systems that appear to value only results or winning, as opposed to embracing ongoing learning and enjoyment. They often learn to evaluate their overall worth by results or numbers, to live only for the future, and to accept that there is no place free from evaluation. (p. 466)

Yet, scholars and empirical research have consistently backed the notion in recent years that sport may contribute in a potentially positive manner in the development of children and adolescents if organized, managed, and led properly in alignment with the tenets espoused by PYD (e.g., Brunelle et al., 2007; Caldwell, 2005; Fraser-Thomas et al., 2005; Petitpas et al., 2004, 2005; Rutten et al., 2007).

Brunelle et al. (2007) found empirical support for a life skills-centered program entitled Sports United to Promote Education and Recreation (SUPER) integrated into The First Tee’s national youth golf academy. One hundred adolescents were pre-selected through local chapters of The First Tee throughout the country and attended the academy which featured the SUPER program and pre- and post-tests to assess prosocial values associated with strong morality or character. The SUPER program was successful in positively impacting prosocial values in the participants. Similarly, Petitpas et al. (2004) found empirical support for positive developmental outcomes in the program evaluation of the pilot phase of the National Football Foundation’s (NFF) Play It Smart program.

The NFF implemented Play It Smart as a PYD initiative designed to provide an underlining life skills ethic to participation in American football. The Play It Smart pilot phase was implemented through the varsity football teams of three Northeastern inner-
city high schools. The ensuing positive results of the Play It Smart program yielded an expansion of the program to 88 high schools across the United States and provided the most cogent example to date of PYD in action through the context of American football. As these programs are implemented around the country, the need becomes even greater to further explore sports place as a positive developmental context.

In refining the model and gaining increased understanding of the complex relationship between the constructs associated with PYD and the variables of AGT in a sport context, important questions remain to be answered. Sage et al. (2006) referenced the importance of this research:

Future studies need to explore the contribution of moral identity variables, together with motivational variables and their interaction effects, to develop our understanding of the individual differences that contribute to the prediction of prosocial and antisocial functioning. (p. 465)

In order to begin to answer questions related to the potentially complex relationships of variables originating within different theoretical perspectives, a multiple methods research design was employed to gather both quantitative and qualitative data. The next section of the review of literature will examine this expanding methodological approach to research beginning with the taxonomy, paradigmatic considerations, and implementation associated with what is more commonly referred to as mixed methods research. Youth development research using multiple methods yielding mixed data will then be discussed in light of the dearth of research using this approach as well as calls for increased use of the approach. Finally, multiple methods-mixed data approaches to PYD
will be examined as a precursor to the following chapter detailing the methods utilized in
my research.

Multiple Methods-Mixed Data Approach to Research

McLean (1996) stated, “If one desires epistemologically ‘open’ research into
social phenomena, then the focus should be on encouraging a multiplicity of
methodologies within the leisure studies community” (p. 141). My research integrated
multiple methods into the study design in an attempt to provide increased understanding
of the theories and variables being investigated. The taxonomy, paradigmatic elements,
and implementation of multiple or mixed methods in addition to methodology in youth
development is discussed in this final section of the review of literature.

Taxonomy

Mixed methods, multi-method, triangulation, linking, and multiple methods-
mixed data are terms related in some manner to the combination of quantitative and
qualitative traditions of research. Triangulation (see Denzin & Lincoln, 1994) and linking
(see Henderson & Bedini, 1995) are two methodological and data techniques utilized in
mixed methods research. Triangulation involves the use of multiple sources of data or
methods - data triangulation or methodological triangulation. Linking simply refers to the
process of linking quantitative and qualitative data in a research study. The term multi-
method (Brewer & Hunter, 1989) was proposed in advocating for a synthesis of styles
and fits within the confines of the previous argument for multiple methods-mixed data.
However, multiple methods and multi-methods alone do not necessarily denote an
amalgamation of qualitative and quantitative traditions of research. Researchers could
just as easily be conducting quantitative research and employing multiple methods.
Mixed methods is the most commonly used term to describe a combined qualitative and quantitative approach to research, but this descriptor evokes the same criticisms expressed by scholars over the differentiation between qualitative and quantitative methods as opposed to qualitative and quantitative data (Henderson & Bedini, 1995). Based on this argument, a more accurate label is multiple research methods yielding mixed data (multiple methods-mixed data).

Pragmatism

Howe (1988) was among the first in educational research to propose the use of pragmatism as a means for negotiating multiple methods-mixed data and the perceived incompatibility between the assumptions of positivism and interpretivism. Pragmatism, a paradigm utilized by historical and contemporary researchers in varied disciplines (see Hanson, Creswell, Clark, Petska, & Creswell, 2005), revolves around the notion that metaphysical truths are nonexistent. Truth ultimately is a practical or pragmatic consideration in utilizing what is effective (“what works” is often used to describe pragmatism). Pragmatism, therefore, allowed researchers to negotiate the assumptions associated with positivism and interpretive science and opened the door for a mixed methods approach to research to take hold. In subsequent years, other noted researchers (e.g., Creswell, 1994, 2003; House, 1994; Reichardt & Rallis, 1994; Tashakkori & Teddlie, 1998) supported pragmatism and a mixed methods approach to social science research. Reichardt and Rallis provided the following support:

That the qualitative and quantitative perspectives remain partly adversarial in their relationship does not preclude cooperation in working together toward their shared goal. In fact, just the opposite is true. By working together, the two
traditions can enhance the practice and utilization of research and evaluation. (p. 11)

Howe also recognized the tendency or potential for methodological “tunnel vision” with a mixed methods approach to research.

**Multilevel Implementation**

Howe (1988) advocated implementation of pragmatism at all levels of the research process. Brewer and Hunter (1989) supported this proposal by advocating for a synthesis of quantitative and qualitative styles throughout a research study. Creswell (1994) described *mixed method designs* rather than simply *mixed methods* and concluded, “…the overall design perhaps best mirrors the research process of working back and forth between inductive and deductive models of thinking in a research study” (p. 178).

Scholars in psychology (e.g., House, 1994) and leisure studies (e.g., Samdahl, 1999) have also lamented methods driving research in their respective fields – whether of the positivist, interpretive, or pragmatic paradigm. House stated:

> There is nothing mystical or transformative about methods of any kind. We can kiss a frog if we want, hoping that it will turn into a handsome prince; but when we open our eyes, we will still find a frog. (p. 21)

House called for a closer adherence to subject matter and insisted that methodological choices be driven by research questions and the content and nature of the research topic, not a blind allegiance to a particular method or paradigm. Further, the interactive continuum approach (Newman & Benz, 1999) of combining research methods from the qualitative and quantitative traditions provides a practical strategy that addresses these issues by offering questions at each stage of research to determine the most appropriate
methodological choice in line with epistemological considerations. In an applied field such as youth development, researchers may be confined by logistical constraints associated with timing or access that force the research in a certain direction, as the methodology associated with youth development has traditionally been more aligned with a quantitative and/or positivist approach to research.

Methodology in Youth Development

A wealth of foundations, nonprofit organizations, federal agencies, and university-supported centers have funded and driven research and created a vast array of resources during this time period (Witt & Caldwell, 2005a). Youth development as an established discipline within psychology or leisure research is still evolving. The established roots are stronger in psychology, but influential leisure and recreation researchers like Witt and Caldwell have led efforts to bring youth development to the forefront of leisure studies. Although strides have certainly been made on a number of levels, formal research on youth development is still in its infancy but draws on prevention and developmental frameworks. The relative maturity of the field as well as its psychological base has contributed to a dearth of multiple methods-mixed data approaches to youth development research.

Dearth of multiple methods-mixed data research. As discussed by Ponterotto (2005), a multiple methods-mixed data approach to research has not been as widely accepted in psychological research as other social science disciplines such as education, sociology, and even leisure research. Clinical psychology is the most visible area of study within psychology, so naturally experimental and quasi-experimental methods are highly valued. Therefore, qualitative research, the interpretive paradigm, and organismic
worldview have not been as broadly integrated into psychological research. Hence, multiple methods-mixed data has naturally not expanded in large measure either. A non-comprehensive but extensive review of the recent and most cited youth development literature yielded few examples of qualitative data or an organismic perspective and even fewer multiple methods-mixed data approaches to research on youth development. In recognizing the utility of multiple methods-mixed data approaches to yield support for complex social science questions, researchers have called for more dynamic research strategies adhering to this methodology.

Calls for multiple methods-mixed data research. Lerner et al. (2001) in a special issue of the *Journal of Adolescent Research* on methodology advocated for creativity in the expansion of methodological innovation, namely implementation of multiple methods-mixed data research into adolescent development. The foundation of this call was based on the multilevel complexity of the developmental systems theory of youth development and the policy implications of diverse funding sources desiring richer data. Gould (2002) made a concurrent call for researchers studying youth sport in stating, “...we should beware of those who employ one method or instrument, either experimental or theoretical. If the state of knowledge in a field is to be advanced, diverse methods must be employed.” Gould also backed the notion supported by House (1994) and Henderson and Bialeschki (2002) that methodological choices should be guided more by the problems being addressed and research questions than allegiance to a particular method.

Researchers studying PYD across the developmental psychology, leisure and recreation, and sport fields have evidently heeded the respective calls by Lerner et al.
(2001) and Gould (2002), as multiple methods-mixed data approaches to research on youth development have seemingly propagated within the last five years. The following subsection summarizes several of the notable research studies across several fields focused on PYD.

**Multiple methods-mixed data approaches to positive youth development.** As detailed by Lerner et al. (2001), developmental systems theory provides a complex framework in which to examine youth development and requires a multiplicity of methods and data. Henderson et al. (2005) designed their study on six summer camp environments to reflect support for that assertion by integrating research methods yielding quantitative (through surveys) and qualitative (through observation and informal interviews) data. The program evaluation aspect of the research enhanced the support for the research design and methodological choices (Yin, 1994). Yin was a strong advocate for this approach and outlined four critical elements necessary for well-executed evaluation: detailing evidence, thinking about rival explanations, seeking results with significant implications, and demonstrating investigatory expertise in the subject matter (p. 82). Whether qualitative or quantitative in nature, Yin stated:

> The commonalities transcend the differences. In fact, the commonalities help us to rediscover that evaluation is not a debate between doing science and doing art but rather a craft that falls within the same single rubric: social science. (pp. 82-83)

This reflection echoed the principal reasoning described by Henderson et al. in choosing a multiple methods-mixed data approach, “…to better understand the world.” (p. 63).
Roth and Brooks-Gunn (2003) reiterated this sentiment in discussing program reviews based solely on quantitative data:

These reviews, however, provide little insight into why the programs succeeded in positively influencing participants’ lives. Moving beyond the question of whether programs can promote positive youth development to the question of how they do so requires greater specificity about the common elements of youth development programs. (p. 95)

Quantitative measures alone, while providing important information to potentially build on, often do not provide insight into the more complex questions of “why” and “how.” Therefore, the methodology chosen for this research was a multiple methods-mixed data approach within the positivist paradigm, utilizing qualitative data from interviews to supplement the insight gained from quantitative data obtained from questionnaires.

Summary

The literature review progressed from historical and theoretical evolution of youth development through leisure to the modern day conception of PYD as the guiding theoretical framework framing research in youth development. Structured extracurricular activity contexts were examined including organized sport as a developmental context for PYD. By examining research related to the AGT, a conceptual link between sport-specific domains and PYD was established. As evident through research on character and morality and achievement motivation, these constructs are multi-dimensional and the relationships are complex. Therefore, the multiple methods-mixed data approach became the obvious choice in answering rich and complex questions related to the purpose of my research.
The purpose of this research was to examine the relationships between the PYD constructs of character and caring with achievement goal orientation and ability level, variables associated with AGT, in the context of organized American football. By adding insight into this relationship through examination of the American football context, the first step towards conceptual unity can be undertaken in moving towards development of a theoretical model integrating the broad and emerging theoretical perspective of PYD with the established AGT. Through examination of character and caring measures of athletes utilizing the PYD framework rather than the bracketed morality often seen in research on sport, the research will provide enhanced insight to the issue of sport as a developmental context for youth and adolescents.
CHAPTER 3: METHODS

The purpose of this research was to examine the relationships between the positive youth development (PYD) constructs of character and caring with achievement goal orientation and ability level, variables associated with achievement goal theory (AGT), in the context of organized American football. A multiple methods-mixed data approach to the research was utilized in an effort to provide increased understanding of the relationship between these theoretical perspectives. Self-administered web-based questionnaires (see Appendix A) and face-to-face interviews (see Appendix B) were incorporated into the study design. The following sections and associated subsections detail the methodology utilized in the study: participants, procedures, measures, and method of data analysis.

Participants

The intercollegiate football program at North Carolina State University hosts several youth football camps annually during the summer months. These camps range from a team camp for high school teams to “Pee-Wee” camp for younger children to skills camp for middle and high school football players interested in improving and highlighting their football skills (personal communication, T. Cox, May 2006). The participants attending NC State’s skills camp from June 14-17, 2006 were the subjects for the study. Campers ranged in age from 12-18 and ranged in skill level from rising seniors highlighting their skills to their prospective college coaches to rising high school freshmen hoping to become starters on their respective junior varsity or varsity teams to middle school-aged children (ages 12 & 13) aspiring to become high school football players. The middle school-aged children were not originally disclosed as a target market.
for the skills camp (personal communication, T. Cox, May 2006), yet the demographic data obtained in the study indicated that nearly 25% of camp attendees ($n = 54$) completing the questionnaire were under the age of 14. Based on pre-registration data, the majority of campers (92%) were residents of the state of North Carolina. Demographic data obtained in data collection are included in Chapter 4. The skills camp served a multi-purpose function for the NC State football program and coaching staff.

Consultation with the graduate assistant football coach responsible for administration of the skills camp yielded detailed information about the multiple purposes associated with NC State’s skills camp (personal communication, T. Cox, May 2006). The skills camp is viewed as a means to serve the following purposes: recruitment of “blue chip” athletes, evaluation of players being considered for recruitment, revenue generation for coaches, and promotion of the football program with high school coaches across the state and region. “Blue chip” athletes are those football players considered to be the most highly rated high school football players by football scouting services based on their individual athletic ability, physical size and potential, game performances, and team success. Top-level NCAA Division I intercollegiate football programs such as NC State compete against each other to entice elite high school players to attend their respective skills camps in hopes of continuing to foster a relationship with the athlete, potentially offer a scholarship, and ultimately receive a verbal commitment from the athlete to attend their university. Other invited participants include athletes who may either be younger or a notch below the “blue chip” athletes, and NC State invited these athletes to attend the skills camp either directly through correspondence or indirectly through high school coaches in order to evaluate their respective talent, highlight the
program, foster relationships between athletes and coaches, and/or further develop the
talent of these players.

The rest of the athletes attending NC State’s skills camp attended of their own
accord either individually or through a program sponsored by their respective high school
teams. The varied purposes associated with administration of the NC State skills camp
combined with the opportunity to research a diverse sample of American football players
from across North Carolina and the Southeast region provided both added significance to
the study and justification for the site selection. Further, the skills camp setting provided
a unique environment to investigate the relationship between AGT and attributes
associated with PYD. A description of the procedures utilized in the process of data
collection follows.

Procedures

Study Design

The design of the study included several logistical elements that should be noted.
After initial consultation with the graduate assistant coach overseeing the NC State
football skills camp in early May of 2006, approval was granted by the coaching staff to
move forward with the study with a timeline of only six weeks between initial approval
and data collection on June 14, 2006. Ethical guidelines for social science research
usually require that children under the age of 18 receive parental consent prior to
participation in research studies (Henderson & Bialeschki, 2002; Ji, Pokorny, & Jason,
2004). Active parental consent can be difficult to obtain with timing, response rate, and
even response bias concerns (Jason, Pokorny, & Katz, 2001; Ji et al.). An alternative
strategy is passive consent. Ji et al. described passive consent:
In a passive consent procedure, parents receive materials that describe the research study and its risks and benefits. They are instructed to contact the researcher if they do not want their child to participate in the study. If the researcher does not receive this notification from the parent, it is assumed the parent is consenting to allow his or her child to participate in the study. (p. 578)

Controversy and debate has swirled around the use of passive consent (Jason et al.). In order to account for the limited timeline and address issues associated with a potentially reduced response rate while also recognizing the controversial nature of passive consent, a request was made and approval granted by the Institutional Review Board for Human Subjects at NC State for a combined passive and active parental consent strategy.

The passive consent strategy involved a mailing to the parents of all pre-registered campers ($n = 203$) that included a passive parental consent letter (see Appendix C) and a decline participation in research form (see Appendix D). Parents were instructed to either complete the decline participation in research form and have their child submit the form at registration or call a provided telephone number and request their child not be included in the study. One parent of a pre-registered camper declined participation for their child via the designated phone number. The multiple methods employed for the study also contributed to the need for a combined passive/active parental consent strategy. A dual categorization method was employed to account for the enhanced level of parental consent necessary for the interview method. This categorization method was employed as follows:
1. Pre-registered campers accompanied by a parent and/or guardian - Recruited for study and eligible to be selected for interview, obtain both passive (mailed letter) and active (signed consent form at check-in) parental consent.

2. Pre-registered campers not accompanied by a parent and/or guardian - Recruited for study but NOT eligible to be selected for interview, obtain passive (mailed letter) parental consent.

3. Campers without pre-registration accompanied by a parent and/or guardian - Recruited for study and eligible to be selected for interview, obtain active (signed consent form at check-in) parental consent.

4. Campers without pre-registration and not accompanied by a parent and/or guardian - Excluded from study, unable to obtain passive or active parental consent.

Campers arrived on NC State’s campus on June 14, 2006 and reported to the check-in/registration site and host dorm. Camp check-in and registration as well as data collection for the study took place from 12:00-4:00pm at this pre-determined location. The adjusted response rate for the study was over 84% based on 230 initially completed questionnaires and an estimated tally of 272 campers arriving during the set registration period. Some campers arrived after the set registration period with the final number of campers being counted as 285 for a final response rate over 80%.

**Self-Administered Web-Based Questionnaire**

NC State football coaches as well as volunteer research assistants assisted with active parental consent during check-in/registration and directed campers to the dorm’s computer lab for completion of the self-administered questionnaire portion of the study.
The computer lab was located directly adjacent to the check-in/registration tables and included 23 computers set on the web-based questionnaire. A copy of the web-based questionnaire is included as Appendix A. Research assistants were staffed in the computer lab to get participants started with the questionnaire and monitor the completion of the questionnaire in the event of technological difficulties. Each participant was required to read an assent statement before proceeding with the questionnaire. Incentives for participation were not provided for this study. An important limitation of the questionnaire design was the ability of subjects to skip questions. This aspect accounts for the varied sample size numbers depending on the variable. Participants completed the questionnaire in approximately 7-10 minutes, and research assistants were trained to note whether participants took less time to insure the integrity of the questionnaire completion. One participant was noted laughing with a teammate and selecting answers at a speed indicative of random answer selection. After this participant finished the questionnaire in less than 5 minutes, a baseline questionnaire was submitted to note this participant’s data, and the entry was excluded from the study. Interviews were also conducted at the time of check-in/registration.

*Interviews*

“An interview may take many forms, ranging from highly structured questions, which are typically used with quantitative approaches, to open-ended questions of various structures” (Henderson, 2006, p. 107). The interview structure for the study can be classified as an interview guide with pre-arranged questions as well as flexibility in modifying questions and probes. A time constraint of five minutes per interview was established by the NC State coaching staff due to fears regarding timing for the pre-
arranged camp schedule. Although qualitative data was collected through the interviews, the pre-arranged structure (with modifications during the interview) and time limit provided that the interviews fit within the positivist paradigm and aligned with a deductive orientation to supplement the quantitative data.

The researcher conducted interviews with participants during the check-in/registration period. Participants were selected in a semi-random fashion beginning with the first camper to complete the questionnaire. The interview room was located directly adjacent to the check-in/registration tables and the computer lab. Therefore, on completion of one interview, the researcher stood by the door of the computer lab recruiting the next participant to finish the questionnaire. Participants were asked whether their parents were present at registration, and if so, whether they would be willing to participate in an interview. Participants agreeing to participate were asked to complete and sign a separate participant assent form (see Appendix F) prior to proceeding with the interview. American football receives a great deal of media attention, so concerns did arise as to whether participants fully understood that the interviews were for social science research and not associated in any way with popular media. After the researcher informed the interviewees that the interview would be taped with a digital recorder, participants were then asked several warm-up questions prior to proceeding with a series of questions relevant to the study variables. Dependent on the nature of the research questions and type of interview being conducted, Creswell (1998) indicated 20-30 as a typical number of interviews both for saturation of themes and management of data. The limited time period of five minutes per interview precluded reaching a goal of saturation of themes, yet 25 interviews were established as the goal based on time considerations.
The interview guide with a complete list of questions and probes including modifications made during the interviews is included as Appendix B. The interview questions were designed to provide additional insight into the respective research questions under consideration in the study. The quantitative measures employed via the self-administered questionnaire portion of the study provided the primary data for the study. These measures along with the supplementary interview questions are summarized in the following section on measures.

Measures

Positive Youth Development

Positive youth development is a broad and evolving theoretical perspective with a limited set of reliable and valid instrumentation designed to measure the associated concepts. King et al. (2005) provided an integrative content analysis examining the major concepts associated with research on PYD and highlighted the lack of, “…direct empirical evidence for the existence of PYD as a latent construct, or, as well, of the empirical reality of key concepts (e.g., the Five C’s) associated with the PYD perspective” (p. 226). King et al. cited Lerner et al. (2005b) as the only published material to date documenting empirical evidence of PYD constructs and associated instrumentation. Lerner et al. (2005b) reported data from the 4-H study of PYD, a longitudinal research study beginning in 2002 (Wave 1) with a diverse sample of 1700 fifth-grade students. Through confirmatory factor analysis, results from Wave 1 of the 4-H PYD study provided support for five first-order latent factors representing the five C’s of PYD and a second-order latent factor supporting the PYD theoretical construct. This empirical evidence combined with the lack of any other published documentation of PYD
instrumentation at the time of my study led to adoption of the measures associated with the 4-H Study of PYD. After consultation with Jacqueline Lerner (personal communication, May 2006), one of the investigators of the 4-H Study of PYD, the decision was made to include character and caring (or compassion) as the two developmental strengths associated with PYD as variables measured in my study. In addition to the support provided in the review of literature related to a conceptual tie between character and caring through the concept of morality, results from Wave 1 of the 4-H Study of PYD indicated shared variance between the two first-order latent factors of character and caring (Lerner et al.). Character and caring were isolated as the only PYD constructs of the five C’s included in my study due to these theoretical and research considerations as well as logistical concerns affecting the study.

Strauss and Corbin (1998) noted, “Some [research projects] face considerable limitations on, say, the data collection techniques or on the populations available to researchers because of bureaucratic regulations, costs, shortages of time, or language barriers” (p. 30). In my study, measurement of all five C’s of PYD would have exceeded the established fifteen-minute time restriction imposed by the NC State football coaching staff on my study. With the camp schedule having been set prior to research approval, the coaching staff would only approve a maximum of fifteen minutes for completion of data collection for each camper. This logistical restriction provided time for measurement of two of the constructs associated with PYD. The combination of expert consultation and support from the literature in the form of ties between morality (closely associated with character and caring) and AGT in sport along with stereotypes associated with American football players led to the choice of character and caring as developmental strengths
representing PYD. American football players have typically been stereotyped as overtly aggressive and competitive individuals both on the playing field and in life, and the examination of character and caring in the manner proposed by my study would potentially provide insight into the validity of these stereotypes. Through correspondence with Jacqueline Lerner (personal communication, May 2006), permission and access was granted to the latest measures for character and caring utilized in the most recent Wave 4 of data collection for the 4-H Study of PYD.

**Character.** The measure for character utilized in the study was derived from Wave 4 of data collection for the 4-H Study of PYD. Wave 4 represents the fourth iteration in the process for development of measures associated with each of the five C’s of PYD. Yet, the only published research to date reporting measurement data was from Wave 1 of data collection (Lerner et al., 2005b). In Wave 1, items and internal assets from the Search Institute’s Profiles of Student Life – Attitudes and Behavior survey (PSL-AB; Benson et al., 1998) were utilized to measure character. The number of items and Cronbach’s alpha reliability coefficient for the respective internal assets by Lerner et al. for the character factor in Wave 1 were reported as follows: social conscience (6 items, \( \alpha = .924 \)), interpersonal skills (3 items, \( \alpha = .682 \)), values diversity (4 items, \( \alpha = .731 \)), and personal values (5 items, \( \alpha = .888 \)). The respective factor loadings for each of these indicators in comprising the first-order latent factor of character were .79, .67, .70, and .76. Despite the significance of empirical data from Wave 1 providing support for the first-order latent factor of character as well as a second-order latent factor of PYD representing all five C’s, the data were considered cross-sectional in Wave 1, and
improvements have been made in the course of subsequent iterations of data collection and model testing.

For Wave 4 of the 4-H Study of PYD, three of the four internal assets and accompanying items for measuring character were retained with behavioral conduct replacing interpersonal skills. Several factors led to retention of the interpersonal skills items as well as inclusion of the behavioral conduct items in my study. Interpersonal skills only consisted of three items, which allowed for the flexibility in retention. At the time of my study, reliability coefficients were not available for behavioral conduct, as the changes were in the process of being implemented in the 4-H PYD study. Further, the behavioral conduct items employed an alternative response format, and the potential for confusion by participants was high considering both the transfer to a web-based questionnaire and a limited number of research assistants to assist participants. These factors combined with only three additional items for the interpersonal skills indicator led to the decision to include both indicator variables and the respective sets of items.

Inclusion of the behavioral conduct indicator was consistent with conceptions of character as action-oriented (Shields et al., 2002). Five items from the Self-Perception Profile for Children (SPPC; Harter, 1983, as cited by Institute for Applied Research in Youth Development [IARYD], 2006) were utilized to measure behavioral conduct. The SPPC utilized an alternative response format where participants were asked to choose between two sets of representative teenagers (Choice A or B) and then asked to choose whether the chosen representative teenager was “really true” or “sort of true” for them. The questionnaire including these five alternative response format items is included as Appendix A. The remaining indicators and respective items utilized a 5-point Likert scale
assessing either importance attributed to an item (1-5; “not important” to “extremely important”) or the degree to which that item was representative of them as a person (1-5; “not at all like me” to “very much like me”). Since these indicators and items are intermixed with each other, Table 3.1 summarizes the items and indicators associated with character. The measure for caring has undergone similar modifications to the measure for character from Wave 1 to Wave 4 of the 4-H study of PYD.
Table 3.1

*Indicator and Respective Items Measuring Character*

<table>
<thead>
<tr>
<th>Character</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Conscience</td>
<td>Helping other people</td>
</tr>
<tr>
<td></td>
<td>Helping to make the world a better place to live in</td>
</tr>
<tr>
<td></td>
<td>Giving time and money to make life better for other people</td>
</tr>
<tr>
<td></td>
<td>Helping to reduce hunger and poverty in the world</td>
</tr>
<tr>
<td></td>
<td>Helping to make sure all people are treated fairly</td>
</tr>
<tr>
<td></td>
<td>Speaking up for equality (everyone should have the same rights and opportunities)</td>
</tr>
<tr>
<td>Values Diversity</td>
<td>Getting to know people who are of a different race than I am</td>
</tr>
<tr>
<td></td>
<td>Respecting the values and beliefs of people who are of a different race or culture than I am</td>
</tr>
<tr>
<td></td>
<td>Knowing a lot about people of other races</td>
</tr>
<tr>
<td></td>
<td>Enjoying being with people who are of a different race than I am</td>
</tr>
<tr>
<td>Personal Values</td>
<td>Doing what I believe is right even if my friends make fun of me</td>
</tr>
<tr>
<td></td>
<td>Standing up for what I believe, even when it’s unpopular to do</td>
</tr>
<tr>
<td></td>
<td>Telling the truth, even when it’s not easy</td>
</tr>
<tr>
<td></td>
<td>Accepting responsibility for my actions when I make a mistake or get in trouble</td>
</tr>
<tr>
<td></td>
<td>Doing my best even when I have a job I don’t like</td>
</tr>
</tbody>
</table>

Note. Behavioral conduct not included, as alternative response format is identifiable in questionnaire.
Caring. The measure for caring utilized in the study was derived from Wave 4 of data collection for the 4-H study of PYD. The initial caring measure of 5 items in Wave 1 (Lerner et al., 2005b) was derived from the Eisenberg Sympathy Scale (ESS; Eisenberg et al., 1996). Eisenberg et al. (1996, 1998) reported adequate reliability for the scale. Results from Wave 1 of the 4-H study of PYD were weakest for the caring measure with only 24% of the explained or common variance for the second-order factor of PYD being attributed to caring (Lerner et al.). In addition, correlation was weakest between caring and the other developmental constructs (five C’s) of PYD. Therefore, Lerner et al. reported that efforts were already underway for modification of the caring measure, as evident by the changes to the measure seen in Wave 4 of the 4-H PYD study.

Whereas Wave 1 of the 4-H PYD study included five items from the ESS representing sympathy only as the measure of caring, Wave 4 of the 4-H PYD study (IARYD, 2006) and my study included 7 bullying items and 9 experimental caring items. The bullying items were included in my questionnaire, as information on the reliability and validity of the “experimental” caring items were not available at the onset of the study. The experimental caring measure included five items from the ESS and four items from the empathetic concern subscale of the Interpersonal Reactivity Index (IRI; Davis, 1980, as cited by IARYD, 2006). At the onset of my study, this measure was labeled “experimental,” but the 4-H longitudinal study of PYD has since adopted this 9-item measure for caring due to strong internal consistency scores across several waves of data collection (personal communication, E. Phelps, May 18, 2007). Therefore, the bullying items were not included in data analysis for my study. Interview questions relevant to PYD were also included in the study.
Lessons learned from American football. An interview question and accompanying probe was included to provide further insight into the orientation of lessons learned from American football. Participants were asked: What have you learned (or are you learning) from playing football? Probes based on the participant’s response were attached to this question to ascertain whether individuals believed these lessons were inherent to the game of football or taught by their respective coaches. This question and probe was designed to ascertain whether the frame of reference for participants was aligned more with competition/winning or life lessons more associated with PYD. As mentioned previously, the interview guide is included as Appendix B. Measures of AGT were also incorporated into the study design.

Achievement Goal Theory

As mentioned in the review of literature, research on AGT in a sport-specific domain has exploded over the course of the last twenty years (e.g., Duda & Nicholls, 1992; Duda & Ntoumanis, 2005; McArdle & Duda, 2002; Roberts, 2001; Treasure, 2001). Duda and Whitehead (1998) summarized research related to measurement of variables in the achievement goal perspective and included the Task and Ego Orientation and Sport Questionnaire (TEOSQ) and the Perception of Success Questionnaire (POSQ) as the two dominant instruments measuring achievement motivation orientations. The POSQ has been adapted to include a children’s version applicable for children and adolescents (Roberts, Treasure, & Balague, 1998). This adapted children’s version was judged to be most appropriate for the study sample and was utilized in my study.
Perception of Success Questionnaire – Children’s Version. The 12-item children’s version of the Perception of Success Questionnaire (POSQ-CH; Roberts, Treasure, & Balague, 1998) was utilized in my study to assess the achievement goal orientations of participants. As mentioned, Duda and Whitehead (1998) provided summary data for research on the POSQ prior to development of the POSQ-CH with an average Cronbach’s alpha for internal consistency of .81 for task orientation and .82 for ego orientation. The POSQ-CH was developed to address concerns over complicated wording and designed for youth ages 12-18 (Roberts et al.). The POSQ-CH has demonstrated strong psychometric properties across numerous studies (Harwood et al., 2004; Liukkonen & Leskinen, 1999; Roberts et al.; Sage et al., 2006). Confirmatory factor analysis revealed strong support for an orthogonal two-factor structure of task and ego orientation (Liukkonen & Leskinen, 1999; Roberts et al.). The respective Cronbach’s alpha reliability coefficients were reported as .87 (task) and .84 (ego) by Roberts et al. and .849 (task) and .871 (ego) by Liukkonen & Leskinen. The 12-items of the POSQ-CH divided according to task and ego orientation with accompanying theoretical definitions, as provided by Liukkonen & Leskinen, are included as Table 3.2. The twelve items measuring task and ego orientation are generally preceded by the statement, “When playing sport, I feel most successful when…” For my study, this statement was modified due to the American football specific context substituting “football” for “sport.” Participants were asked to rate their agreement with each item utilizing a 5-point Likert scale (1-5; “Strongly agree” to “Strongly disagree).
Table 3.2

*Items In The Perception Of Success Questionnaire-Children’s Version By Goal Orientation And Theoretical Definition*

<table>
<thead>
<tr>
<th>Item</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task Orientation</strong></td>
<td></td>
</tr>
<tr>
<td>I try hard</td>
<td>Effort</td>
</tr>
<tr>
<td>I really improve</td>
<td>Self-improvement</td>
</tr>
<tr>
<td>I overcome difficulties</td>
<td>Self-improvement</td>
</tr>
<tr>
<td>I succeed at something I could not do before</td>
<td>Learning a task</td>
</tr>
<tr>
<td>I perform to the best of my ability</td>
<td>Effort</td>
</tr>
<tr>
<td>I reach a target I set for myself</td>
<td>Task mastery</td>
</tr>
<tr>
<td><strong>Ego Orientation</strong></td>
<td></td>
</tr>
<tr>
<td>I beat other people</td>
<td>Superior ability</td>
</tr>
<tr>
<td>I am the best</td>
<td>Superior ability</td>
</tr>
<tr>
<td>I do better than others</td>
<td>Better than others</td>
</tr>
<tr>
<td>I show other people I am the best</td>
<td>Superior ability</td>
</tr>
<tr>
<td>I accomplish something others cannot do</td>
<td>Better than others</td>
</tr>
<tr>
<td>I am clearly better</td>
<td>Better than others</td>
</tr>
</tbody>
</table>

Note. Adapted from Liukkonen & Leskinen, 1999
Perceived competence or ability level. Nicholls, Cobb, Wood, Yackel, and Patashnick (1990) utilized a single measure of perceived competence or ability level in the academic domain, as children assessed their own ability level in mathematics relative to their peers. Pensgaard and Roberts (2000) replicated this single-item measurement of perceived ability in the sport domain with elite Norwegian athletes. My study examined perceived competence or ability level by asking participants completing the self-administered questionnaire to rate their ability/skill level relative to their teammates on a 5-point Likert scale (1-5; “worst player” to “best player”).

Orthogonality of achievement goal orientation. An interview question and probe was included to provide further insight into the orthogonality of achievement goal orientation. Participants were asked about the importance attached to beating others versus the achievement of personal goals. A probe based on the participant’s response was attached to the question to ascertain whether “beating others” was interpreted more in terms of competition and/or normative ranking among peers and/or opponents (associated with ego orientation) or in reaching personal goals (associated with task orientation). Several modifications to the original wording of the question were implemented during the interviews to account for perceived confusion. The interview guide including these modifications is included as Appendix B. The method of data analysis for both the quantitative and qualitative data is included in the following section.
Method of Data Analysis

**Quantitative Data**

Data from the web-based questionnaire were tabulated and delivered by the internal university server via an Excel spreadsheet. Data was organized with flagged data and incomplete data removed from the database. The Excel spreadsheet was then converted to a data file and analyzed with SPSS 14.0 Graduate Version. Data was recoded where appropriate due to reverse coding procedures employed with Likert scale measures. Preliminary analysis included reliability analysis to test the internal consistency of measures as well as correlation analysis to test the bivariate correlation between indicators associated with PYD. Two-step cluster analysis was utilized to account for the assumption of orthogonality associated with achievement goal orientation. The primary statistical analysis employed for the study was a general linear model (GLM) with multivariate analysis of variance (MANOVA) as well as follow-up univariate analysis of variance (ANOVA). With two primary dependent variables (character and caring) in the study, the choice of utilizing GLM with MANOVA allowed for control of Type I error as well as flexibility to continue with univariate analysis and multiple comparisons when appropriate. With the deductive nature of the qualitative data collected from interviews, the method of data analysis was aligned with the qualitative approach but within the positivist paradigm of research.

**Qualitative Data**

The researcher transcribed the qualitative interview data from the digital recorder into a text file. After transcription, a three-pronged approach to data analysis was utilized including enumeration, microanalysis, and modified constant comparison. Enumeration,
despite being considered a quantitative approach, is deemed to be an appropriate outlet for some qualitative data for descriptive purposes (Henderson, 2006). The warm-up questions asked of interviewees fell into this quantifiable category. After a long period between data collection and data analysis, microscopic analysis of the transcripts yielded re-familiarity with the data and in-depth consideration of seemingly simplistic statements. This aspect of immersion into the data was particularly important given the following recommendation with qualitative data, “Data interpretation should, therefore, begin as soon as possible after data discovery” (Henderson, 1991, p. 142).

The microanalysis was recorded via memos. Memos are “…specialized types of written records – those that contain the products of analysis or directions for the analyst” (Strauss & Corbin, 1998, p. 217). The line-by-line microanalysis technique described by Strauss & Corbin requires the researcher to analyze and consider the specifics of the data and “listen” intently to the words of the interviewees. With immersion in the theoretical frameworks of AGT and PYD and the deductive nature of the interview questions, the potential existed to be “too close” to the established theories associated with the study. Further, this deductive or positivist adherence required the researcher to be concerned with bias in forcing the data to fit the theories. Objectivity was not possible, but care had to be taken to avoid overt bias in data analysis. The microanalysis technique provided such a measure, as each line of data was broken down to assess the subject’s meaning.

Following microanalysis, the primary method of data analysis for the qualitative data was a modified constant comparison technique. Constant comparison and the associated open, axial, and selective coding are most commonly associated with grounded theory (Henderson, 2006). Grounded theory is naturally inductive in nature.
(Strauss & Corbin, 1998), hence the “modified” label when describing the analytic technique utilized in my study. Data was read and re-read and coded according to categories for each question and probe, and overall themes were then established based on the categories.

Summary

This chapter on the methodology of the study began with a description of the participants and the study setting of a summer skills camp conducted by an intercollegiate football program. The description of the study setting included information on the multiple purposes underlining the administration of the camp by the NC State football coaching staff. The procedures were outlined according to overall study design, the web-based self-administered questionnaire, and interviews. The relatively unique passive and active consent strategy allowed for Human Subjects administrative approval and implementation of data collection despite logistical concerns related to time constraints. Research assistants oversaw the administration of the web-based, self-administered questionnaire, and the researcher conducted 25 interviews during the set check-in/registration period for the skills camp.

The measures utilized in the study were a mix of evolving (PYD) and established (AGT) instruments. Positive youth development is an evolving theoretical framework void of a plethora of established measures for the primary latent constructs. The 4-H PYD longitudinal study conducted by Lerner et al. (2005b) has published the only documented efforts to establish measures for the latent constructs of character and caring included in my study. Therefore, the measures associated with the ongoing waves of the 4-H PYD study were included in research. The POSQ-CH, designed to measure
achievement goal orientation, is an extensively tested instrument judged to be valid and reliable by previous research. The interviews were conducted in an effort to add increased understanding to the overall results of the study and serve a supplementary role to the quantitative data. The primary method of data analysis employed for the quantitative data was GLM with multivariate and univariate analysis of variance. The method of data analysis employed for the qualitative data was a combination of enumeration, microanalysis, and modified constant comparison. The summary of results for the research follows in Chapter 4.
CHAPTER 4: RESULTS

The purpose of this research was to examine the relationships between the positive youth development (PYD) constructs of character and caring with achievement goal orientation and ability level, variables associated with achievement goal theory (AGT), in the context of organized American football. A multiple methods-mixed data approach was utilized in an effort to provide increased understanding of the relationship between these theoretical perspectives. The summary of results will progress from a summary of the relevant demographic and quantitative data collected through the self-administered, web-based questionnaire to qualitative data collected through the standardized open-ended interviews. The quantitative and qualitative data will be presented in alignment with the respective research questions.

Demographic Summary

Demographic data was not a major consideration in the study, but the basic demographic makeup of the sample is important in establishing a narrative backdrop for the research. The demographic data for the research is summarized in Table 4.1. Age was calculated as a categorical variable due to age categories as choices rather than an open-ended response. Age was divided relatively evenly with no age group representing more than 25% of the study sample. Over 60% of the participants were White, not of Hispanic origin.
Table 4.1

Demographic Summary of Participants Completing the Questionnaire

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (n = 229)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 14</td>
<td>54</td>
<td>23.6</td>
</tr>
<tr>
<td>14</td>
<td>40</td>
<td>17.5</td>
</tr>
<tr>
<td>15</td>
<td>49</td>
<td>21.4</td>
</tr>
<tr>
<td>16</td>
<td>51</td>
<td>22.3</td>
</tr>
<tr>
<td>17</td>
<td>32</td>
<td>14.0</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>Race/Ethnicity (n = 225)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Black, not of Hispanic origin</td>
<td>82</td>
<td>36.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>White, not of Hispanic origin</td>
<td>136</td>
<td>60.4</td>
</tr>
</tbody>
</table>

Quantitative Data

The summary of results for the quantitative data will begin with preliminary analysis including reliability analysis of the internal consistency of the measures,
correlation analysis of highlighted variables, and cluster analysis of goal orientations. The preliminary analysis will be followed by a summary of results associated with the respective research questions.

Preliminary Analysis

**Internal consistency.** In order to begin the process of examination of the relationship between the respective measures of AGT and PYD, statistical analysis must be conducted first to determine the reliability coefficients of items and indicators designed to measure the respective latent constructs of achievement goal orientations, character, and caring. Table 4.2 summarizes this data by reporting the respective Cronbach’s alpha reliability coefficients for these indicator variables along with the respective number of items and means. The primary variable associated with AGT in task and ego goal orientation, operationalized in the study through use of the Perception of Success Questionnaire–Children’s Version (POSQ-CH), displayed exemplary internal consistency with Cronbach’s alpha over 0.80 (Garson, n.d.).
Table 4.2

*Reliability Coefficients and Respective Means for Indicator Variables Associated with Measures of Achievement Goal Orientation, Character, and Caring*

<table>
<thead>
<tr>
<th>Measures &amp; Indicator</th>
<th># of Items</th>
<th>M</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Achievement Goal Orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>6</td>
<td>4.53</td>
<td>.840</td>
</tr>
<tr>
<td>Ego</td>
<td>6</td>
<td>3.43</td>
<td>.869</td>
</tr>
<tr>
<td><strong>Character</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>3</td>
<td>3.79</td>
<td>.601</td>
</tr>
<tr>
<td>Values diversity</td>
<td>4</td>
<td>4.08</td>
<td>.816</td>
</tr>
<tr>
<td>Social conscience</td>
<td>6</td>
<td>4.13</td>
<td>.885</td>
</tr>
<tr>
<td>Personal values</td>
<td>5</td>
<td>4.34</td>
<td>.855</td>
</tr>
<tr>
<td>Behavioral conduct</td>
<td>5</td>
<td>3.33</td>
<td>.194</td>
</tr>
<tr>
<td><strong>Caring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caring</td>
<td>9</td>
<td>3.63</td>
<td>.757</td>
</tr>
</tbody>
</table>

For indicators of character, the behavioral conduct indicator (5 items) did not display adequate internal consistency (α = .194). Interpersonal skills (3 items), an indicator replaced by behavioral conduct in Lerner et al. (2005b) for the subsequent waves of the 4-H PYD study that followed Wave 1, was retained in my study due to
concerns about confusion with behavioral conduct’s alternate response format.

Interpersonal skills ($\alpha = .601$) exhibited an internal consistency bordering the accepted cutoff point of 0.60 established as a minimum benchmark for internal consistency (Garson). With the behavioral conduct indicator omitted due to inadequate internal consistency, the interpersonal skills indicator was retained as one of the four indicators in the study. The four remaining indicators of interpersonal skills, values diversity, social conscience, and personal values were further tested by reliability analysis and exhibited strong internal consistency when combined as a single measure of character ($\alpha = .846$). Correlation analysis was then conducted to determine the interrelationships between the indicators of the PYD constructs of character and caring.

**Correlation analysis.** A bivariate Pearson product-moment correlation analysis was conducted for the indicators of the PYD constructs of character (interpersonal skills, values diversity, social conscience, & personal values) and caring (9-item measure). The results of the analysis are displayed as a correlation matrix and included as Table 4.3. Results revealed positive and significant correlation between each of the indicators associated with character and caring. Preliminary analysis continued through cluster analysis for the achievement goal orientation variables.
Table 4.3  

*Correlation Matrix for Indicators of Character and Caring*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interpersonal Skills</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Values Diversity</td>
<td>.501**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Social Conscience</td>
<td>.532**</td>
<td>.729**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Personal Values</td>
<td>.467**</td>
<td>.567**</td>
<td>.630**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>5. Caring</td>
<td>.397**</td>
<td>.434**</td>
<td>.424**</td>
<td>.406**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**p ≤ .01 (2-tailed)**

*Cluster analysis.* Based on previous research into achievement goal orientation (e.g., Duda, 2001; Duda & Ntoumanis, 2005; Liukkonen & Leskinen, 1999; Roberts et al, 1998), the associated task and ego goal orientations have been established as orthogonal with delineation within each orientation. Therefore, a two-cluster solution was chosen a priori, followed by a two-step cluster analysis. A Euclidean distance measure and Schwarz’s Bayesian Criterion were utilized to form two clusters each for task and ego orientation. Table 4.4 summarizes the results of the two-step cluster analysis. Based on these distinct clusters, cases were then organized into the following categorical groupings: high task/high ego (n = 73), high ego/low task (n = 27), high task/low ego (n = 78), and low task/low ego (n = 52). The results indicated participants recorded an overall
higher task orientation \((M = 27.07)\) than ego orientation \((M = 20.40)\). With preliminary analysis complete, statistical analysis of quantitative data based on the research questions and hypotheses were then conducted.

Table 4.4

Two-Step Cluster Analysis for Task and Ego Goal Orientation

<table>
<thead>
<tr>
<th>Clusters</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Task</td>
<td>79</td>
<td>22.95</td>
<td>2.56</td>
</tr>
<tr>
<td>High Task</td>
<td>151</td>
<td>29.23</td>
<td>1.02</td>
</tr>
<tr>
<td>Low Ego</td>
<td>130</td>
<td>16.28</td>
<td>3.52</td>
</tr>
<tr>
<td>High Ego</td>
<td>100</td>
<td>25.75</td>
<td>2.83</td>
</tr>
</tbody>
</table>

Note. Means based on aggregated totals of 6-item, 5-point Likert scales for task and ego.

Primary Analysis

The relationship between AGT and the PYD constructs of character and caring was examined in alignment with the research questions. Various statistical analyses were conducted including measures of central tendency, correlation analysis, chi-square test of independence, and general linear modeling (GLM) with multivariate analysis of variance (MANOVA) followed by univariate analysis of variance (ANOVA) and multiple comparisons where appropriate.
Abilities level and measures of achievement goal orientation, character, and caring. The first research question considered whether a relationship existed between self-reported ability level and measures of achievement goal orientation, character, and caring. Self-reported ability level was measured by asking subjects to assess their ability level in football relative to other players on their respective teams. A 5-point Likert scale was utilized for self-reported ability level (1 = worst; 2 = below average; 3 = average; 4 = above average; 5 = best). An uneven distribution was found for this variable with the following number of respective participants in each category: worst (n = 1), below average (n = 2), average (n = 75), above average (n = 123), and best (n = 27). Due to this uneven distribution, the data were recoded into a lower (n = 78; included worst, below average, and average) and a higher (n = 150; above average and best) ability level category. These recoded categories were utilized as ordinal data for the purposes of statistical analysis.

The first step in assessing the relationship between self-reported ability level and achievement goal orientation was a chi-square test of independence on the four respective categories of achievement goal orientation and the two respective levels of self-reported ability. The results indicated a significant two-way chi-square ($\chi^2 = 17.27$, $df = 3$, $p < .01$), indicative of dependence and association between the two variables. Table 4.5 summarizes the two-by-four cross-tabulation of self-reported ability level and achievement goal orientation according to frequencies and percentages. For the cross-tabulation, the greatest disparity was found in the high ego/high task category. Participants of higher ability level represented 80.8% of total participants in this goal orientation category, and 39.3% (the highest percentage) of participants reporting higher
ability level were grouped into the high ego/high task goal orientation compared to only 17.9% of lower ability level participants. After the cross-tabulation and chi-square test for independence, a general linear model (GLM) was utilized to conduct multivariate analysis of variance (MANOVA).

Table 4.5

*Cross-Tabulation of Ability Level and Goal Orientation According to Frequencies and Percentages*

<table>
<thead>
<tr>
<th>Goal Orientation</th>
<th>Ability Level</th>
<th>f</th>
<th>Column %</th>
<th>f</th>
<th>Column %</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Ego/High Task</td>
<td>Lower</td>
<td>14</td>
<td>17.9</td>
<td>59</td>
<td>39.3</td>
</tr>
<tr>
<td></td>
<td>Higher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Row %</td>
<td>19.2</td>
<td></td>
<td>80.8</td>
<td></td>
</tr>
<tr>
<td>High Ego/Low Task</td>
<td>Lower</td>
<td>6</td>
<td>7.7</td>
<td>21</td>
<td>14.0</td>
</tr>
<tr>
<td></td>
<td>Higher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Row %</td>
<td>22.2</td>
<td></td>
<td>77.8</td>
<td></td>
</tr>
<tr>
<td>High Task/Low Ego</td>
<td>Lower</td>
<td>32</td>
<td>41.0</td>
<td>45</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>Higher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Row %</td>
<td>41.6</td>
<td></td>
<td>58.4</td>
<td></td>
</tr>
<tr>
<td>Low Ego/Low Task</td>
<td>Lower</td>
<td>26</td>
<td>33.3</td>
<td>25</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Higher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Row %</td>
<td>51.0</td>
<td></td>
<td>49.0</td>
<td></td>
</tr>
</tbody>
</table>
A MANOVA was conducted to determine whether a relationship existed between self-reported ability level and achievement goal orientation. Unlike the chi-square test of independence, which examined the categorical groupings for both of the respective variables to assess association, this multivariate analysis utilized the continuous variables associated with task and ego goal orientation as dependent variables. With unequal sample sizes in the two levels of self-reported ability, a Box’s M test of equality of covariance matrices was conducted to satisfy the assumption of homogeneity of variance. This test revealed a non-significant result ($F[3, 646352.4] = 1.64, p > .05$), indicative of failure to reject the null hypothesis of homogeneity and proceed with the MANOVA.

Results from the analysis revealed a significant main effect for ability level, $F(2, 225) = 12.62, p < .01, \eta^2 = .101$. Despite the unequal sample size, the dichotomous nature of the ability level variable provided that the main effect would be the same for each criterion (Tabachnick & Fidell, 2001). Follow-up univariate analysis of variance (ANOVA) revealed significantly higher mean scores for participants reporting higher ability level on both task ($F[1, 226] = 8.13, p < .01, \eta^2 = .035$) and ego ($F[1, 226] = 20.97, p < .01, \eta^2 = .085$) orientation as opposed to the mean scores on both task and ego orientation for participants reporting lower ability level. Results indicated a higher percentage of variance explained by ego (8.5%) than task (3.5%) as evident by the partial eta-square coefficient ($\eta^2$) or effect size. To address these relatively low effect sizes, a statistical control for age was implemented in an effort to determine whether age contributed as a covariate.
As mentioned in Chapter 3, middle school-aged subjects were not anticipated in the sample. Therefore, the respective age categories included only one category reflective of middle school-aged subjects (under 14). The data were parsed to reflect middle school (under 14) and high school-aged (14 and over) subjects. In controlling for age utilizing a multivariate analysis of covariance (MANCOVA) and univariate analysis of covariance (ANCOVA), the main effect for ability level in the overall model remained significant, as did the main effect for ability level in the ANCOVAs for task and ego orientation. Yet, the significant main effect for age in the overall model ($F[2, 223] = 4.93, p < .01 [.008], \eta^2 = .042$) combined with a significant main effect on ego orientation in follow-up univariate ANCOVAs ($F[1, 224] = 7.62, p < .01 [.006], \eta^2 = .033$) were indicative of age as a significant covariate along with ability level for ego goal orientation. When controlling for age, participants reporting higher ability level yielded significantly higher task orientation scores than participants reporting lower ability level. Participants reporting higher ability level of high school age exhibited significantly higher ego orientation scores than participants reporting lower ability level of middle school age. Based on these results, age will be examined as a covariate in statistical analysis involving ability level and achievement goal orientation.

To examine the relationship between self-reported ability level and measures of character and caring, a GLM was also utilized with a MANOVA to compare the mean scores for character and caring across the two levels of self-reported ability (high and low). As mentioned in Chapter 3, the separate measures of character and caring are not combined into a single measure of PYD. Therefore, character and caring are dependent variables analyzed in the GLM. The descriptive statistics for the mean scores on
measures of character and caring for each level of self-reported ability are summarized in Table 4.6. A Box’s M test of equality of covariance matrices was again conducted to satisfy the assumption of homogeneity of variance. This test revealed a non-significant result ($F[3, 656422] = .515, p > .05$), indicative of failure to reject the null hypothesis of homogeneity and proceed with the MANOVA. Results from the analysis revealed a significant main effect for ability level, $F(2, 224) = 5.47, p < .01, \eta^2 = .047$. A follow-up univariate ANOVA was performed and revealed significantly higher mean scores for ability level on character only ($F[1, 225] = 10.98, p < .01, \eta^2 = .047$). The ANOVA did not reveal significant differences for ability level on caring. These results supported a significant relationship between a participant’s ability level and character, as participants reporting higher ability level displayed a higher measure of character than participants reporting lower ability level. No significant differences were found for ability level on the measure of caring. Further, age was not determined to be a significant covariate in testing age as a statistical control.
Table 4.6

Mean Scores on Measures of Character and Caring by Self-Reported Ability Level

<table>
<thead>
<tr>
<th>Ability Level</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>78</td>
<td>3.93</td>
<td>.628</td>
</tr>
<tr>
<td>Higher</td>
<td>149</td>
<td>4.21</td>
<td>.596</td>
</tr>
<tr>
<td>Caring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>78</td>
<td>3.53</td>
<td>.639</td>
</tr>
<tr>
<td>Higher</td>
<td>149</td>
<td>3.69</td>
<td>.704</td>
</tr>
</tbody>
</table>

Achievement goal orientation and measures of character and caring. To examine the relationship between a participant’s achievement goal orientation and measures of character and caring, a GLM was utilized with multivariate analysis to compare the mean scores for character and caring across the four categorical variables developed through cluster analysis for achievement goal orientation. The descriptive statistics for the mean scores on measures of character and caring across each category of achievement goal orientation are summarized in Table 4.7.
Table 4.7

*Mean Scores on Measures of Character and Caring by Achievement Goal Orientation*

<table>
<thead>
<tr>
<th>Goal Orientation</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Character</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Ego/High Task</td>
<td>72</td>
<td>4.37</td>
<td>.641</td>
</tr>
<tr>
<td>High Ego/Low Task</td>
<td>27</td>
<td>3.76</td>
<td>.569</td>
</tr>
<tr>
<td>High Task/Low Ego</td>
<td>78</td>
<td>4.24</td>
<td>.527</td>
</tr>
<tr>
<td>Low Ego/Low Task</td>
<td>52</td>
<td>3.79</td>
<td>.620</td>
</tr>
<tr>
<td><strong>Caring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Ego/High Task</td>
<td>72</td>
<td>3.78</td>
<td>.740</td>
</tr>
<tr>
<td>High Ego/Low Task</td>
<td>27</td>
<td>3.38</td>
<td>.606</td>
</tr>
<tr>
<td>High Task/Low Ego</td>
<td>78</td>
<td>3.70</td>
<td>.665</td>
</tr>
<tr>
<td>Low Ego/Low Task</td>
<td>52</td>
<td>3.47</td>
<td>.618</td>
</tr>
</tbody>
</table>

With unequal sample sizes across the achievement goal categories, a Box’s M test of equality of covariance matrices was conducted to satisfy the assumption of homogeneity of variance. This test revealed a non-significant result ($F[9, 96544.7] = .713, p > .05$), indicative of failure to reject the null hypothesis of homogeneity and proceed with the MANOVA. Results from the analysis revealed a significant main effect for goal orientation according to Pillai’s Trace criterion, $F(6, 450) = 7.05, p < .01, \eta^2 = .086$. With unequal sample sizes, Pillai’s Trace is the accepted criterion due to an
addition of robustness (Tabachnick & Fidell, 2001). A follow-up univariate ANOVA was performed and revealed a significant differences across the goal orientation categories for both character ($F[3, 225] = 15.42, p < .01, \eta^2 = .170$) and caring ($F[3, 225] = 3.66, p < .05, \eta^2 = .047$). Results indicated a higher percentage of variance explained by character (17%) than caring (4.7%), as evident by the respective effect sizes. Age was not determined to be a significant covariate in testing age as a statistical control.

With four categories of goal orientations, Bonferroni post hoc tests were conducted to examine the multiple comparisons across the goal orientations for character and caring. Table 4.8 summarizes the multiple comparisons in reporting the mean difference and standard error for each goal orientation category according to mean scores of character. The Bonferroni post-hoc tests of multiple comparisons decompose the mean differences between each of the goal orientation categories. As evident in the results highlighted in Table 4.8, significant differences for character were found between participants in the following pair-wise comparisons: high ego/high task versus high ego/low task, high ego/high task versus low ego/low task, and high task/low ego versus high ego/low task. These results were indicative of a significant relationship between a participant’s achievement goal orientation and measures of character with participants grouped into the high task/low ego and high task/high ego categories exhibiting significantly higher measures of character than participants grouped into the high ego/low task and low task/low ego categories. No significant differences were found in the multiple comparisons for caring. A significant difference was found in the ANOVA assessing the differences in caring across the goal orientation categories, but significant differences were not found when decomposing through individual comparisons.
Table 4.8

_Bonferroni Post Hoc Tests of Multiple Comparisons Between Achievement Goal Orientation and Character_

<table>
<thead>
<tr>
<th>Multiple Comparisons</th>
<th>Mean Difference</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Ego/High Task versus High Ego/Low Task</td>
<td>.610*</td>
<td>.128</td>
</tr>
<tr>
<td>High Ego/High Task versus High Task/Low Ego</td>
<td>.122</td>
<td>.092</td>
</tr>
<tr>
<td>High Ego/High Task versus Low Ego/Low Task</td>
<td>.580*</td>
<td>.103</td>
</tr>
<tr>
<td>High Task/Low Ego versus High Ego/Low Task</td>
<td>.487*</td>
<td>.127</td>
</tr>
<tr>
<td>Low Ego/Low Task versus High Ego/Low Task</td>
<td>.030</td>
<td>.128</td>
</tr>
<tr>
<td>High Task/Low Ego versus Low Ego/Low Task</td>
<td>.457*</td>
<td>.102</td>
</tr>
</tbody>
</table>

* p < .05

_Interaction between ability level and achievement goal orientation on measures of character and caring._ To examine the interaction between a participant’s self-reported ability level and achievement goal orientation on measures of character and caring, a GLM was utilized with a two-by-four MANOVA to compare the mean scores for character and caring across the two levels of self-reported ability and the four categories of achievement goal orientation. The descriptive statistics for the mean scores on measures of character and caring across each level of ability and each category of achievement goal orientation are summarized in Table 4.9. With unequal sample sizes
across the two independent variables, a Box’s M test of equality of covariance matrices
was conducted to examine the assumption of homogeneity of variance. This test revealed
significance and the possibility of a violation of the assumption of homogeneity.
Levene’s test of equality of error variance is an additional measure designed to further
test the assumption of homogeneity (Tabachnick & Fidell, 2001), and Levene’s test
revealed a non-significant result for both of the dependent variables of character ($F [7,$
$219] = .866, p > .05$) and caring ($F [7, 219] = .553, p > .05$). These results were indicative
of failure to reject the null hypothesis of homogeneity and proceed with the MANOVA.
Table 4.9

*Mean Scores on Measures of Character and Caring by Ability Level and Achievement*

*Goal Orientation*

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Goal Orientation</th>
<th>Ability</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character</td>
<td>High Ego/High Task</td>
<td>Lower</td>
<td>4.20</td>
<td>.806</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher</td>
<td>4.41</td>
<td>.596</td>
</tr>
<tr>
<td></td>
<td>High Ego/Low Task</td>
<td>Lower</td>
<td>3.28</td>
<td>.564</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher</td>
<td>3.89</td>
<td>.503</td>
</tr>
<tr>
<td></td>
<td>High Task/Low Ego</td>
<td>Lower</td>
<td>4.06</td>
<td>.568</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher</td>
<td>4.36</td>
<td>.454</td>
</tr>
<tr>
<td></td>
<td>Low Ego/Low Task</td>
<td>Lower</td>
<td>3.79</td>
<td>.475</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher</td>
<td>3.77</td>
<td>.577</td>
</tr>
<tr>
<td>Caring</td>
<td>High Ego/High Task</td>
<td>Lower</td>
<td>3.86</td>
<td>.628</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher</td>
<td>3.76</td>
<td>.769</td>
</tr>
<tr>
<td></td>
<td>High Ego/Low Task</td>
<td>Lower</td>
<td>3.06</td>
<td>.695</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher</td>
<td>3.47</td>
<td>.564</td>
</tr>
<tr>
<td></td>
<td>High Task/Low Ego</td>
<td>Lower</td>
<td>3.46</td>
<td>.625</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher</td>
<td>3.88</td>
<td>.634</td>
</tr>
<tr>
<td></td>
<td>Low Ego/Low Task</td>
<td>Lower</td>
<td>3.54</td>
<td>.590</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher</td>
<td>3.37</td>
<td>.649</td>
</tr>
</tbody>
</table>
Consistent with the previously administered GLMs, results from the MANOVA revealed significant main effects for ability level \((F[2, 218] = 4.55, p < .05, \eta^2 = .040)\) and goal orientation \((F[6, 438] = 6.36, p < .01, \eta^2 = .080)\) according to Pillai’s Trace criterion. However, an interaction effect was not found for the overall model. Follow-up univariate ANOVAs for each of the dependent variables revealed the following significant main effects: ability level for character \((F[1, 219] = 9.13, p < .01, \eta^2 = .040)\), goal orientation for character \((F[3, 219] = 13.47, p < .01, \eta^2 = .156)\), and goal orientation for caring \((F[3, 219] = 4.20, p < .01, \eta^2 = .054)\). These main effects supported previously conducted models. A significant interaction effect between ability level and goal orientation was found for caring \((F[3, 219] = 2.86, p < .05, \eta^2 = .038)\) but not for character. With the two-by-four model design, further analysis in decomposing the interaction between the independent variables allowed for multiple comparisons. These comparisons allowed for the main effect of ability level to be examined at different levels of the other main effect of goal orientation for both character and caring.

Utilizing Bonferroni adjustment to control for Type I error or alpha inflation, multiple comparisons were conducted to further examine the differences. These comparisons tested simple effects utilizing ANOVA and pairwise comparisons. These Bonferroni post hoc tests revealed significant differences for the dependent variable of character based on the interaction between ability level and goal orientation. The multiple comparisons of goal orientation categories divided by ability level for the measure of character are summarized in Table 4.10. As evident by the results highlighted in Table 4.10, significant mean differences for character were found between categories of goal
orientations when examined according to the level of ability. The results are indicative of a significant relationship for the interaction between self-reported ability level and achievement goal orientations for the dependent variable of character. Despite the interaction effect found for caring in the univariate analysis, the only significant mean difference found for caring in the Bonferroni post-hoc tests of multiple comparisons was with higher ability level and the comparison between high task/low ego versus low ego/low task ($p < .05$). The final Bonferroni post-hoc tests of multiple comparisons decomposed the interaction for ability level across the categories of goal orientation for both character and caring.
Table 4.10

*Multiple Comparisons of Goal Orientation Categories Divided by Ability Level for the Measure of Character*

<table>
<thead>
<tr>
<th>Comparisons</th>
<th>Mean Difference</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Ability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Ego/High Task versus High Ego/Low Task</td>
<td>.922*</td>
<td>.272</td>
</tr>
<tr>
<td>High Ego/High Task versus High Task/Low Ego</td>
<td>.141</td>
<td>.179</td>
</tr>
<tr>
<td>High Ego/High Task versus Low Ego/Low Task</td>
<td>.411</td>
<td>.185</td>
</tr>
<tr>
<td>High Task/Low Ego versus High Ego/Low Task</td>
<td>.780*</td>
<td>.248</td>
</tr>
<tr>
<td>High Task/Low Ego versus Low Ego/Low Task</td>
<td>.270</td>
<td>.147</td>
</tr>
<tr>
<td>Low Ego/Low Task versus High Ego/Low Task</td>
<td>.511</td>
<td>.252</td>
</tr>
<tr>
<td><strong>Higher Ability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Ego/High Task versus High Ego/Low Task</td>
<td>.515*</td>
<td>.142</td>
</tr>
<tr>
<td>High Ego/High Task versus High Task/Low Ego</td>
<td>.048</td>
<td>.111</td>
</tr>
<tr>
<td>High Ego/High Task versus Low Ego/Low Task</td>
<td>.638*</td>
<td>.133</td>
</tr>
<tr>
<td>High Task/Low Ego versus High Ego/Low Task</td>
<td>.466*</td>
<td>.147</td>
</tr>
<tr>
<td>High Task/Low Ego versus Low Ego/Low Task</td>
<td>.589*</td>
<td>.139</td>
</tr>
<tr>
<td>Low Ego/Low Task versus High Ego/Low Task</td>
<td>-.123</td>
<td>.165</td>
</tr>
</tbody>
</table>

* p < .05
Univariate ANOVAs revealed simple effects for high task/low ego orientation with significantly higher character ($F[1, 219] = 5.50, p < .05$), and caring ($F[1, 219] = 7.78, p < .05$) measures for participants with higher ability compared to participants with lower ability level. The only significant difference found when decomposing the interaction was a significantly higher character ($F[1, 219] = 5.71, p < .05$) measure for high ego/low task when comparing participants with higher ability level to participants with lower ability level. These mean scores were summarized previously in Table 4.9. Age was again not determined to be a significant covariate in testing age as a statistical control. Results of the quantitative data were presented according to the research questions, and the following section is organized according to the specific elements of the research questions addressed by the qualitative data.

Qualitative Data

A three-pronged approach to qualitative data analysis was utilized including enumeration, microanalysis, and modified constant comparison. Enumeration was conducted when appropriate based on the questions asked of interviewees, primarily for the warm-up questions that addressed demographics. The mean age of the 25 interviewees was 15.54 with 5.04 years of organized football playing experience. All of the nine major football positions were represented in the interview sample: quarterback, running back, wide receiver, tight end, offensive and defensive linemen, linebacker, defensive secondary, and kicker/special teams. Nineteen of the twenty-five (76%) interviewees reported themselves as starters when classifying ability level. Five (20%) participants reported themselves as All-Stars with only one (5%) individual self-reporting as a reserve. The remaining data are organized according to the following two specific
elements of the research questions addressed by the qualitative data: orthogonality of achievement goal orientation and lessons learned from American football.

*Orthogonality of Achievement Goal Orientation*

The first question and accompanying probe related to the orthogonality of achievement goal orientation. Interviewees were asked: Do you measure your success in playing football more by beating others or through achieving personal goals? This original question was modified several times during the actual interviews due to concerns of perceived confusion and bias in the wording of the question (i.e., negativity of the phrase, “beating others”). These modifications are detailed in the interview guide included as Appendix B. Due to concerns over the wording and modifications as well as the close-ended nature of this main question, the results did not provide as much relevance to the question of orthogonality of achievement goal orientation as did the accompanying probe asking interviewees to provide an example of their personal goals related to football.

Analysis of the personal goal probe began with microscopic analysis of the interview transcripts. An example of the analysis from this line-by-line technique is seen in the following memo by the researcher:

Researcher probe: *What are some examples of personal goals?*

Camper #9 (16-year old, starter, placekicker): *Try to get into college.*

Researcher probe: *OK, so you want to be a college football player?*

Camper #9: *Yes sir.*

Researcher memo: *College. This word is seen a couple of times in the data for this question. What does the word college mean here? College, of course, refers to higher education. But, is higher education the dominant meaning by this camper?*
The skills camp is in a college setting, sure, but perhaps more importantly the setting is related to football. Is it more likely the ascribed meaning for “college” is not higher education but “higher football” or the “next level” as stated by another camper? Granted, I did lead him in that direction. So, on the flip side of that analysis, this camper states, “try to get into college.” Is football viewed as a vehicle to accomplish life goals such as a college degree or a successful career? Or, is college football the goal and college education an added bonus or even an afterthought for some? Do parents, coaches, and even peers or fellow players have realistic discussions with players and promote an achievement ethic in more domains than just the athletic domain? Is a balance struck between motivating and encouraging players to strive for their dreams of college or NFL stardom while also actively pursuing academic and career goals? Maybe for some, more likely not for most. OK, back to analysis of the word “college” and its meaning here. Considering the football skills camp context, college here likely denotes playing college football, but a better follow-up question in adding to the explanatory value would have been, “Can you explain what you mean by “try to get into college?”

This process was repeated for all 25 interviews with varying degrees of detail dependent on the questions and responses by interviewees. As evident by the researcher memo provided above, this microanalysis provided an opportunity for detailed reflection on the meaning of the responses for each interviewee. The deductive nature of the questions combined with the limited time period per interviewee restricted the ability in most cases to probe interviewees further as to the meaning of their responses. Microanalysis was an
important step in the process of developing categories and themes from the interview data. Reading and re-reading of the data followed with various iterations of modified constant comparison yielding specific categories and general themes for the personal goal probe.

The five dominant categories emerging from the data compiled for the personal goal probe were the following: personal future, personal improvement, personal statistics, personal normative, and team success. An example of personal future was denoted by Camper #1 (17-year old, All-Star, quarterback) who simply stated, “Play college football.” Personal improvement was related predominantly to physical skills, but two players did mention leadership skills as well in reflecting on personal goals. The personal improvement category was denoted by statements such as the following by Camper #16 (15-year old, starter, offensive lineman), “Just setting ‘em, just like, for instance, I gotta get faster on the 40 and stuff like that, just simple stuff just to get me going and moving forward.”

Participants who mentioned personal statistics were mainly in alignment with the following statement by Camper #10 (16-year old, All-Star, running back), “Like one year, I might get like 100 yards in one game, the next year I want to get like maybe 120 years in that game when we play against them.” Several players also listed personal statistics in addition to including other categories, as described by Camper #3 (15-year old, starter, running back), “Um, well, um, start like my 10-12th grade year on varsity, get a college scholarship, um, run like mid-4s on the 40, low-4s, score a number of touchdowns, get a bunch of yards, you know.” The personal normative category was denoted by either participants answering, “beating the other person” on the main question and/or a
statement such as Camper #11 (15-year old, starter, running back) who stated, “I want to be the best on the field at the time I am on the field.” The final category established for the personal goal probe related to achievement goal orientation was team success. Some interviewees had difficulty separating personal achievement from team achievement resulting in the formation of this category. The formation of specific categories was followed by general thematic considerations.

Two predominant themes emerged from the personal goal categories. The two themes were ultimately aligned with the meanings attached to task and ego achievement goal orientation, as skill mastery (task) and normative ranking (ego) were the dominant themes. When examining the totality of responses and ensuing categories, the two themes did not delineate in a dichotomous manner. All of the derived categories could be interpreted in varying degrees as either skill mastery or normative ranking, which provides at least limited support for orthogonality of achievement goal orientation. This interplay between the categories and ensuing themes will be discussed in greater detail in Chapter 5. In an attempt to add insight into the lessons learned from American football, the following question and probe was included in the interviews.

*Lessons Learned from American Football*

In an inverse manner to the previous question and probe, the main question asking interviewees to reflect on what they have learned from football was more open-ended and provided richer data than the follow-up probe. The probe was close-ended in asking interviewees whether lessons learned through football were developed from playing the game or taught by coaches. Most participants attributed lessons learned from football to coaches. This answer became so predominant that saturation was achieved for the
question and was skipped several times towards the end of questioning for this reason.
The main question about lessons learned through football was analyzed utilizing the
microanalysis and modified constant comparison process described previously.

A number of categories of lessons were established from data derived for the
main lessons question. These categories included classic team sport lessons such as
teamwork, discipline, work ethic, and overcoming adversity. For example, Camper 19
(16-year old, starter, defensive lineman) stated, “Hmm...it's not about one person; it's
about the whole team. That's one thing.” Attributes that could be associated with PYD
were also included in the categories of lessons such as character, diversity, awareness,
establishing friendships, self-control, and responsibility. An example of the diversity
aspect was seen in the following statement by Camper #17 (13-year old, starter, running
back): “Um, like, uh...(pause)...learn about where other people come from, I guess.” A
physical skill category was also included despite the presence of the probing question
asking interviewees to provide a lesson besides physical skill. Camper 18 (17-year old,
starter, tight end) stated, “Oh yeah, they always say, 'Keep your feet moving" and stuff
like that, and you can apply that to pretty much any situation and um...just little stuff
like that.” Some interviewees were not able to generate lessons learned from football
beyond physical skills.

The dominant theme emerging from the main question was teamwork. Although
some interviewees did not mention teamwork, the teamwork lesson was woven in some
way into most of the statements by interviewees. The following statement by Camper #4
(16-year old, starter, linebacker) provided an example not only of teamwork but other
several other categories as well: “Teamwork, being able to work well with a group,
discipline, listening to your coaches, learning a lot of good character, how to do things even when nobod…do the right things when nobody looking and stuff like that.” The teamwork lesson, although aligned with PYD in the above statement by Camper #4, was most commonly associated with winning and competition. Further interpretation of this teamwork theme in relation to the final research question will be discussed in Chapter 5.

Summary

Chapter 4 included a summary of results organized according to demographic, quantitative, and qualitative data. After preliminary analysis including statistical testing of internal consistency, correlation, and clusters for goal orientation, general linear modeling was utilized to examine the relationship between AGT and PYD. The quantitative data was presented in alignment with the research questions. The qualitative data served a supplementary role to the quantitative data in addressing the research questions. The respective categories and themes for orthogonality of achievement goal orientation and lessons learned from American football were presented including example statements from participants. Discussion and interpretation of the results associated with the research questions follows in Chapter 5 along with limitations of the study, implications for the field, recommendations for future research, and conclusions.
CHAPTER 5: DISCUSSION

The purpose of this research was to examine the relationships between the positive youth development (PYD) constructs of character and caring with achievement goal orientation and ability level, variables associated with achievement goal theory (AGT), in the context of organized American football. A multiple methods-mixed data approach was utilized in an effort to provide increased understanding of the relationship between these theoretical perspectives. The chapter is organized according to the following sections with appropriate subsections: summary of findings, significance of findings, limitations of the research, interpretation of findings recommendations for the field, recommendations for future research, and conclusion.

Summary of Findings

A summary of results was presented in Chapter 4 including both quantitative and qualitative data. The purpose of this first section of Chapter 5 is to organize the findings from that data according to the specified research questions and link the quantitative and qualitative data. Henderson (2006) stated, “To link data usually means recognizing that you will be operating primarily from a positivist paradigm” (p. 219). As mentioned previously, my study does fall within the positivist paradigm, as the research questions are deductive in testing existing theory. Through the self-administered questionnaire and interviews, both quantitative and qualitative data related to AGT and PYD were collected and analyzed. Henderson and Bialeschki (2002) provided support for this strategy of multiple methods-mixed data approach to research employed in my study:

…sometimes quantitative data are collected and then interviews are used to understand the meaning behind some of the numbers. Nothing is wrong with
combining qualitative and quantitative data in these ways and the combination may make for a deeper and more useful project. (p. 246)

Despite the potential for a richer and deeper understanding afforded through this approach to research, this commentary should not be misconstrued as a belief in the generalizability of the findings. As discussed previously and in depth later in this chapter, the cross sectional nature of the study combined with convenience sampling promotes recognition of the constraints present in my research. However, as Stake (1995) stated, “An ethic of caution is not contradictory to an ethic of interpretation” (p. 12). The summary of findings is summarized in order of the research questions framing the research.

Relationship Between Ability Level and Measures of Achievement Goal Orientation, Character, and Caring

Results supported an association between self-reported ability level and the orthogonal groupings of achievement goal orientation. Multivariate and univariate analysis comparing the mean scores of higher and lower ability level for task and ego orientation respectively revealed a significant relationship between ability level and goal orientation. Participants reporting the higher ability level exhibited significantly higher ego and task orientation than participants reporting lower ability level. Likewise, the findings also supported a significant relationship between ability level and character, with participants reporting higher ability level displaying significantly higher measures of character than participants reporting lower ability level. No significant differences were found for ability level on the measure of caring. The second research question addressed the relationship between achievement goal orientation and character and caring.
Relationship Between Orthogonal Achievement Goal Orientation Categories and Measures of Character and Caring

A significant relationship was found between a participant’s achievement goal orientation and the measure of character with participants grouped into the high task/low ego and high task/high ego categories exhibiting a significantly higher measure of character than participants grouped into the high ego/low task and low task/low ego categories. When drawing comparisons between the goal orientation categories, no significant differences were found for goal orientation and caring. For caring, a significant difference was found in the model across the totality of the goal orientation categories but not individually. The auxiliary element of this research question related to the orthogonality of achievement goal orientation.

The quantitative data, in exhibiting significant differences across the established orthogonal goal orientation categories, provided support for the orthogonal assumption. Likewise, the qualitative data provided limited support for orthogonality of achievement goal orientation. The five established categories and two themes established for the qualitative data did not develop in a dichotomous manner, as each category could have been interpreted with varying degrees of task or ego orientation. The third research question addressed the interaction between ability level and achievement goal orientation for measures of character and caring.

Interaction Between Ability Level and Achievement Goal Orientation on Measures of Character and Caring

A significant interaction between ability level and achievement goal orientation was found for the measure of character when examining the multiple comparisons
between the orthogonal goal orientation categories. A significantly higher character measure was found for both lower and higher ability levels when comparing participants grouped into high ego/high task and high task/low ego with participants grouped into high ego/low task. For higher ability level, a significantly higher character score was also found when comparing participants grouped into high ego/high task and high task/low ego with participants grouped into low ego/low task. The only significant difference found for caring was for higher ability level and the comparison between high task/low ego and low ego/low task goal orientation. When examining the goal orientation categories displayed significant differences across levels of ability, only one significant difference was found. For the high ego/low task goal orientation category, participants reporting higher ability level scored significantly higher on the measure of character than participants reporting lower ability level. The fourth research question addressed the orientation of lessons participants reported learning from American football.

*Lessons Learned from American Football*

Teamwork was the dominant theme emerging from the interview question addressing lessons learned from American football. The interpretation of teamwork as a lesson learned through football was determined to be most associated with winning and competition rather than the constructs associated with PYD. This determination was made based on statements such as the following by Camper #7 (15-year old, All-Star, quarterback):

Coach, he taught us how to work like that because he won a lot and like he second or third year out of college and he came back, and he showed us things that what
they did in college and how a team effort can help you achieve better success.

That's how we made it to the playoffs.

Although lessons associated with PYD such as character, diversity, and awareness were listed by participants as lessons learned through football, these lessons were most often accompanied by teamwork and other lessons more associated with winning and competition. These findings were significant in examining the link between the quantitative and qualitative data. The quantitative data revealed significantly higher character for participants with higher ability level when compared to participants with lower ability level, so establishing an orientation for the lessons players report learning from football provides some insight into the meaning derived from a higher character measure. Teamwork is an interpersonal construct, and the measure of character for the questionnaire was constructed utilizing interpersonal skills as an indicator. These aspects will be explored further in the following sections. The significance of the findings of my study are presented in the following section.

Significance of Findings

The significance of my study is based primarily on examination of the relationship between variables associated with AGT in goal orientation and ability level with constructs associated with PYD in character and caring. Research on goal orientation and measures of morality is not unique, but the grounding in a relatively new theoretical framework of PYD was significant in contributing to the body of knowledge. Likewise, the investigation of morality-based constructs such as character and caring with sport participants is in no way unique. The debate over whether sports builds or reveals character has commenced for many years in popular and academic circles (e.g., Beller &
Stoll, 1995; Gerdy, 2006; Leonard, 1998; Rees, 2001; Shields & Bredemeier, 2005; Shields et al., 2002), yet my study examined character and caring in a PYD theoretical framework that has not been largely studied in the sport domain.

Research relative to character and sport has predominantly examined either moral scenarios evolving through sport (e.g., Beller & Stoll, 1995) or the manifestations of sport participation in contributing to the moral self (e.g., Rees & Howell, 1990). Further, sport settings have also been widely studied with investigations across a myriad of variables associated with elite or Olympic (e.g., Harwood et al., 2004), intercollegiate (e.g., Ntoumanis, 2001), interscholastic (e.g., Whitley, 1999), and recreational sport (Sage et al., 2006) participants. The preponderance of this research has been comparative research in relation to non-participation (e.g., Rudd & Stoll, 2004) and structured or extracurricular activity (e.g., Barber et al.; Bartko & Eccles; Darling et al.). Other studies have examined differences between various types (individual versus team, contact versus non-contact) of sports (e.g., Conroy et al., 2001; Dunn & Dunn, 1999; Kavussanu & Ntoumanis, 2003).

Research on medium or high contact sports have yielded findings of aggressive tendencies or lower levels of moral reasoning for individuals who have been involved with these sports for longer periods of time (Conroy et al., 2001; Dunn & Dunn, 1999; Kavussanu & Ntoumanis, 2003). Further, Sage et al. (2006) found significantly higher levels of antisocial judgment for adult male soccer players based on competitive level (semi-professional versus recreational). Self-reported ability level has not been broadly scrutinized to determine the interrelationships with developmental variables such as character and caring. Shields and Bredemeier (2005) and Doty (2006) independently
summarized research on character and sport to date without mention of an athlete’s ability level as an independent variable when assessing character. After summarizing the research on character and sport, Shields and Bredemeier concluded, “Taken together, the results from these studies suggest that it is important not to group all sport participants together” (p. 125). My study heeded this warning in examining participants involved specifically in American football, and findings revealed support for participants with higher ability level exhibiting higher character when controlling for age. This finding adds to the equivocal nature of research related to character and sport. Triangulation of the quantitative and qualitative data also revealed significant findings relative to previous research.

Rudd (2005) asserted that two types of “character” exist defined according to social and moral manifestations of the construct. Rudd postulated that these perceptions of the definition of character are divided according to those involved directly with sport (i.e., administrator, coaches, athletes) in promoting social character and those involved indirectly as sport scholars or social critics in promoting moral character. Social character was defined by such attributes as teamwork, work ethic, and persistence, while moral character was defined by honesty, compassion, and fairness. Yet, Rudd and Mondello (2006) in testing this theory found that intercollegiate head coaches defined character broadly with definitions encompassing both social and moral character. The results of my research yielded mixed results relative to social and/or moral character and adolescent football players.

The character measure established through PYD is a multidimensional construct incorporating elements of both social and moral character as defined by Rudd (2005).
Whereas results from the quantitative data provided insight into this measure of character relative to several independent variables, the qualitative data revealed teamwork as the dominant theme emerging for adolescent participants in detailing lessons learned from football. The teamwork theme is more aligned with the definition of social character provided by Rudd than moral character. This finding combined with the overall lower scores on the measure of caring (more associated with moral character) for participants in my sample provided some support for varying definitions of character. Despite the recognized limitations of my research, the results suggest that assertions related to character and sport should at least be examined further. My research not only examined individual differences by ability level relative to the developmental constructs of character and caring but also investigated the interaction between ability level and achievement goal orientation.

Achievement goal theory has been widely researched in the sport achievement domain with achievement goal orientation being the central component of the theory. The conception of one’s ability or perceived competence is integral to the formation of an individual’s goal orientation (e.g., Duda, 2001; Nicholls, 1989). The theory holds that a heightened degree of competence (or ability level) yields higher degrees of achievement motivation in being self-directed towards the attainment of goals. Perceived competence has often been viewed as an implied aspect of achievement goal orientation with research centered on a particular setting such as contact sports (e.g., Dunn & Dunn, 1999) or elite athletics (e.g., Harwood et al., 2004), and the interaction between goal orientation and perceived competence (or ability level) has not been broadly examined in the sport literature. Ntoumanis (2001) found that university athletes with higher competence also
reported higher task and ego orientation than those athletes with lower competence. My study supported this assertion by Ntoumanis in finding a significant association between achievement goal orientation and self-reported ability level. Individuals higher in self-reported ability level exhibited stronger task and ego goal orientation than individuals with lower ability levels. Self-reported ability level served as the single item manifestation of perceived competence in my study, which was a limitation of the study. Despite the limitation, results of the study yielded significant findings related to self-reported ability level and character not anticipated based on previous research.

The findings of most significance to the body of knowledge relative to AGT were the nature of the orthogonal goal orientation categories on character measures both with and without interaction with self-reported ability level. Sage et al. (2006) stated, “Even though goal orientations are assumed to be orthogonal, interaction effects in relation to moral variables in sport have rarely been examined” (p. 457). In utilizing two-step cluster analysis in forming orthogonal goal orientation categories, my study investigated the interaction effect of goal orientation on moral variables of character and caring. Results only partially supported previous research examining interaction in finding significantly higher measures of character for high task/high ego and high task/low ego participants when compared to low task/low ego and high ego/low task participants. Dunn and Dunn (1999) examined elite level ice hockey players and found support for high task/low ego as the most positive interaction and high ego/low task as the most detrimental interaction for goal orientation on sportspersonship. Sage et al. did not find a main effect for task orientation on prosocial behavior in adult soccer players and believed the interaction of high ego orientation to offset the task orientation. My research did not support this
finding, as high task/high ego participants displayed the highest measures of both character and caring (despite lack of significantly higher differences). The skills camp context and lack of control for social acceptance may have played a role in these results. The final consideration of the study examined the interaction of goal orientation and ability level for the PYD constructs of character and caring.

Once the interaction between ability level and goal orientation was decomposed to examine the individual differences, the high task/low ego goal orientation for participants with higher ability level was shown to be the interaction exhibiting the highest levels of character. Sage et al. (2006) found support for high ego orientation as predictive of antisocial functioning and more pronounced for semi-professional soccer players when compared to recreational players. Although high ego/low task participants in my study exhibited significantly lower character measures than participants with high task/low ego or high task/high ego, the higher ability level interaction was not found to be detrimental to measures of character in a PYD theoretical framework. Although limitations do exist for my research, the results provide insight suggesting further examination of these interactions is warranted.

Despite widespread acceptance of goal orientations as orthogonal, some researchers have contended that the setting or ability level may have an impact on orthogonality (see Duda, 2001). This question cannot fully be answered based on the results obtained in my research, as the study setting was unique and not considered representative of a larger population. Yet, the triangulation of quantitative and quantitative data in my study did provide limited support for orthogonality of achievement goal orientation, which is significant in moving forward and conducting future
research into this assumption. The triangulation of quantitative and qualitative data was also significant in examining the character and caring measures and lessons learned from American football respectively. Limitations of the research are presented in the following section.

Limitations of the Research

The limitations of my research are primarily methodological concerns related to research design and the measures utilized for the study. As noted by Marsh and Kleitman (2003), research on athletic participation is most often characterized as cross-sectional, small scale, and convenience samples. Despite the multiple methods-mixed data approach to the research that yielded a degree of uniqueness, my study was not an exception to this characterization. The data was cross-sectional, and the research was conducted with a convenience sample rather than a random sample. These aggregated factors require that the research be considered contextual in nature with the findings applicable only to the skills camp setting in which the study was conducted. The findings may provide insight to contribute to the knowledge base and aid future research, but results cannot be generalized to a larger population. Social science research in general can rarely be viewed as causal due to the difficulty in controlling for antecedent variables, and my study is not an exception. Further, any inferences drawn in the ensuing sections of this chapter should be considered in the light of the contextual manner detailed for the study setting. The procedures of the study also yielded limitations.

Logistical concerns associated with the research were highlighted in Chapter 3, as the timing of study approval and access to the study participants was completed in a short period of time. The researcher, committee chairperson, and selected members of the
research committee were the lone reviewers of the questionnaire and interview questions, and a pilot-test was not conducted with participants or a similar sample due to the requirement of parental consent for any research conducted with minors. However, the university setting provided access to students of a similar age to the study population, and a pilot test with college students may have yielded insight to improve the quantitative instrumentation as well as the framing of questions for the interviews.

With the logistical concern of limited access to the participants due to pre-arranged camp timelines, qualitative data was collected through interviews limited to five minutes per interviewee. The interview format fit the limited access time per participant but did not allow for flexibility in probing and generating more detailed and rich data. This limitation prevented the qualitative data from being interpretive in nature and forced the research to align with the positivist paradigm. Further, the researcher’s inexperience in conducting interviews created instances of questions leading participants in certain directions through questioning rather than leaving the probing questions as open-ended. Considering the lack of flexibility in probing, this limitation was not substantial but also highlighted another limitation relative to the researcher. In the analysis and interpretation phase for the qualitative data, the positivist paradigm required that the researcher be as objective as possible and take steps to remove potential bias. Inter-rater reliability for the modified constant comparison would have been an additional measure to aid in offsetting this concern. Another limitation related to the convenience sample was the characterization of participants who did not participate in the study.

During the registration process, coaches and research assistants directed campers to the computer laboratory where questionnaires were being administered. Most of the
campers registering during the registration period (84%) complied with these instructions and completed the questionnaire. Yet, the researcher did observe several campers ignoring these instructions and proceeding directly to their respective dorm rooms. Due to ethical guidelines, research assistants were instructed not to be overly direct to avoid a perception of forcing participation in the study. With character as a primary construct of interest in the study, the researcher was left to wonder whether the campers not participating in the study (16%, n = 42) would have had an effect on the results. The study setting of a football skills camp provided added significance with a sample of football players from across the state and region. Yet, the setting also created limitations.

As noted in Chapter 3, some participants in intercollegiate football skills camps are either being recruited by the football program or would like to be recruited in the future. This aspect presented the potential for evaluation apprehension from participants, as participants feel compelled to answer questions in a socially acceptable manner (Garson, n. d.). Respondents were assured of the confidentiality of their responses for both the self-administered questionnaires and the interviews through the assent statement and verbal reminders from the researcher and research assistants, but the potential for answers to reflect social acceptability cannot be discounted. These aspects may have been exacerbated in the interview portion of the research. Participants have likely been exposed to a limited amount of social science research. The concept of an interview to some participants may have been equated with the news media, which is a medium where social acceptability is of the utmost concern. Several studies centered on morality and achievement motivation have utilized a social desirability scale to control for this aspect.
(Ntoumanis, 2001; Sage et al., 2006), yet my study did not employ this strategy. The measures utilized in the study provided additional limitations.

As discussed in Chapter 2 and 3, the theoretical model and latent constructs associated with PYD have not been tested extensively. At the onset of my study, the measures and indicators being tested and validated by the longitudinal 4-H PYD study (Lerner et al., 2005b) represented the only published data comprehensively examining the constructs associated with PYD. Verification of the internal consistency of the items and indicators was imperative for my research. Three of the four indicators and accompanying items (values diversity, social conscience, and personal values) designed to measure the latent construct of character were verified and exhibited strong internal consistency. Wave 1 of the 4-H PYD study utilized 3 items representing the interpersonal skills indicator, but this indicator was replaced in subsequent waves by the behavioral conduct (5 items) indicator.

As mentioned previously, without data verifying the internal consistency and due to concerns over the alternate response format utilized for the behavioral conduct indicator, both indicators and accompanying items were included in my study in order to address these issues. Behavioral conduct exhibited weak internal consistency, and interpersonal skills exhibited only adequate internal consistency. The internal consistency, as measured with Cronbach’s alpha, can be affected by the number of items included in a scale, with more items often yielding stronger internal consistency (Garson, n. d.). The interpersonal skills indicator was measured with only three items, which was potentially a contributing factor to the lower internal consistency, but judged to be acceptable due to these factors. The three items representing interpersonal skills were
retained and utilized as an indicator in the character measure. The four indicators that were retained and utilized for data analysis did exhibit strong internal consistency when aggregated to form a single measure of character, yet concerns about construct validity and convergent validity must be addressed due to these factors.

The foundation of the indicators utilized in measuring the latent constructs of character and caring in a PYD theoretical framework have not been well established in the literature, and these indicators have not been extensively tested for reliability and validity across a number of developmental settings. The construct validity for character and caring as operationalized through PYD and the indicators will potentially grow stronger but only through time and the amalgamation of published research supporting the development of the construct. The convergent validity of character as manifested through measures of internal consistency was relatively strong in my study but affected by the difficulties with the behavioral conduct and interpersonal skills indicators respectively. Construct validity for the caring measure utilized in my study, although adopted in recent waves of data collection in the longitudinal 4-H PYD study, has not been verified in published work. Further, caring was operationalized through a measure consisting of nine items compared to the character measure with four respective indicators and eighteen items. Despite these limitations, the findings of the study have significance in contributing to the knowledge base through examination of the conceptual link between PYD and AGT. The following section will provide interpretation of the findings based on the results from the quantitative and qualitative data.
Interpretation of Findings

With a competitive team sport like American football that receives a great deal of
media and community attention at all levels of competition, the failures of high profile
intercollegiate and professional athletes garner media attention and lead to a perception
that “All-Star” players do not possess the moral fortitude of less highly skilled athletes or
the general populace. Despite the limitations specified for the study, the data did not
support this perception for participants with higher ability level. A significant component
of the quantitative data compiled for the study was examination of character outside the
sport realm rather than investigation of sport-specific morality. This differentiation may
partially provide explanation for the results, although the qualitative data and prior
research by Rudd (20050 and Rudd and Mondello (2006) call into question whether
definitions of character are consistent among those individuals associated with sport
including the adolescent athletes. Findings from my study relative to the interaction
between ability level and achievement goal orientation on measures of character and
caring provided additional insight.

Findings showed players with higher ability level, particularly when paired with
higher task orientation, exhibited a significantly higher character measure than players
with lower ability level and lower task orientation. Further, these players also exhibited a
higher caring measure. This amalgamation of high ability level, high task orientation,
high character, and high caring represents an ideal characterization. Whether or not this
characterization of athletes is more prevalent in sport than sport scholars and critics have
realized is beyond the scope of my research, but the findings do suggest that further
research is needed to explore these elements. Players exhibiting these characteristics may
be looked to as leaders on their teams to play a mentor role to players with lower ability level. What about players who represent the opposite of this ideal characterization?

When athletes with higher ability level exhibited higher ego orientation and lower task orientation, the character and caring measures were lower. Sometimes preferential treatment is afforded to these athletes with higher ability level and higher ego orientation. In sport environments where an emphasis on winning is amplified, these “high ability/high ego” athletes often receive a great deal of attention and sometimes preferential treatment either consciously or subconsciously is given by sport administrators, coaches, fans, and even teammates. Results from my study provide insight into the characterizations of participants based on ability level and achievement goal orientation, but further research is needed to explore whether preferential treatment for certain athletes helps to create a “perfect storm” in promoting even higher degrees of ego orientation through sport. The overall lower caring measures found across the sample relative to the overall character measures provided some cause for concern and reflection on the interpretation of this finding.

Findings revealed lower overall caring scores across all goal orientation and ability levels when compared to character. Despite the limitations expressed previously regarding the caring measure, these findings provide some cause for concern and warrant additional research. In a contact sport like American football, the orientation is toward viewing the opponent as the enemy, as players aim to “crush” the opposition. Shields and Bredemeier (1996) established the connection between sport and militarism in detailing this “opponent as enemy” orientation. This orientation combined with media exposure of character issues for professional and intercollegiate athletes has promoted the mentality
discussed in the limitations section relative to concern over being labeled a “bad guy” in terms of character. If this social acceptability element did filter into the study, the expectation would hold that the caring measure would follow in a similar fashion. Yet, this expectation did not hold, as caring measures were lower overall than character measures. Is caring or compassion a step too far given the masculine setting and “opponent as enemy” orientation? Although these factors may play a role, the findings are consistent with previous research by Benson (1997) on adolescents in general in finding support for decreased caring measures for high school students. The findings did suggest this angle should be explored further. Recommendations for the fields of youth development, recreation, and sport are provided in the following section based on the results of my study.

Recommendations for the Field

The findings from my study have relevance for the interrelated fields of youth development, recreation, and sport. The study setting was focused on adolescents participating in interscholastic sport. With growing concerns about the obesity epidemic for children and adolescents in the United States (United States Department of Health and Human Services, 2001), Bocarro, Kanters, and Casper (2006) touted investment in intramural sports where more children compete and promotion of lifelong physical fitness is of primary concern. Bocarro et al. stated, “The role of schools should be to promote lifelong recreational sport and physical activity participation” (p. 22). This call for investment in intramural sports by schools has the potential to be at the expense of interscholastic sports and leads to the inevitable question: Are interscholastic sports worth the costs? Most interscholastic sport models are exclusive with tryouts eliminating
youth with lower ability levels. Yet, interscholastic sports are woven into the fabric of communities and American culture. The elimination of interscholastic sports is implausible, yet the re-engineering of interscholastic sports is an imperative and this study has suggested a potential pathway through promotion of task orientation as a means to the end or goal in PYD.

Unfortunately, in today’s overtly competitive sport environment for American football in particular, the vast majority of interscholastic football teams are at least perceived as promoting ego orientation more so than task orientation. The media and popular culture exacerbate this perception. The findings of this study suggest that these perceptions may not ultimately be as accurate as many believe but also suggest the pathway towards positive developmental outcomes lies with promotion of task orientation. Elite male athletes do experience success through sport, and some of these elite athletes reach the pinnacle of their respective sport and the hundreds of thousands or millions of dollars associated with major male professional sport. For lower income children in particular, reaching the professional ranks of sport is often labeled as an “escape” from whatever life circumstance that was most overt. The pervasive aspect of professional sport in our lives through the media and popular culture promote the sport dream to children and adolescents, one that can be damaging to a child’s overall development if an ego achievement orientation is glorified over task orientation (Coakley, 2002). “In the demanding and often unpredictable world of competitive sport, it is difficult always to be the best and potentially quite debilitating to be fixated on showing superiority” (Duda, 2005, p. 320).
Competition is inherent within organized sport, but recognition that a balance can be achieved is an important first step towards promoting more task orientation than ego orientation. Coakley (2002) agreed and stated:

Those who play sports are less likely than comparable others to engage in deviant or violent behaviors only when participation is accompanied by an emphasis on nonviolence, respect for self and others, the importance of fitness and control over self, confidence in physical skills, and a sense of responsibility. (p. 24)

The first step in implementing a task orientation achievement ethic is focusing on the delivery of organized sport.

Through coaching education and the education of recreation & sport management students at universities nationwide, students who will be the future professionals in the field can be taught theoretical and applied models relative to AGT and PYD. Further, within competitive sport environments, positive peer influence segmented by ability level with an understanding of the implications associated with task and ego orientation could result in participants serving as role models and leaders for teammates. In changing the culture from one consistent only with winning and viewing the opponent as an enemy to a culture conducive to the principles of PYD, a balance may be achieved where sport becomes a primarily positive developmental context or setting for male adolescents. If competitive sport programs at all levels provide support for an achievement and positive youth development ethic underlining the delivery of sport, the results have the potential to be extraordinary. Future research is needed to further investigate this critical developmental context.
Recommendations for Future Research

The recommendations for future research will center on theoretical and methodological considerations. My research provided insight and significant findings relative to the relationship between variables associated with an established theoretical perspective in AGT and an emerging theoretical framework in PYD. Yet, as noted by Marsh and Kleitman (2003) in lamenting research related to athletic participation in general, the limitations of the research provide constraints. Cross sectional designs, small sample sizes, and convenience samples prevent generalization to a larger population. Further, my research was confined to male American football players. Future studies should address these shortcomings and examine male and female athletes across varied contexts including team, dual, and individual sports. Self-report measures can be limiting, as evident by the concern expressed related to evaluation apprehension. As recommended by Ntoumanis (2001) and Sage et al. (2006), implementation of a social desirability variable provides a degree of control. Observational and/or quasi-experimental research in which PYD or AGT treatment was implemented into the research design would add increased relevance and generalizability. Further, the 4-H study of PYD (Lerner et al., 2005b) provides an example of the benefits of longitudinal research and multiple waves of data collection serving to enhance the knowledge base. Research on the relationship between AGT and PYD has not been examined extensively, especially the interaction with ability level.

Self-reported ability level was measured with a single item in my study. Future studies should examine ability level with either an accepted scale of multiple items or through multiple measures (e.g., reports by coaches, peers, or potentially athletic
statistics). With the relatively unique amalgamation of variables, structural equation modeling should be employed to examine the myriad of latent and manifest constructs associated with these theoretical perspectives. My research only examined a portion of the constructs associated with AGT and PYD. Research on AGT has shown that motivational climate is a key component. Ames (1992a) stated, “The adult shapes or structures the home, classroom, or sport setting and, in so doing, establishes a motivational climate that conveys certain goals to children” (p. 163). Fry (2001) expanded on this notion and believed that youth sport coaches or physical educators could unduly influence young children by forming overtly competitive environments capable of “tremendous potential harm” (p. 52). Examination of motivational climate along with the other three primary constructs associated with PYD in competence, confidence, and connection would further efforts towards conceptual unity in a manner that has not been previously examined. The theoretical framework of PYD is evolving, and the measurement of the associated latent constructs will continue to be refined.

The construct validity of the measures associated with PYD will be further developed as research is conducted and published. Through expansion of the measures, valid and reliable instruments will be developed to aid in the research process. Quasi-experimental research implementing PYD and AGT principles into youth sport programs, similar to the study on youth basketball and sportspersonship by Wells, Ellis, Paisley, and Arthur-Banning (2005), would provide treatment and control groups by which to more closely examine the constructs through programming. The multiple methods-mixed data approach added insight in more of a supplementary role due to several factors that should be addressed in future studies.
The interview portion of my study was confined by time and access restrictions, which ultimately resulted in the interview structure being aligned with the positivist paradigm of research rather than the interpretive paradigm. Therefore, the findings of the qualitative data were limited to a supplementary role for the quantitative data. Future studies should implement multiple methods-mixed data approaches to research that allow more flexibility in research design. Through participant observation, informal interviews, and/or other interpretive approaches, the researcher needs the freedom of multiple access points with participants in aiming for deeper understanding and richer data characteristic of a qualitative approach. The orthogonality of achievement goal orientation is an assumption of AGT, yet Duda (2001) highlighted questions related to this orthogonal nature. These questions may best be addressed through an interpretive approach and an inductive rather than deductive orientation towards the research. Through future research on the developmental context of organized sport relative to achievement goal theory and positive youth development, an applied and theoretical model will continue to emerge.

Conclusion

Sport settings for youth are omnipresent in American society. Yet, as a whole, research on sport as a positive developmental context for youth has been equivocal (e.g., Beller & Stoll, 1995; Rees, 2001; Shields & Bredemeier, 2005; Shields et al., 2002; Steiner et al., 2000; Whitley, 1999). The popular majority contends that sport builds character in youth, yet academic research has countered that notion and said, “Not so fast, not necessarily!” Many questions related to sport’s place in teaching children to be productive citizens have yet to be answered. PYD, an evolving theoretical framework in academia, is centered on the primary tenet that youth are resources to be developed rather
than problems to be fixed (see Benson et al., 2006; Catalano et al., 2004; Damon, 2004; Lerner et al., 2002; Pittman et al., 2001). This positive embodiment of children has particular relevance considering the troubling developmental signs associated with male children and adolescents (see Pollack, 1998).

As an achievement setting, an expansive body of research in sport has centered on AGT (see Ames, 1992a, 1992b; Duda, 2001; Duda & Nicholls, 1992; Dweck, 1986; Nicholls, 1989; Sage et al., 2006). Shields and Bredemeier (2005) posited an achievement ethic was pervasive in the study of morality and sport. Sage et al. (2006) asserted the interaction between ego and task orientation to be integral in predicting morality-based outcomes. My research supports both of these notions in finding significant differences for character based on the interaction between task and ego goal orientation. Further, self-reported ability level was found to be a significant predictor of character in the sample of American football players. By examining these variables in a PYD theoretical framework for the first time, insight was gained that will serve to enhance future research working towards conceptual unity of these theories. The significance of this research relates ultimately to development of a theoretical model that will serve to enhance the sport settings for youth at all levels of competition.

Youth do not develop in a vacuum. Sport is an important developmental context with the potential to offset troubling developmental signs for male adolescents, but we cannot continue to leave development to chance. The key to unlocking the potential may very well be an achievement and positive youth development ethic built into the core fabric of sport at all levels.
References


Duda, J. L. (2001). Achievement goal research in sport: Pushing the boundaries and


Current directions in developmental psychology (pp. 134-141). Upper Saddle River, NJ: Pearson Education


Pittman (Eds.), *Youth development: visions, realities, and challenges* (pp. 155-186). Boston: Kluwer Academic.


Stevens (Eds.), *Psychological foundations of sport* (pp. 352-379). Boston: Allyn and Bacon.


Appendix A

Copy of Web-Based Questionnaire
How would you rate your ability/skill level relative to players on your team?

Scale: 1-5
1 = Worst player, 2 = Below average, 3 = Average, 4 = Above Average, 5 = Best player
What does success in football mean to you? There are no right or wrong answers. We ask you to check the number that best indicates how you feel.

Scale: 1-5, Strongly agree - Strongly disagree

WHEN PLAYING FOOTBALL, I FEEL MOST SUCCESSFUL WHEN:

1. I beat other people
2. I am clearly better
3. I am the best
4. I try hard
5. I really improve
6. I do better than others
7. I reach a target I set for myself
8. I overcome difficulties
9. I succeed at something I could not do before
10. I accomplish something others cannot do
11. I show other people I am the best
12. I perform to the best of my ability
Think about the people who know you well. How do you think they would rate you on each of these statements?

Scale: 1-5, Not at all like me - Very much like me

1. Caring about other people’s feelings
2. Feeling really sad when one of my friends is unhappy
3. Being good at making and keeping friends
4. Respecting the values & beliefs of people who are of a different race or culture than I am.
5. Knowing a lot about people of other races
6. Enjoying being with people who are of a different race than I am

How important is each of the following to you in your life?

Scale: 1-5, Not important - Extremely important

1. Getting to know people who are of a different race than I am
2. Helping other people
3. Helping to make the world a better place to live in
4. Giving time and money to make life better for other people
5. Helping to reduce hunger and poverty in the world
6. Helping to make sure all people are treated fairly
How important is each of the following to you in your life?

Scale: 1-5; Not important - Extremely important

1. Speaking up for equality (everyone should have the same rights and opportunities)

2. Doing what I believe is right even if my friends make fun of me

3. Standing up for what I believe, even when it’s unpopular to do

4. Telling the truth, even when it’s not easy

5. Accepting responsibility for my actions when I make a mistake or get in trouble

6. Doing my best, even when I have a job I don’t like
FILL IN ONLY ONE RESPONSE FOR EACH PAIR OF SENTENCES The following pairs of sentences are talking about two kinds of people. We’d like you to decide whether you are more like the person described in Line A or more like the person described in Line B. Do not mark a box yet.

Then we would like you to decide whether that sentence is sort of true for you or really true of you and then put an X in the box. Again, you will only mark one of the four boxes.

<table>
<thead>
<tr>
<th>Really True</th>
<th>Sort of</th>
</tr>
</thead>
<tbody>
<tr>
<td>for Me</td>
<td>True for Me</td>
</tr>
</tbody>
</table>

A. Some teenagers usually do the right thing

BUT

B. Other teenagers often don’t do what they know is right

<table>
<thead>
<tr>
<th>Really True</th>
<th>Sort of</th>
</tr>
</thead>
<tbody>
<tr>
<td>for Me</td>
<td>True for Me</td>
</tr>
</tbody>
</table>

A. Some teenagers often feel guilty about certain things they do

BUT

B. Other teenagers hardly ever feel guilty about what they do
A. Some teenagers are usually pleased with
   the way they act

BUT

B. Other teenagers are often ashamed at
   the way they act

---

A. Some teenagers do things they know
   they shouldn’t do

BUT

B. Other teenagers hardly ever do things
   they know they shouldn’t do

---

A. Some teenagers usually act the way
   they know they are supposed to

BUT

B. Other teenagers often don’t act the
   way they are supposed to
How would you most likely react if you saw the following things happen to a child and this child was not able to protect himself or herself?

Scale: 1-5; Response format: 1 = I’d be very upset, 2 = I’d be a bit upset, 3 = I would not feel one way or the other, 4 = I’d sort of like it, 5 = I’d like it a lot

1. Teased about his or her religion
2. Teased about his or her race
3. Teased about his or her looks or speech
4. Hit, slapped, or pushed
5. The subject of false rumors or lies
6. Called mean and hurtful names
7. Has his/her money or other things taken away or damaged
How well do each of these statements describe you?

Scale: 1-5; Not well - Very well

1. I don’t feel sorry for other people when they are having problems
2. When I see someone being taken advantage of, I want to help them
3. It bothers me when bad things happen to good people
4. It bothers me when bad things happen to any person
5. When I see someone being treated unfairly, I don’t feel sorry for them
6. I feel sorry for other people who don’t have what I have
7. When I see someone being picked on, I feel sorry for them
8. It makes me sad to see a person who doesn’t have friends
9. When I see another person who is hurt or upset, I feel sorry for them
Appendix B

Interview Guide
INTERVIEW QUESTION GUIDE

Researcher: Do you understand that you do not have to answer any of these questions and you can end the interview at any time? We are interested in what YOU think and this information will not be shared with any of the coaches or anyone else associated with the football camp.

Warm-up Questions:

1. How old are you?
2. How long have you been playing organized football?
3. What is your main position in football?
4. On your team, would you consider yourself a reserve, a starter, or an All-Star?

Main Questions:

1. Orthogonality of Achievement Goal Orientation

   Original (Interviewees 1-5): Do you measure your success in playing football more by beating others or through achieving personal goals?

   Modified (6-7): Do you measure your success in playing football more by the wins/losses and the competition or through achieving personal goals?

   Modified (8-15): Do you measure your success in playing football more by beating the person across from you or through achieving personal goals?
Modified (16-25): If you think about your personal self, I know football is a team game. If you think just about yourself, how do you measure success for yourself? More by beating other people across from you or more by achieving personal goals?

Probe – (“Beating others”) – Is that more along the lines of winning in terms of beating other teams OR personal victories like beating the person in front of you (linemen), making more tackles (defense), or scoring more touchdowns (skills players)?

2. Lessons Learned from American Football

Original (all interviewees): What have you learned (or are you learning) from playing football?

Probe - (If “leadership, teamwork, sportsmanship, character, etc.”) - Does your coach teach these skills along with football or do you believe that you have learned these skills simply by playing football?

Probe – (If “competitive fire, winning, etc.”) – When you lose, how do you react in a general sense?

Probe (If sport-oriented as in how to catch, run, tackle, etc) – Besides physical skills, what have you learned from playing football?
Appendix C

Parent/Guardian Passive Consent Letter
NOTE: You do NOT need to return any forms in order to provide consent for your child to participate in this research study

NC State University
PARENT/GUARDIAN PASSIVE CONSENT INFORMATION
(For Football Survey Questionnaire Participants)

Dear Parent/Guardian,

We are asking permission for your child to participate in a research study. The purpose of this study is to assess your child’s achievement and participation motivations and character and caring measures as they relate to their participation in football.

INFORMATION
If you agree to allow your child to participate in this study, your child will be asked to complete a questionnaire about football participation. The questionnaire will take approximately 10-15 minutes for your child to complete and be administered via the Internet in one of NC State’s computer labs. There are NO right or wrong answers. Your child will be asked to electronically provide consent to participate in the study prior to completion of the questionnaire. Participation, declining to participate, or withdrawal from participation in the study will NOT have any positive or negative impact on your child’s standing with the NC State Football coaching staff.

RISKS
There are no risks related with this study.

BENEFITS
There are no immediate benefits from your child’s participation in this study. However, it is possible that the information found in the study will help in developing and promoting sport programs that do more than teach sport – programs that assist children and adolescents develop skills that can be transferred to all aspects of their life.

CONFIDENTIALITY
The information in the study records will be kept strictly confidential. Data will be stored securely in computers accessed only by principal research investigators. No reference to individual children will be made in oral or written reports, which could link your child to the study. Further, the research team and NC State Football coaching staff will NOT be able to link individual answers on the survey to the respective children completing the survey.

CONTACT
If you have questions at any time about the study or the procedures, you may contact the principal investigator, Brian Greenwood, at (919) 522-8382, NC State University, Department of Parks, Recreation, and Tourism Management, Campus Box 8004, Raleigh, NC 27695. If you feel you have not been treated according to the descriptions in this form or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148).
PARTICIPATION
Your child’s participation in this study is voluntary; your child may decline to participate without penalty. If you decide to permit your child to participate, you may withdraw your child from the study at any time without penalty. If you withdraw your child from the study before data collection is completed, your child’s data will be deleted at your request. Again, participation, declining to participate, or withdrawal from participation in the study will NOT have any positive or negative impact on your child’s standing with the NC State Football coaching staff.

CONSENT
Due to several factors related to this study including most importantly the questions not being of a sensitive nature, we have employed a passive parental consent strategy for the study. Therefore, you do NOT have to sign and return a form in order to provide consent. By not completing this form, you are agreeing to the consent statement provided below.

If you do NOT want your child to participate in this study, a separate form labeled “Decline Participation in Research Form” has been provided. If you are bringing your child to camp for registration/check-in on June 14, you will be given the opportunity to decline participation in the research at that time. If you are not bringing your child to registration/check-in on June 14, please complete and sign the enclosed “Decline Participation in Research” form, and be sure that your child submits the form at the registration/check-in table. If you are worried about whether your child will remember to submit the form at registration/check-in, we have also provided contact information so that all you have to do is call our telephone number and decline participation in the research for your child (see “Decline Participation in Research” form).

By NOT signing and bringing the enclosed “Decline Participation in Research” form to registration/check-in on June 14, I understand that I am providing the following consent for my child to participate in this research study:

“I have read and understand the above information. I have received a copy of this form. I agree to allow my child to participate in this study with the understanding that my child may withdraw at any time.”

We appreciate your child’s attendance at the NC State Football skills camp in 2006. Thanks for your time in considering whether to grant permission for your child to participate in this research study.

Sincerely,

Brian Greenwood & Dr. Michael Kanters
NC State University
Department of Parks, Recreation, & Tourism Management
Appendix D

Parent/Guardian Decline Participation in Research Form
NC State University

DECLINE PARTICIPATION IN RESEARCH FORM
(For Football Survey Questionnaire Participants)

We understand that you may not want your child to participate in this research study, so we have included this form for you to decline participation for your child. You have a choice as to how you decline participation for your child:

- If you are bringing your child to camp for registration/check-in on June 14, you will be given the opportunity to decline participation in the research at that time.

- If you are not bringing your child to registration/check-in on June 14, please complete and sign the enclosed “Decline Participation in Research” form, and be sure that your child submits the form at the registration/check-in table.

  - If you are worried about whether your child will remember to submit the form at registration/check-in, we have also provided contact information so that all you have to do is call our telephone number and decline participation in the research for your child. Call (919) 522-8382 and leave a message indicating your desire to decline participation for your child. Please speak clearly on the message and include your child’s full name and your name.

I understand that declining participation in this research for my child will NOT have any positive or negative impact on my child’s standing with the NC State Football coaching staff.

In the space below please print your name, your child’s name and sign your name.

________________________________________________________________________
Print Parent’s Name                                         Print Child’s Name

________________________________________________________________________
Parent’s Signature                                          Date
Appendix E

Parent/Guardian Informed Consent Form
NC State University
PARENT/GUARDIAN INFORMED CONSENT FORM
(For Football Survey Questionnaire and/or Interview Participants)

We are asking permission for your child to participate in a research study. The purpose of this study is to assess your child’s achievement and participation motivations and character and caring measures as they relate to their participation in football.

INFORMATION

If you agree to allow your child to participate in this study, your child will be asked to complete a questionnaire and/or be interviewed about football participation by Brian Greenwood, the principal investigator of the study. The questionnaire will take approximately 10-15 minutes for your child to complete and be administered via the Internet in one of NC State’s computer labs, and the interview will take approximately 10-15 minutes for your child to answer the interview questions. There are NO right or wrong answers. Your child will be asked to electronically provide consent to participate in the study prior to completion of the questionnaire and written consent to participate in the interview prior to being asked interview questions. Participation, declining to participate, or withdrawal from participation in the study will NOT have any positive or negative impact on your child’s standing with the NC State Football coaching staff.

RISKS

There are no risks related with this study.

BENEFITS

There are no immediate benefits from your child’s participation in this study. However, it is possible that the information found in the study will help in developing and promoting sport programs that do more than teach sport - programs that assist children and adolescents develop skills that can be transferred to all aspects of their life.

CONFIDENTIALITY

The information in the study records will be kept strictly confidential. Data will be stored securely in computers accessed only by principal research investigators. No reference to individuals will be made in oral or written reports, which could link your child to the study. Further, the research team and NC State Football coaching staff will NOT be able to link individual answers on the survey to the respective children completing the survey. Interview tapes will be kept in a locked filing cabinet until copied onto secure University computers. Once copying is complete, these tapes will be destroyed.
CONTACT

If you have questions at any time about the study or the procedures, you may contact the principal investigator, Brian Greenwood, at (919) 522-8382, NC State University, Department of Parks, Recreation, and Tourism Management, Campus Box 8004, Raleigh, NC 27695. If you feel you have not been treated according to the descriptions in this form or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148).

PARTICIPATION

Your child’s participation in this study is voluntary; your child may decline to participate without penalty. If you decide to permit your child to participate, you may withdraw your child from the study at any time without penalty. If you withdraw your child from the study before data collection is completed, your child’s data will be deleted at your request. Again, participation, declining to participate, or withdrawal from participation in the study will NOT have any positive or negative impact on your child’s standing with the NC State Football coaching staff.

CONSENT

“I have read and understand the above information. I have received a copy of this form. I agree to allow my child to participate in this study with the understanding that I may withdraw my child or my child may withdraw at any time.”

________________________________________________________________________
Print Parent’s Name

________________________________________________________________________
Print Child’s Name

________________________________________________________________________
Parent’s Signature

________________________________________________________________________
Date

________________________________________________________________________
Investigator’s Signature

________________________________________________________________________
Date
Appendix F

Participant Assent Form for Interviews
NC State University
ASSENT FORM for RESEARCH
(For Football Interview Participants)

We are asking you to participate in a research study. The purpose of this study is to assess your achievement and participation motivations and character as it relates to their participation in football.

INFORMATION
If you agree to participate in this study, Brian Greenwood (the principal investigator of the study) will interview you about football participation, achievement motivation, and character. The interview will take approximately 10-15 minutes to answer the questions. There are NO right or wrong answers. You will be required to complete this written consent to participate in the interview prior to being asked any questions. Participation, declining to participate, or withdrawal from participation in the study will NOT have any positive or negative impact on your standing with the NC State Football coaching staff.

RISKS
There are no risks related with this study.

BENEFITS
There are no immediate benefits from your participation in this study. However, it is possible that the information found in the study will help in developing and promoting sport programs that do more than teach sport - programs that assist children and adolescents develop skills that can be transferred to all aspects of their life.

CONFIDENTIALITY
The information in the study records will be kept strictly confidential. Data will be stored securely in computers accessed only by principal research investigators. No reference to individuals will be made in oral or written reports, which could link your child to the study. Further, the research team and NC State Football coaching staff will NOT be able to link individual answers on the survey to the respective children completing the survey. Interview tapes will be kept in a locked filing cabinet until copied onto secure University computers. Once copying is complete, these tapes will be destroyed.

CONTACT
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PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed, your data will be deleted at your request. Again, participation, declining to participate, or withdrawal from participation in the study will NOT have any positive or negative impact on your child’s standing with the NC State Football coaching staff.

CONSENT

“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may withdraw at any time.”

________________________________________
Print Your Name

________________________________________    _______________________
Your Signature                                      Date

________________________________________    _______________________
Investigator’s Signature                           Date