

THE RELATIONSHIPS BETWEEN GOAL ORIENTATION, PERFECTIONISM,  
PARENTAL INVOLVEMENT, PEER CLIMATE, ENJOYMENT, AND  
INTENTION TO CONTINUE IN SPORT IN CHILDREN

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This investigation examined the relationships between parental involvement, peer-initiated climates, and perfectionism to goal orientation as well as children's enjoyment and the intention to continue playing sport in youth sport. Participants were 188 athletes, 100 boys ( $M = 12.06$ ,  $SD = 1.06$ ) and 88 girls ( $M = 12.18$ ,  $SD = .73$ ). The athletes completed the TEOSQ, Sport MPS, PIAS, and the PeerMCYSQ.

Parental support and peer task environment was related to girls' and boy's task orientation. For boys, personal standards, parental pressure, and fewer concerns over mistakes, also were related to task orientation. Ego orientation was related to peer-initiated ego and task climates, for the boys. For the girls, higher personal standard was the only variable related to ego orientation. For enjoyment, task orientation was the strongest predictor for the girls and the only predictor for the boys for enjoyment. The fewer concerns girls had over mistakes the more enjoyment they reported. For girls and boys, intention to continue playing next season was predicted only by enjoyment. However, results were varied when intention to play next year was examined. For boys, no predictors were discovered whereas for girls, higher levels of enjoyment and task orientation, and lower levels of parental support and pressure related to intention.

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## INTRODUCTION

Through observing others, children imitate and adopt beliefs, behaviors and performance standards that are demonstrated through others' actions (Bandura, 1969, 1977). This social learning involves "the process whereby individuals learn skills, traits, values, attitudes, norms, and knowledge associated with the performance of present or anticipated social roles" (McPheson & Brown, 1988, p.267). This learning can occur in multiple environments, such as at school, within the home, in the community and even through athletic experiences. In sport, adults, coaches, teammates, and parents, act as socializing agents for children, establishing a motivational climate by giving performance feedback that defines what "doing well" in sport means, and by the relative importance they place on effort versus to achievement (Roberts, Treasure & Hall, 1994; Smith, 2003). This motivational climate is defined through the communication of goals (e.g., skill development, winning, having fun) and the feedback received, which determines if the performance or activity was successful or non-successful (Ames, 1992).

Initially, parents become socializing agents for their children by providing social support, influencing physical activity levels (Brown, Frankel & Fennel, 1989), and reinforcing behaviors of which they approve (Harter, 1978). Brustad (1993) added that parents' socialization role is dynamic, beginning with the child's initial attraction or introduction to sport and continuing to the instillation of attitudes and values about sport choices, to the acquisition of these values as consequences of involvement, and finally to the stage of discontinuation. In essence, parents' influence is felt from the beginning to the end of their children's sport experiences.



Parents play a pivotal role during the early to middle childhood years (approximately 6 to 10 years), a time when sport participation usually commences (Lewko & Greendorfer, 1988). Although this process of socialization in both life and sport starts early in life, at about age 12, children differentiate from their parents and a shift from self-referenced (comparison to own performance) to other-referenced (utilizing performances and opinions of peers in comparison to their own standards to define success) occurs. Although children retain the earlier lessons offered from parents, when this shift occurs they begin to evaluate success according to their own internalized achievement standards or goal orientations. They begin to conceptualize ability as adults do, differentiating it from concepts of luck, difficulty, and effort (Nicholls, 1992).

In childhood and adolescence, teammates and peers also serve as important socializing agents. The relationships and peer interactions children have can serve to enhance or detract from the sport experience and influence the motivational climate (Smith, 2003). Peer relationships serve as a source of information about physical competence, enjoyment and anxiety, and commitment in sport and physical activity (Weiss, Smith & Theeboom, 1996). Although dyadic friendships are influential, the motivational climate constructed by peers is particularly strong when it emerges from a larger peer group, such as an athletic team (Wentzel, 1999). Teams, as opposed to individuals, influence the motivational climate by holding members accountable and sharing experiences when practicing and playing. Furthermore, teammates influence one another through acceptance, encouraging improvement and effort, support, friendship, and within team competition (Ntoumanis & Vazou, 2005). Teammates define

the motivational climate by encouraging increased effort, by stressing that everyone should try harder, and by promoting inter-individual competition within the peer group. Also, team members can foster the feeling of being part of a group and/or create a friendly environment. They can encourage physical and motivational improvement, provide feedback to teammates, and communicate expectations about the importance of effort, cooperation, and team vs. individual success.

Parents, peers, and coaches (who are not specifically investigated in this study due to the plethora of research conducted with them) construct the motivational climate for youth athletes through their continuous involvement, feedback, and communication of performance standards. During training and competitions, athletes are constantly receiving messages from these individuals about effort levels, mastery of skills, enjoyment, support, and acceptance within the team. These messages distinguish that certain perspectives (e.g., self-focused vs. team-focused) are more or less important and influence what children believe they “should” think and feel and how they believe they “should” behave on and off the field.

Shaped through the motivational climate, goal orientations categorize an individual’s belief about success and a striving for competence (Ames, 1984, 1992; Duda, 1988, 1992, 1993; Duda & White, 1992; Dweck, 1986; Dweck & Leggett, 1988; Nicholls, 1984, 1989, 1992), and are oriented along two dimensions. These contrasting goal orientations are referred to as learning and performance goals (Dweck, 1986; Dweck & Leggett, 1988; Elliot & Dweck, 1988), task-involved and ego-involved goals (Maehr & Nicholls, 1980; Nicholls, 1984), or mastery and performance goals (Ames & Archer 1987, 1988). For clarity and consistency, task and ego will be used to denote the

differing goal orientations. These task and ego goal orientations are internalized around the age of 12, a time when athletes begin to compare parental responses with social and performance feedback (Horn & Harris, 1996; Nicholls, 1992; Stipek & MacIver, 1989). For example, at this age a boy might believe his friend's opinion of whether he played well in last night's game more than that of his father, or ask his friend as opposed to his mother, if he was a better athlete than others in their league. This internalization of motivational climates and personal appraisal represent a personal theory of achievement, governing how individuals construe achievement contexts, such as sport, through interpretation, assessment, and reaction to performance feedback.

Task orientation focuses on the development of competence, along with personal improvement related to skill mastery, and a self-referenced set of standards (Nicholls, 1984, 1989). Individuals who operate from this orientation want to gain skill and knowledge, perform their best, help others improve, and work hard when collaborating with peers (Ames & Archer, 1998; Nicholls, 1992). In further describing this perspective, Duda (1992) indicated that, regardless of perceived competence, a task-oriented athlete would choose moderately challenging tasks, exert effort, and demonstrate intrinsic interest in the activity. Task orientation also helps athletes "handle" the traumas of sport, such as losses, disappointment, injury, and conflict, by de-emphasizing competitive goals such as winning or beating a specific opponent (Steinberg, Singer & Murphey, 2000). An athlete with an ego orientation, on the other hand, is focused on the demonstration of competence and ability, avoidance of judgment, and/or dominance over others (Ames & Archer, 1998; Nicholls, 1984, 1989). Although research suggests that an athlete operating solely from an ego orientation is

“maladaptive,” it also has been linked to positive affect, competence, and the demonstration of ability (Hom, Duda & Miller, 1993; Roberts, Treasure & Kavussanu, 1996). These results suggest that both types of goal orientations can be useful and children may benefit most when both task and ego orientations are present (Steinberg, Singer, & Murphey, 2000; Carpenter & Morgan, 1999).

An important, but under researched internal factor in youth sport is perfectionism (Dunn, Dunn, & Sryotuk, 2002; Hall, Kerr, & Matthews, 1998; McArdle & Duda, 2004). Indeed, initial findings suggest that adaptive levels of perfectionism can increase motivation, performance, and satisfaction, whereas maladaptive levels can lead to burnout and a premature departure from sport (Gould, Udry, Tuffey & Loehr, 1996; Hall & Matthews, 1998). Because little research has been done among athletes, it is important to learn more about how children handle and are affected by perfectionistic demands in the sport environment (Flett & Hewitt, 2005). Aspects of perfectionism, such as personal standards and concern over mistakes, can affect the thoughts, feelings, and behaviors of athletes regarding successful performances, well-being, enjoyment, and intention to continue in sport.

Satisfaction and enjoyment are key outcomes among youth sport participants and often result from the goal orientation adopted by the child. They also can strongly influence children’s continued participation in sport (Carron & Chelladurai, 1981; Hom, Duda, & Miller, 1993). Scanlan and colleagues labeled satisfaction as “enjoyment,” and defined it as a positive affective response to the sport experience that reflect pleasure, liking, and experienced fun (Scanlan, Carpenter, Lobel & Simons, 1993; Scanlan & Lewthwaite, 1986; Scanlan & Simons, 1992). Satisfaction and fun are major reasons for

continued sport participation, and a lack of these variables has been identified as a primary reason for the high drop out rates in youth programs (Gould, Fox, Biddle & Armstrong, 1992).

Thus, the purpose of this study is to examine different external (i.e., influence of parents and peers) and internal (i.e., perfectionism) factors that may influence young athletes' goal orientation as well as to determine the extent which all these factors may influence children's enjoyment and intention to continue to play sports. In the subsequent sections, research on parental and peer influences, goal orientations, and perfectionism are reviewed.

### Parental Involvement

For sport participation, parental involvement generally translates to the amount of time, energy, and money parents are willing to invest in their children's sport participation. Involvement encompasses issues such as transportation, attending practices and games, providing instructional assistance and information, providing opportunities to play different sports, buying sports equipment, reading sports-related literature, watching sports on television, participating in fitness-related activities, communicating positive beliefs/realistic expectations about abilities, and being emotionally supportive (Enyon, Kitchen & Semotiuk, 1980; Gould, Lauer, Rolo, Jannes & Pennist, 2006; Jowett, 2005; Weiss & Hayashi, 1995). Research indicates that such parental involvement is associated positively with children's sport enjoyment (Left & Hoyle, 1995; Scanlan & Lewthwaite, 1986), positive appraisals of their performance outcomes (Smith, Zingale & Coleman, 1978), and self-worth (Coopersmith, 1967;

Felker, 1986; Left & Hoyle, 1995). Although, parental involvement can positively influence children's sport experiences, parents also can put pressure on their children, which can be a source of stress and anxiety (Stein, Raedeke & Glenn, 1999). Parental pressure is defined as behavior(s) and attitudes that children perceive as expectations of unobtainable standards (Left & Hoyle, 1995). Parental pressure is related to children's lack of enjoyment (Smith, 1986), stress associated with the evaluation of performance outcomes (McElroy, 1982; Ogilvie, 1979; Scanlan & Passer, 1979), and negative appraisals of self-worth (Smith et al, 1978).

One study identified an ideal level of parental involvement by surveying 13 to 14 year old ( $N = 42$ ) youth volleyball, soccer, or football players and measuring the player's involvement, stress, and enjoyment (Stein et al., 1999). On average, athletes perceived their mothers and fathers to be moderately to highly involved in their sports and believed their parents' level of participation was appropriate. When analyses were done by parent, mother's involvement was related to a more enjoyable experience, whereas higher levels of involvement by father' was associated with less enjoyment. This study also distinguished between the quantity (amount) and quality (positive vs. negative) of involvement and suggested that parents can be highly involved without becoming "too involved" if the quality of involvement is positive (Stein et al., 1999). That is, parents can find an ideal level of involvement by monitoring how much time is spent dedicated to their children's sport experiences and recognizing how that involvement is perceived by their child.

Ommundsen and Valgum (1991) sampled 223 twelve to sixteen year old soccer players regarding their perceptions of sport, enjoyment, ability, and how they are

influenced by their coaches and parents' involvement. They found that if athletes perceived themselves as highly competent in sport and believed that their parents and coaches were emotionally involved in a positive way, they had higher levels of enjoyment. Hoyle and Leff (1997) surveyed 24 tournament tennis players (females = 10, males = 14) ranging in age from 9 to 17 years to assess parental involvement, enjoyment, performance, children's perceptions of their own performance, and self-esteem. They found significant relationships between parental support and enjoyment, state rank, self-rated performance, self-esteem, importance of tennis, starting age, and gender. In addition, they found that female tennis players reported higher levels of parental pressure than their male counterparts; however, the study could not confirm that parental pressure had a significant effect on their performance.

To examine the motivational climate initiated by parents and its relationship to goal orientations, White (1996) sampled 204 female volleyball players ranging in age from 14 to 17 ( $M = 15.40$  years). Overall, the players reported their parents emphasized a learning/enjoyment climate and de-emphasized an environment where success was associated with low levels of effort. The girls perceived their parents as focusing on mastering basic skills, understanding that mistakes are part of learning, trying hard, and having fun. White indicated this parental goal orientation also encouraged the children to challenge themselves and to not fear the ramifications of failing at the task. Consistent with this parental task environment, the athletes themselves endorsed higher levels of task, than ego, orientation.

Research from White, Duda, and Hart (1992), which was consistent with White's (1996) study, found that girls, more so than boys, considered the environment

constructed by their parents to be task-oriented when learning physical skills. Girls believed their parents valued improving skills and learning physical skills free from thoughts of failure or making mistakes. Girls, in response to this worry-free environment, reported less anxiety and concern than boys did. Conversely, boys believed that parents commended learning physical skills with minimal effort, which suggests that girls believe their parents create a more task-oriented environment whereas boys believe their parents take an ego approach. This finding implies that boys' climates might include increased pressure from parents, as well as from themselves, to view success relative to others rather than themselves. Consistent with these results, Weigand (1994) found that boys scored significantly higher than girls on their own ego orientation, on their perception that their parents' also were ego oriented, and on the academic pressure (i.e., grades) they experienced from parents. In general, boys tend to be more "other-referenced" than girls (Gill, 1992; Weigand, 1994; Duda, Fox, Biddle, & Armstrong, 1992), indicating once again that there are differences found in children and in the environment created for each gender.

Parents are involved in their children's sport experiences on many levels, including psychologically, physically, socially, and financially. During the early years of children's development, parents communicate what behaviors and standards are desirable and, what is considered successful, and hopefully provide the means to accomplish these standards. Parental involvement can have numerous positive outcomes, such as attendance at games, emotional support, increasing children's enjoyment, and increased self-worth (Leff & Hoyle, 1995; Gould et al., 2006; Jowett, 2005; Weiss & Hayashi, 1995). Most of the time parental involvement is experienced by



children as valuable and supportive; nevertheless, involvement also can be perceived as pressure and can have negative effects on children, such as stress, anxiety, a lack of enjoyment, and decreased self-worth (Smith, 1986; Smith et al., 1978; Stein, Raedeke & Glenn, 1999). Because parents play such central role in the evolution of their children's goal orientations, it is important to continue to study their influence on the youth sport environment and the children who participate in it. Studies have examined the relationships of parent involvement, goal orientation and, even enjoyment; however, future research will need to examine not only the influences of parents, but those of other external agents, such as teammates.

### Teammates

Although the influence of coaches and parents on the development of children's goal orientations and their experience of sport has been studied extensively, researchers have acknowledged that much less is known about how peers initiate and/or maintain motivational climates on sport teams (Ntoumanis & Vazou, 2005; Vazou, Ntoumanis & Duda, 2005). Before the age of 10, children generally state that parents are their primary source of feedback regarding success and enjoyment. But as athletes age and spend increasing time with their peers, they begin to develop strong bonds that become equally, if not more, influential than their parents (Horn & Weiss, 1991). Because of this increasing influence, teammates need to be included in any studies that examine the influences of sport motivational climates.

The impact of peers on an individual child's perception can be significant, determining if a child will join a club or sport or continue in that activity. Adolescents

indicate that making friends, enhancing social skills, interacting with people of different ages, and forming genuine relationships encourage them to join and continue participating in clubs and teams (Patrick, Ryan, Alfeld-Liro, Fredricks, Hruda & Eccles, 1999; Weiss & Petlichkoff, 1989). In addition, peer relationships on sport teams provide athletes with the means to evaluate and compare abilities and to determine physical competence (Horn, 2004). A team then becomes a primary place to determine if abilities are less than, comparable to, or better than other athletes; a form of other-referenced comparison that is a key component of ego orientation. Teammates can promote a more task involving climate by encouraging each other, reinforcing principles of fun, and not directly comparing skill levels of each other.

Interviews conducted with children who ranged in age from 8 to 12 years revealed that overt attributes of friendship, such as engaging in similar activities as their friends, behaving in prosocial ways, and endorsing that physical characteristics such as height and weight were important, whereas older children aged 13 to 16 years cited more psychological components of friendship, such as esteem enhancement, intimacy, and emotional support, as important (Weiss & Smith, 2002). Regardless of age or their attraction to friendships and teams, Patrick et al. (1999) found that athletes who experienced satisfaction in their relationships with teammates also reported enjoyment and increased commitment to sport.

When peers create a task climate they stress ideals such as cooperative learning, offering help, and sharing knowledge and expertise (Wentzel, 1999; Ames & Archer, 1988). Peer task climates also can promote athletic cooperation, autonomy, and group relatedness (Ames, 1992). Conversely, peer influenced ego climates encourage

the demonstration of ability (Wentzel, 1999), and limit individual choice and initiative (Ames, 1992). The climate of a team determines what is emphasized. For example, in a task climate, athletes may be more likely to persist in the face of obstacles (e.g., losing season) and continue to experience enjoyment through comradeship, whereas in an ego orientated team environment they may base their enjoyment solely on winning games, and may become discouraged and dropout of sport if they are not successful.

In peer-initiated climates among athletes, gender differences have been found (Patrick et al., 1999; Weiss et al., 1996). For example, Weiss and Smith (2002) found that girls ( $M = 13.8$  years,  $SD = 2.8$ ) rated the enhancement of their self-esteem, supportiveness, loyalty, intimacy, and having things in common higher than boys, whereas boys rated conflict higher than girls. Interestingly, older boys and girls (13-16 years) were able to experience interpersonal conflict and arguments within relationships, recognizing that these are natural to friendships (Hartup, 1989) and do not have to effect satisfaction or enjoyment of sport.

Although there are numerous benefits to participating on a sport team, the influence of teammates is not always positive. In fact, some athletes can experience negative outcomes from their interactions with teammates. For example, peers are sometimes discouraging and overly competitive, causing negative experiences that can detract from the enjoyment of sport. In some cases, individuals can even experience “social costs” (the feeling of losing out on social opportunities because of involvement). Specifically, athletes who reported having to focus on one or choose between many different activities reported dissatisfaction with participation (Patrick et al., 1999).

Although parents have the strongest influence on their children when they are young, peers' influence grows as the athletes move into adolescence (Horn & Weiss, 1991; Lewko & Greendorf, 1988). Peers' influence results from increased levels of interaction (e.g., longer and more frequent practices, playing more games together, and traveling as a team), stronger social bonds/friendships, higher quantities of feedback or encouragement, and even through the chance to physically dominate each other (Horn, 2004; Ntoumanis & Vazou, 2005; Patrick et al., 1999; Vazou, Ntoumanis & Duda, 2005; Weiss & Petlichkoff, 1989). Although, previous research has examined the influence of parents and peers independently on goal orientation, enjoyment and other psychological outcomes, there are few, if any, studies that have examined these two powerfully influential groups together. Therefore, future research should examine the relative influence of these external factors on children's experiences in sport.

### Perfectionism

Perfectionism is defined as the "setting of excessively high standards of performance in conjunction with a tendency to make overly critical self-evaluations" (Frost, Marten, Lahart, & Rosenblate, 1990, p. 450). Perfectionistic individuals consistently believe their work to be unfinished and often doubt the quality of their performances (Burns, 1980; Hamachek, 1978). Perfectionistic individuals strive for mistake-free endeavors. If a mistake is made, or the behavior/outcome is perceived as a mistake, it causes the entire performance to be viewed as a failure. Failures are inevitable for these individuals because of their propensity to set extremely high standards for themselves and others - standards that often cannot be met under any

conditions. In addition, when these standards are not met, individuals engage in harsh self-criticism that may result in feelings of depression (Frost et al., 1990; Blatt, 1995) and anxiety (Kawamura, Hunt, Frost, & DiBartolo, 2001). Perfectionists also emphasize precision, neatness, order and organization, and presume that successful individuals achieve their established goals with little or no effort, few errors, confidence, and no emotional distress (Burns, 1980).

Flett and Hewitt (1991, 2005) conceptualized perfectionism along three dimensions: self-oriented (i.e., excessive striving and demanding absolute perfection from the self), other-oriented (i.e., demanding perfection from other people), and socially prescribed (i.e., the perception that other people demand perfectionism from oneself). Self-oriented perfectionists create excessively high standards for themselves and engage in intense self-criticism, yet this approach also has been related positively to students' motivation, learning strategies using extrinsic compensation, and demonstrated increases in self-efficacy (Mills & Blankstein, 2000). Socially prescribed perfectionists perceive significant others as setting and imposing excessively high standards that they must meet in order to please others. These individuals often experience negative affect and physiological stress reactions following failures (Mills & Blankstein, 2000; Roberts & Lovett, 1994). Other-oriented perfectionism describes individuals who impose excessively high standards on others and expect them to successfully fulfill these standards at all times (Mills & Blankstein, 2000).

Frost et al. (1990) offered a separate, but related, multidimensional conceptualization of perfectionism focusing on five factors: excessive concern over making mistakes, the perception of high parental expectations, the perception of high

parental criticism, the doubting of the quality of one's actions, and a preference for order and organization. Concern over mistakes represents the negative reactions to mistakes, a tendency to interpret mistakes as equivalent to failure, and a tendency to believe that one will lose the respect of others following failure. Parental expectations and criticism are the tendency to perceive that one's parents set very high goals and are overly critical of one's performance (Frost et al., 1990). For children, these parental expectations and reactions can result in fear and other negative emotions in addition to negative lessons associated with making mistakes (Rice, Kubal, & Preusser, 2004). Doubting of actions constitutes the tendency to feel that projects are never completed to satisfaction, causing dissatisfaction or hesitation. Finally, a sense of organization comprises the importance of and preference for order (Frost et al., 1990), which results in a methodical, deliberate, conscientious, and persistent approach to a task (Rice et al., 2004).

These two multidimensional systems of perfectionism are highly regarded and draw numerous parallels to each other. For instance, Hewitt and Flett's socially prescribed perfectionism is related to high parental expectations and criticism in Frost's system. Self oriented perfectionism, on the other hand, is related to high personal standards and both have been associated with positive affect (Frost et al., 1990). The setting of high personal standards can serve to motivate individuals by giving them a goal to attain. To reach their goals, individuals utilize achievement strategies and demonstrate great persistence (Hewitt & Flett, 1991). High personal standards and self-oriented perfectionism, such as a drive for a perfect performance at school or in sport, have been associated with high levels of achievement (Flett, Sawatzky, & Hewitt, 1995).

Given that athletes purposefully train to achieve performance excellence, sport is a logical arena in which to examine the impact of perfectionism on children's behaviors. Within the sport literature, perfectionism has been increasingly researched during the last ten years (Dunn et al., 2002; Flett, & Hewitt, 2005; Flett et al., 1995; Gould, Dieffenbach, & Moffett, 2002; Gould et al., 1996). For example, Frost and Henderson (1991) explored the relationships between perfectionism and college athletes' negative reactions to mistakes in competition. They found strong associations between concern over mistakes and competitive anxiety ( $r = .47$ ), a failure orientation ( $r = .70$ ), and trait sport confidence ( $r = -.61$ ). In addition, athletes with high scores on the concern over mistakes dimension experienced more negative thoughts prior to competition and reacted more negatively to mistakes during competition than those who showed few concerns.

Hall, Kerr, and Matthews (1998) investigated perfectionism in relation to achievement goals and state anxiety in 119 male and female high school runners. High personal standards were significantly and positively related to both task ( $r = .24$ ) and ego orientations ( $r = .34$ ). In addition, concern over mistakes was positively and significantly related to ego orientation ( $r = .38$ ), though it was unrelated to task orientation. Parental criticism and parental expectation were positively related to state anxiety.

Previous research also has demonstrated significant relationships between perfectionism and negative performance components, such as athlete burnout (Gould et al., 1996), anxiety (Hall et al., 1998), and a preoccupation with mistakes (Frost, Trepanier, Brown, Heimberg, Justre, Markis & Leung, 1997). But, numerous

researchers have argued that perfectionism may not be singularly maladaptive, noting that specific aspects of perfectionism when combined together actually contribute to positive outcomes (Hamachek, 1978; McArdle & Duda, 2004; Rice & Mirzadeh, 2000; Rice & Preusser, 2002; Slaney, Rice & Ashby, 2002; Terry-Short, Owens, Slade & Dewey, 1995). “Adaptive perfectionism” was coined to represent this positive combination of perfectionist tendencies, and is illustrated by individuals who hold high personal standards, expect high competence from others, and have a propensity to set challenging goals (Gould et al., 1996; Hall, Kerr & Matthews, 1998). These individuals may look similar to maladaptive perfectionists because they hold high personal standard, but adaptive (normal or healthy) perfectionists are not characterized by negative self-evaluation, such as concern over mistakes. They are much more likely to endorse positive achievement responses (e.g., tolerance for mistakes) and healthy psychological functioning (Gould et al., 1996; Rice & Mirzadeh, 2000). When individuals endorse high personal standards and low concern over mistakes it is likely they will have greater chances of success and more positive experiences in sport, and therefore be more likely to continue participation. Individuals who are maladaptive in their perfectionism may feel discouraged when faced with challenges and/or failures and, with their standards of success so elevated, they may be less likely to view their performances as accomplishments.

In examining perfectionism in sport, Gould, Dieffenbach, and Moffett (2002) surveyed medal winning Olympic athletes. They found that these athletes scored moderately high to high on personal standards and organization, but low on concern over mistakes, parental expectations, parental criticism, and doubts about actions,



suggesting an “adaptive” profile for perfectionism (Hamachek, 1978; Rice & Mirzadeh, 2000). In addition, athletes who had this adaptive profile scored higher on task orientation than ego orientation. An Olympian indicated his task orientation this way,

I think I worked really hard. There were a lot of athletes that might have been more talented than I was, but I think I was more determined. I wanted to do well and I wanted to reach my goals and I wasn't going to let anything stand in my way. (p.187)

This adaptive level and style of perfectionism is associated with satisfaction (life and self), drive and determination, elite performance, and continuous self-improvement (Chang, Watkins & Bank, 2004; Gilman & Ashby, 2003), characteristics that are related to a task orientation.

Dunn, Dunn, and Sryotuk (2002), in their study of 174 Canadian football players ( $M = 18.24$  years,  $SD = 0.66$ ), found that goal orientations were differentiated by type of perfectionism. Athletes who were primarily task oriented tended to have an adaptive style of perfectionism ( $r = .36$ ), whereas predominantly ego oriented individuals reported a positive relationship with maladaptive perfectionism ( $r = .30$ ). In a similar study, McArdle and Duda (2004) surveyed 77 male and 119 female youth athletes ( $M = 14.0$  years,  $SD = 1.42$ ) from a variety of sports to study the relationships between perfectionism and goal orientation. High personal standards were significantly and positively related to task ( $r = .22, p < .01$ ) and ego ( $r = .32, p < .01$ ) orientations, whereas concern over mistakes was only significantly and positively related to ego orientation ( $r = .23, p < .01$ ). In terms of perfectionism, these findings suggest that what differentiates ego and task orientations is the extent to which individuals are concerned over the mistakes they make when performing and how much they focus on external referents as a measure of success.

Gender also may influence levels of perfectionism and its ultimate expression. In one study focusing on gifted individuals (about age 12), boys scored higher than girls for parental expectations, concern over mistakes, and doubts about actions (Parker, 2002). However, results in the sports arena have suggested that such gender differences may change as individuals age. When male and female elite/college level athletes were compared, differences in perfectionism scores were smaller than have been found for youth and recreational athletes (Anshel, 2003). This attenuation in differences suggests that future investigations with youth athletes should take into account the possible influence of gender.

Researchers have established initial relationships between perfectionism and various psychological outcomes, including goal orientation (Dunn, Dunn & Syrotuik, 2002; Hall, Kerr & Matthew, 1998; McArdle & Duda, 2004). However the influence of perfectionism in relation to other external factors, such as parents and teammates, has not been studied. Thus, it will be important to examine how much these factors influence children's involvement in and enjoyment of sport. In addition, future research should examine the extent to which these variables influence children's goal orientations, a central factor in understanding children's involvement in sport.

### Goal Orientations

Goal orientations represent individuals' interpretations and internalizations of motivational climates. Once internalized, goal orientations serve as filters through which individuals appraise performance situations to determine what is successful and what

approach should be taken. As discussed previously, there are two primary goal orientations.

Task orientation encompasses the development of personal competence and improvement, skill mastery, and a self-referenced set of personal standards (Nicholls, 1984, 1989). Individuals who operate from a task orientation desire to gain skill and knowledge to improve, perform their best, and help others improve through collaboration (Ames & Archer, 1998; Nicholls, 1992). This orientation encourages athletes to choose moderately challenging tasks, persist in the face of adversity, exert effort, and experience internal motivation for an activity (Duda, 1992; Stein, Singer & Murphey, 2000). A task orientation is related to the enjoyment of sport, continued participation, and perseverance in the face of challenges. Studies indicate a task orientation approach also involves the added benefits of reducing boredom and anxiety, while increasing satisfaction and enjoyment (Goudas et al., 1992; Hall & Kerr, 1997; White, 1998).

An individual with an ego orientation is focused on demonstrating ability and competence, displaying dominance over others, and avoiding judgment of their actions or performance (Ames & Archer, 1998; Nicholls, 1984, 1989). In a study of young Korean athletes, Yoo and Kim (2002) found that high ego athletes favored external rewards and social recognition. Individuals with a primary ego orientation sometimes have difficulty when faced with challenges, often choosing to either not engage or discontinue an activity if they believe they do not have the talent or ability to succeed (Duda, 1992).

Goudas et al. (1992) measured goal orientation in relation to perceived

competence, enjoyment, and participation. Results confirmed that a task orientation was related positively to enjoyment and participation. In a study of young Korean athletes, Yoo and Kim (2002) found that high task athletes identified self-referenced factors (e.g., health/fitness benefits and psychological benefits of sport) associated with the enjoyment of sport. Hom, Duda, and Miller (1993) focused on the relationships between a young athletes' proneness to task and ego orientations with respect to (a) success, (b) perceived ability, and (c) degree of satisfaction/enjoyment in the athletic domain. A predominant task orientation was positively related to higher levels of satisfaction and enjoyment, and correlated with a downplaying of deceptive strategies in order to win. These individuals placed much less emphasis on success that was based on social comparison compared to those individuals who were predominantly ego oriented. Boyd and Callaghan (1994) investigated goals, enjoyment, and intrinsic motivation and found that a predominant task orientation was associated with increased enjoyment, satisfaction, and interest. On the other hand, an ego orientation was not related to any of these positive outcomes, suggesting that individuals who subscribe to an ego orientation primarily experience positive affect from successful performances.

White and Zellner (1996) found that an ego orientation paired with high levels of cognitive anxiety manifested itself as worry, which led to disruptions in concentration particularly for female as opposed to male college recreational sport participants. Although some studies have suggested that an ego orientation is inversely related to positive sport experiences (e.g., Boyd & Callaghan, 1994), an individual's ego orientation has the potential to aid in improving skill, increase competition, and provide a performance advantage. In a study of youth basketball players, Hom, Duda, and Miller

(1993) found that athletes who endorsed high ego orientations paired with task orientation reported being satisfied with their sport and perceived themselves as having high levels of athletic ability.

Goal orientations have been used extensively to explain the motivational approaches individuals take in performance situations (Ames, 1984, 1992; Ames & Archer, 1987; Duda, 1988, 1992, 1993; Duda & White, 1992; Dweck, 1986; Dweck & Leggett, 1988; Nicholls, 1984, 1989, 1992), and have been related to a wide range of psychological outcomes. In sport, goal orientation has been found to predict fun and enjoyment as well as children's motivation to continuing playing. Because goal orientation is such a central variable in understanding children's experiences in sport, research should continue to include it as a variable of interest and examine its relative influence on multiple outcomes in youth sport.

### Enjoyment

Although there are many reasons that children participate in sport, including opportunities to be active, meet peers, make new friends, develop gross and fine motor skills, learn the value of effort and practice, experience teamwork, increase self-esteem (Kanters & Tebbutt, 2001; Weiss, 1995), having fun is the most frequently endorsed reason for participating in youth sport (Weiss & Chaumenton, 1992; Weinberg, Tenenbaum, McKenzie, Jackson, Anshel, Grove, & Fogarty, 2000) and the reason it is included in this study. Early research suggested that enjoyment and satisfaction with participation leads to continued play (Harter, 1978, 1981). In fact, when children report not having fun in their sport and experience pressure and stress from adults or the

environment, they are most likely to discontinue participation (Coakley, 1992; Petlichkoff, 1992). And as youth sport has become more professionalized and enjoyment is sacrificed to develop athletic talent, children are in danger of losing a key component that reinforces motivation, continued participation, and well-being (Gould & Carson, 2004).

Enjoyment is operationalized as reflecting both achievement and non-achievement components, stemming from both internal and external sources (Scanlan & Lewthwaite, 1986). Internal achievement factors include demonstrating skills successfully and mastering challenges, whereas extrinsic factors comprise success in competition, such as winning a game. Internal non-achievement factors include the experience of playing sport, athletic ability, and the excitement of the game, whereas external factors involve social aspects, such as being with peers, group inclusion, and the status of being an athlete (Bengoechea, Streaan & Williams, 2004). For individuals with a task orientation, enjoyment may be experienced through mastering a new skill and/or helping teammates understand a new offensive play. For individuals operating from an ego orientation, fun may be associated with winning a game or dominating the person they were guarding.

Enjoyment is so important in youth sport, specifically in the early years of participation, because it is during this time that children are developing their “love” for the game and building interests for physical activity. In a landmark study of 120 artists, academics, and athletes, Bloom (1985) defined three stages of development for these exceptional individuals. The early years, or the Romance Phase, is a time where individuals cultivated appreciation for the activity, received encouragement from

significant others, experienced vast amounts of fun, were given the freedom to explore the activity, and experienced success. He went on to add that parents were the primary influence during this phase, instilling work ethics and supporting their performer. The two stages that follow are the Precision Phase and the Integration Phase; times when mastering skills and then optimal performance are achieved. The message during the Romance Phase should be one of support (financial and emotional), encouragement upon task completion and moderate involvement, all without unreasonable expectations or pressure. For example, an athlete should have the freedom to cross-train in the off season, the choice to continue to play at a recreation level vs. moving to select levels, or the liberty to have time off from training all together.

These stages of talent development reinforce that parental involvement and positive feedback are crucial factors in the facilitation of motivation, goal orientations, intention, enjoyment, and the selection of activities and even peer groups. As contact with other athletes increase, peer influences gain importance and children begin to compare their abilities to others. As children pass the age of eight or nine, they begin to evaluate the feedback they receive from their parents with the feedback they gather from their performances (i.e., winning or losing) and from their peers (Horn & Harris, 1996; Stipek & MacIver, 1989). If these messages are congruent, athletes can formulate genuine opinions about their skill levels, abilities, and competence and thus make accurate appraisals of their enjoyment, relationships, and participation. It is important that feedback from parents and peers be genuine. This genuine feedback, complimented by positive interactions and continuous support, is the best way to encourage enjoyment and fun for young athletes (Brustad, 1988; Scanlan et al., 1993;

Scanlan & Lewthwaite, 1986).

Although enjoyment is recognized as a key reason for sport participation, it is acknowledged that athletes do not always experience enjoyment when training or performing. And because the participation in sport requires an enormous amount of time and effort, both from athletes and their parents, it is paramount to evaluate the factors that influence enjoyment and assess if and when children have this positive experience (Gould & Carson, 2004). One of the strongest predictors of enjoyment is goal orientation, in particular a task focus (Bengochea, Streat & William, 2004; Goudas et al., 1992; Hom, Duda & Miller, 1993; Roberts, Treasure & Kavussanu, 1996; Scanlan & Lewthwaite, 1986). And since goal orientation appears to represent a precursor to enjoyment, it is important to investigate additional internal (e.g., goal orientation and perfectionism) and external (e.g., parental and peer involvement) attributes of children's sport experience and compare these with their reported levels of enjoyment. Shedding light on the primary reasons a child experiences fun will aid in making youth sports more enjoyable and increasing the likelihood they will continue playing sport.

### Intention

Intention to play sport can be understood best through the sport commitment model, which purports that continued participation is related to sport enjoyment, varied opportunities for activity, personal investment, and social aspects (Carpenter et al., 1993; Scanlan et al., 1993). If individuals endorse greater enjoyment and opportunity to play sport, and higher personal investments of time and energy, they are more likely to continue playing. In their study of 178 girls and boys participating in Little League



programs, Scanlan et al. (1993) found that enjoyment and personal investment were the leading predictors of commitment. Being committed to sport has physical benefits, such as improvements in health, but it also affords opportunities for emotional development, higher self-concepts, and the installation of moral values (Harter, 1978, 1981; Horn, 2004; Smith & Smoll, 1996; Diaz, 2005).

In order to better understand the type of individuals who participate in sport, the Athletic Footwear Association Report (1990) quantified three types of participants: 1) the reluctant participant, who participated in sport because they felt they had to due to external pressure; 2) image conscious socializers, who were concerned with the rewards or approval of others; and 3) competence-oriented athletes, who were concerned with improving their skill. The report also suggested that participants who were in the first two categories were more likely to withdraw, versus the children who were interested in skill development. If children are experiencing enjoyment within their sport experience it is less likely that they will discontinue play.

Research supports a relationship between enjoyment and intention, and confirms that these factors influence continued participation (Carpenter et al., 1993; Harter, 1978, 1981; Scanlan et al., 1993). Thus, it is important to increase our understanding of how enjoyment predicts intention. To do so, research should examine how external factors, such as parents and peers, influence children's views of performance situations (i.e., goal orientations) and how such views may affect their levels of enjoyment and intention to continue playing. By understanding the complex interplay of these factors, researchers will be better able to predict which children will continue and which ones will dropout.

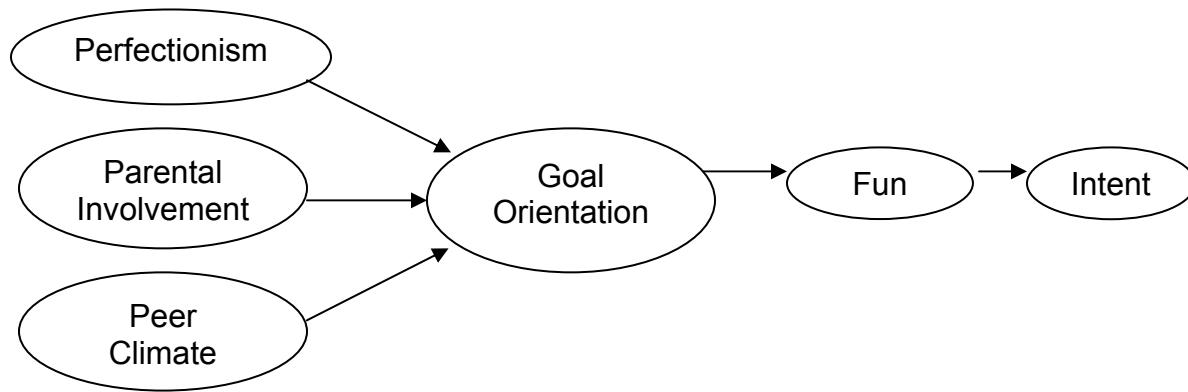


Figure 1. Conceptual model illustrating the relationships among the variables of interest.

### Purpose

The study of motivational climates and goal orientation has resulted in some important initial findings regarding their relationships to a number of factors; however, research generally has not taken a multidimensional approach, considering how internal and external factors might influence the development of goal orientations and ultimately the experience of fun. Investigating these external and internal dynamics should shed light on children's sport experiences and allow for a greater understanding of the variables that affect enjoyment and participation in youth sport. Based on the review of literature, I will examine both internal (i.e., perfectionism) and external (i.e., parental involvement, peers) factors that may create the motivational climate for youth sport participants and thus affect their goal orientations. In addition, I will test the extent to which all these variables predict children's fun while participating and their intention to continue playing sport in the near future.

Based on the review of the current literature, the purpose of this study was two fold. The first purpose was to explore the relationships of parental involvement, peer

climates, and perfectionism to children's goal orientations. The second purpose was to examine the extent to which these factors are related to children's enjoyment and the intent to continue playing sport. The following research questions (and hypotheses) were investigated:

1. What are the relative influences of perfectionism (Personal Standards, Concern over Mistakes), parental involvement (Pressure, Support), and teammate climates (Task-focused, Ego-focused) to goal orientation (Task, Ego)?
2. What are the relative influences of goal orientation (Task, Ego), perfectionism (Personal Standards, Concern over Mistakes), parental involvement (Pressure, Support), and teammate climates (Task-focused, Ego-focused) with overall enjoyment?
3. What are the relative influences of goal orientation (Task, Ego), parental involvement (Pressure, Support), peer climates (Task-focused, Ego-focused), perfectionism (Personal Standards, Concern over Mistakes), and enjoyment with children's intent to continue in their sport (season, year)?

Because research (Anshel, 2003; Duda et al., 1992; Gill, 1992; Hoyle & Leff, 1997; Parker, 2002; Patrick et al., 1999; Weigand, 1994; Weiss et al., 1996; White, 1996; White, Duda & Hart, 1992) suggests that gender may affect the relationships among these variables, the above stated research questions were examined by gender (boys and girls) in an exploratory manner. In addition, preliminary analyses were conducted to examine between group differences for boys and girls on the outcome variables, as well as the potential influence of level of sport. Because the children were drawn from three primary sport experiences (recreational, select, school), I also examined the extent to which these groups differed from one another to determine if they could be combined in the analyses to address the above mentioned research questions.

## METHOD

### Participants

One hundred boys and 88 girls who were on organized sport teams participated. Their ages ranged from 10 to 14 years (boys:  $M = 12.06$ ,  $SD = 1.06$ ; girls:  $M = 12.18$ ,  $SD = .73$ ). The children participated in basketball (100 boys and 60 girls) and soccer (28 girls). Each participant was a registered member of a team, playing under the supervision of a coach, and following the sanctioned rules of the game and sport complex where the league games were played.

### Boys

For the boys, 77.6% were Caucasian, 11.2% African American, 6.1% Latino, and 4.1% Asian American; 1.0% reported Other. They reported having grade averages of A's (75%), B's (21.7%), or C's (3.3%). Some boys reported playing 1 sport (15.3%), whereas others endorsed playing 2 (18.4%), 3 (30.6%), 4 (21.4%), 5 (9.2%), or 6 (5.1%) the average number of sports was 3.06 ( $SD = 1.36$ ). Of these sports, the most popular were basketball (93.9%), football (61.2%), baseball (48%), soccer (27.6%), track (23.5%), and golf (22.4%). A majority of the boys reported they were a starter when playing their best sport (88.5%), whereas the others were a primary substitute (11.5%; substituting in and playing at least 50% of the game). Boys reported playing their best sport at the select (43%,  $n = 43$ ), recreation (34%,  $n = 34$ ), or school level (23%,  $n = 23$ ). They practiced an average of 6.45 hours ( $SD = 4.74$ ) a week and played games an average of 3.65 hours ( $SD = 3.44$ ) a week.

Fathers'/step-fathers' ages ranged from 33 to 57 years ( $M = 45.21$ ,  $SD = 4.82$ ), mothers'/step-mothers' ages ranged from 31 to 53 years ( $M = 42.73$ ,  $SD = 4.59$ ), brothers'/step-brothers' ages ranged from 1 to 27 years ( $M = 12.13$ ,  $SD = 4.67$ ), and sisters'/step-sisters' ages ranged from 1 to 19 years ( $M = 11.09$ ,  $SD = 4.43$ ). Many family members participated in sports including fathers/step-fathers (93.2%), mothers/step-mothers (64.3%), brothers/step-brothers (93.4%), and sisters/step-sisters (87%).

### *Girls*

For the girls, 73.9% were Caucasian, 9.1% African American, 4.5% Latino, 9.1% Asian American, and 1.1% Asian American; 2.3% reported Other. They reported having grade averages of A's (81.9%) or B's (18%). Some girls reported playing 1 sport (20.5%), whereas others endorsed playing 2 (37.5%), 3 (18.2%), 4 (11.4%), 5 (9.1%), or 6 (2.3%) sports; one individual reported playing up to 9 sports or activities (1.1%). The average number of sports played was 2.65 ( $SD = 1.48$ ). Of these sports, the most popular sports were basketball (81.8%), soccer (45.5%), volleyball (42%), track (26.1%), and softball (20.5%). A majority of the girls reported they were a starter when playing their best sport (83.7%), whereas the others were a primary substitute (12.8%; substituting in and playing at least 50% of the game), or a secondary substitute (3.5%; substituting in and playing less than 50% of the game). Girls reported playing their best sport at the select (55.7%,  $n = 44$ ), recreational (19.3%,  $n = 28$ ), or school (25%,  $n = 16$ ) level. They practiced an average of 5.21 hours ( $SD = 2.84$ ) a week and played games an average of 3.42 hours ( $SD = 2.65$ ) a week.

Fathers'/step-fathers' ages ranged from 32 to 64 years ( $M = 45.30$ ,  $SD = 4.77$ ), mothers'/step-mothers' ages ranged from 31 to 53 years ( $M = 43.33$ ,  $SD = 4.60$ ), brothers'/step-brothers' ages ranged from 2 to 27 years ( $M = 12.31$ ,  $SD = 5.30$ ), and sisters'/step-sisters' ages ranged from 4 to 23 years ( $M = 13.19$ ,  $SD = 4.53$ ). Many family members participated in sports including fathers/step-fathers (87.2%), mothers/step-mothers (72.3%), brothers/step-brothers (94.6%), and sisters/step-sisters (94.7%).

## Instruments

### *Demographics*

A demographic questionnaire was developed specifically for the study to assess: age, gender, ethnicity, level of education, years of sport participation, types of sports played, level of sport participation (i.e., recreation versus select), amount of practice each week (days and hours/week), average grades in school, and family composition (see Appendix A).

### *Goal Orientations*

The 13-item Task and Ego Orientation in Sport Questionnaire (TEOSQ; Duda, 1989; Duda & Nicholls, 1992) measures goal orientation, specifically determining the individual's differential emphasis on achievement and related criteria underlying subjective success: Task Orientation (7 items; developing competence, along with personal improvement related to skill mastery, and a self-referenced set of standards) and Ego Orientation (6 items; demonstrating competence over others or avoidance of

judgment). Participants rate each item on a 5-point Likert scale ranging from 1, strongly disagree, to 5, strongly agree. Mean scores represent the total scores for each dimension; higher scores represent greater internalization of that goal orientation (see Appendix B).

Duda (1993) reported adequate internal consistency for the task ( $r = .82$ ) and ego ( $r = .89$ ) orientation subscales for a collection of studies with samples ranging in age from 10 to 31 years old. Cronbach's alpha for the current study ranged from .74 to .90 (task: boys = .84, girls = .74; ego: boys = .85, girls = .90). There was a low correlation between the two factors ( $r = .12$ ) and three-week test-retest reliability was reported as .68 and .75 for task and ego subscales, respectively (Duda, 1992, 1993). Extensive previous research has supported the TEOSQ's validity and reliability (Duda, 1989, 1992, 1993; Duda, Olsen & Templin, 1991; Givvin, 2001; Weigand, 1994; White & Duda, 1994).

### *Perfectionism*

The 30-item Sport Specific Multidimensional Perfectionism Scale (Sport MPS; Dunn, Dunn & Syrotuik, 2002), constructed from the Frost Multidimensional Perfectionism Scale (Frost-MPS; Frost, Marten, Lahart & Rosenblate, 1990), measures four dimensions of perfectionism: Perceived Parental Pressure (9 items; belief that one's parents set high standards and are overly critical), Personal Standards (7 items; setting of very high standards and the excessive importance placed on these high standards for self-evaluation), Concern over Mistakes (8 items; negative reactions to mistakes, tendency to interpret mistakes as equivalent to failure, and a tendency to

believe that one will lose the respect of others following failure), and Perceived Coach Pressure (6 items; belief that ones' coach set high standards and are overly critical). Participants rate each item on a 5-point Likert scale ranging from 1, strongly disagree, to 5, strongly agree. Total scores were the mean for each subscale; higher scores reflect a higher level of perfectionism on that dimension. For the purpose of this study, only the Personal Standards and Concern over Mistakes subscales were used to represent internal influences. The other two scales assessed external influences of coaches and parents. A more thorough measure of parental influence was utilized to assess their influence, whereas coaches were not a focus of this study.

Internal consistency reliabilities (Cronbach's alpha) have ranged from .76 to .89 (Frost et al., 1990) in samples of college females. Dunn et al. (2006) sampled athletes ranging from teenagers to college, resulting in adequate levels of internal consistency, alphas ranging from .76 to .89. In the current study Cronbach's alphas were: personal standards (boys = .74, girls = .75) and concern over mistakes (boys = .81, girls = .87). In terms of construct validity, the MPS total score was highly correlated with existing measures of perfectionism, including the Burns Perfectionism Scale ( $r = .82$ ; Burns, 1980), the Self-Evaluative (SE) scale from the IBT ( $r = .78$ ; Jones, 1968), and the EDI Perfectionism Scale ( $r = .70$ ; Garner, Olmstead & Polivy, 1983) (see Appendix B).

### *Parental Involvement*

The 16-item Parental Involvement in Activities Scale (PIAS; Anderson, Funk, Elliott & Smith, 2003) measures children's perception of their parents' involvement in their extracurricular activity participation along two dimensions: Support (6 items; child's



perception that parents facilitate extracurricular participation and give choices in this area) and Pressure (10 items; child's perception that his/her parents control activity participation and impose standards of performance). All items include the phrase "My mom and dad" to allow individuals to consider their parents together, or alternatively, only one parent if the child was raised primarily or only by a mother or father.

Participants rated each item on a 4-point Likert scale, ranging from 1, never / strongly disagree to 4, always / strongly agree. Total scores are the mean of each subscale; higher scores indicate a perceived increase in Support or Pressure from parents.

Internal consistency reliabilities were .70 for Support and .71 for Pressure (Anderson et al., 2003) in a sample of elementary school students. In the current study, Cronbach's alphas were: Support (boys = .77, girls = .68) and Pressure (boys = .85, girls = .84). A principle component analysis supported the two scales. Support was positively related to children's enjoyment in activities and negatively related to anxiety about activities. Conversely, Pressure was negatively related to enjoyment of sports and activities (Anderson et al., 2003).

### *Peer Climate*

The 21-item Peer Motivational Climate in Youth Sport Questionnaire (PeerMCYSQ; Ntoumanis & Vazou, 2005) measures the athletes' perspectives on five aspects of peer-initiated motivational climates: Improvement (4 items; degree to which teammates encourage and provide feedback to improve), Related Support (3 items; degree to which teammates foster the feeling of being part of a group as well as the create a friendly environment), Effort (5 items; degree to which teammates emphasize

that everyone should try their hardest), Intra-team Competition/Ability (5 items; degree to which teammates promote inter-individual competition), and Intra-team Conflict (4 items; degree to which teammates engage in negative and unsupportive behaviors). Each question is rated on a 7-point Likert scale, ranging from 1, strongly disagree, to 7, strongly agree. Total scores were obtained for the two higher order factors Task-Involving Climate (12 items; Improvement, Related Support, and Effort) and Ego-Involving Climate (9 items; Intra-team Competition and Intra-team Conflict) by averaging the items on each factor. Higher scores represent either a more Task or Ego-involving Climate.

Reliability coefficients (Cronbach's alpha) ranged from .69 to .77 (Ntoumanis & Vazou, 2005) in a sample of 11 to 16 year olds. For this study, Cronbach's alphas were moderate to high for Task-involving (boys = .91; girls = .88) and for Ego-involving (boys = .87, girls = .81) climate. Four week test-retest reliabilities ranged from  $r = .74$  to  $r = .82$ . To determine the content and factor validity, Ntoumanis and Vazou (2005) conducted exploratory and confirmatory factor analyses that resulted in the 21-item, five factor (with two super ordinate factors) solution. The correlation between the Task-involving and Ego-involving higher order factors was  $r = -.67$ .

### *Intent*

Nine questions were used to assess participants' intent to continue playing their best sport: next season/next year, with this team next season/next year, with this coach next season/year, and at the current/higher/lower competitive level. Participants rate each item on a 5-point Likert scale, ranging from 1, strongly disagree to 5, strongly

agree (see Appendix A). Because the correlation between intent to play next season and year was low ( $r = .32$ ), each item was used as a separate indication of the child's intent. The other intention questions were not used because of inconsistent response patterns, low correlations and the reality that children often stay with a sport, coaches and teams often change.

### *Enjoyment*

Four items from the sport commitment model (Carpenter, Scanlan, Simons & Lobel, 1993; Scanlan, Angeles & Simons, 1995; Scanlan, Carpenter, Schmidt & Simmons, 1993) measure athletes' level of enjoyment. Questions included "I have fun playing my best sport," "I like playing my best sport," "I enjoy playing my best sport, and "I am satisfied with my current experience in my best sport." For each item participants respond on a 5-point Likert scale, ranging from 1, strongly disagree, to 5, strongly agree. Principle axis factor analysis, with squared multiple correlations as the communality estimates, revealed a single factor solution that accounted for 89.50% of the variance. Three items loaded significantly on the factor; satisfaction was dropped to due low loadings. Total score was the mean of these items. Cronbach's alpha was .98 for the boys and .88 for the girls.

### *Procedure*

Once the University of North Texas Internal Review Board (IRB) for Human Subjects Research approved the project, the executives of a large sports complex in a metropolitan city were contacted. They were briefed as to the topic of the survey and

subsequently approved the research after an internal meeting. Once permission was granted, information about the survey was disseminated to coaches and parents of the organization through their website and emails. The participants were informed of the days the survey would be conducted and were encouraged to participate. Coaches, parents, and players were reminded the day of the survey by personal contact, which occurred before or after games, practice, and tournaments.

Athletes who wished to participate were escorted into a private conference room along with their parents. A short explanation of the survey was given and if both parties agreed the parents signed the consent form and the athletes signed the assent form. Parents were encouraged to leave after this point in order to facilitate confidentiality and honest responding.

It took the participants approximately 20-25 minutes to complete the survey, which included the demographics, TEOSQ, MPS, PIAS, and PeerMCYSQ; approximately half of the packets were counterbalanced. Some participants reported fatigue or their parents requested they leave before their survey was complete and because participation was voluntary they were allowed to discontinue without penalty; these individual's survey packets were removed from the sample ( $n = 21$ ). Athletes and parents who participated were offered refreshments for their participation (i.e., Gatorade and snacks). After the athlete completed the packet it was scanned for completeness, and then the consent and assent forms were removed from the packet and it was labeled with a number to ensure anonymity.

## Design and Analysis

Data were screened for missing values. When an item was missing from a questionnaire, the scores from the other items on that questionnaire were then averaged and the item was replaced with that score; only 67 individual items across all 188 participants were replaced during data entry. Within the entire data set, 7 individuals were dropped due to incomplete questionnaires.

Descriptive analyses were conducted so the demographic characteristics of the sample (e.g., age, ethnicity, gender) could be described. Means, standard deviations, ranges, and correlations of the dependent variables also were computed. The issues of normality (skewness and kurtosis) were tested by gender. Skewness and kurtosis were not an issue except for fun, intention – season, and intention – year. Data in these instances were examined and different common transformations were performed (square root and logarithmic); however, the transformations were not successful in redistributing the data to normality so the decision was made to maintain these three measures in their original form.

Initially, preliminary analyses were conducted to assess if there were any between group differences (gender and level of primary sport) on the following variables: goal orientation (Task, Ego), perfectionism (Personal Standards, Concern over Mistakes), parental involvement (Pressure, Success), peer-initiated climate (Task-focused, Ego-focused), intention (season, year) and enjoyment. MANOVA were used to evaluate independently the potential influence of level of sport (recreational, select, school) and gender (boys, girls) on the dependent measures. These analyses were

conducted to screen the data and determine if the group could be combined across sporting level and gender, or if analyses would be conducted within each subgroup.

Hierarchical multiple regression analysis was used to examine the relationship of the predictors to goal orientation (Task vs. Ego). Variables were entered in the following order: perfectionism (Personal Standards, Concern over Mistakes), parental involvement (Support, Pressure), and peer-initiated team climate (Task-focused, Ego-focused). The order of entry was based on the idea that within person or internal variables would have the most influence, followed by those variables that were external, representing the motivational climate that was created by parents and peers. Regression analyses were conducted separately by gender and by goal orientation (Task vs. Ego). Goal orientation was examined separately because they were uncorrelated and represented essentially orthogonal constructs (Duda, 1992, 1993; Duda & White, 1992).

Hierarchical multiple regression analysis also was used to examine the relationship of the variables to enjoyment. Variables were entered in the following order: goal orientations (Task, Ego), perfectionism (Personal Standards, Concern over Mistakes), parental involvement (Support, Pressure), and peer-initiated team climate (Task and Ego). The analysis was conducted separately by gender. The order of entry was determined based on the idea that goal orientation was most proximal to children's experience of enjoyment and thus would have the most influence.

Finally, a hierarchical multiple regression analysis was performed to determine the best predictors for intention to continuing playing the primary sport (season and year). For each type of intent, the predictors were entered in the following order:

enjoyment, goal orientations (Task, Ego), perfectionism (Personal Standards, Concern over Mistakes), parental involvement (Support, Pressure) and peer-initiated team climate (Task-focused and Ego-focused). The analyses were conducted separately by gender. Because the correlation for the two intention measures was near zero, they were used separately as criterion measures and the analyses conducted separately for each one. The order of entry was determined based on the idea that fun was the most proximal variable to intent, followed by goal orientations, and then the internal and external factors.

## RESULTS

### Descriptive Statistics

Pearson-product moment correlations, means and standard deviations for boys and girls are presented in Table 2.

### Preliminary Analyses

#### *Multivariate Analyses of Variance (Gender)*

In order to assess for any differences in response patterns, MANOVA or ANOVAs were conducted to assess for gender differences. A separate MANOVA was conducted for each set of dependent variables, specifically: goal orientation (Task, Ego), perfectionism (Personal Standards, Concern over Mistakes), parental involvement (Pressure, Support), peer-initiated climate (Task-focused, Ego-focused), intention (season, year), and enjoyment.

With parental involvement as the DV there was a significant overall main effect for gender (boys, girls), Wilks' Lambda = .915,  $F(1, 182) = 8.35$ ,  $p < .001$ , partial  $\eta^2 = .085$ . Univariate ANOVAs revealed significant differences on Parental Support  $F(1, 182) = 5.72$ ,  $p < .05$ , partial  $\eta^2 = .031$  and Parental Pressure  $F(1, 182) = 14.77$ ,  $p < .001$ , partial  $\eta^2 = .076$ . Boys experienced less Support, ( $M = 3.50$ ,  $SD = .57$ ,  $d = .36$ ) and more Pressure ( $M = 2.09$ ,  $SD = .70$ ,  $d = .57$ ) than did the girls (Support:  $M = 3.67$ ,  $SD = .40$ , Pressure:  $M = 1.71$ ,  $SD = .59$ ).

With perfectionism as the DV there was a significant overall main effect for gender, Wilks' Lambda = .940,  $F(1, 182) = 5.86$ ,  $p < .01$ , partial  $\eta^2 = .060$ . Univariate ANOVAs revealed significant differences on Personal Standards  $F(1, 182) = 9.37$ ,  $p <$



.01, partial  $\eta^2 = .048$  and Concern over Mistakes  $F(1, 182) = 9.46, p < .01$ , partial  $\eta^2 = .048$ . Boys had higher Personal Standards ( $M = 3.74, SD = .81, d = .45$ ) and more Concern over Mistakes they might make ( $M = 2.87, SD = .97, d = .45$ ) than did the girls (Personal Standards:  $M = 3.38, SD = .81$ , Concern over Mistakes:  $M = 2.44, SD = .94$ ).

With peer climates as the DV there was a significant overall main effect for gender, Wilks' Lambda = .890,  $F(1, 182) = 11.41, p < .001$ , partial  $\eta^2 = .110$ . Univariate ANOVAs revealed significant differences on peer-initiated Task climate  $F(1, 182) = 11.38, p < .01$ , partial  $\eta^2 = .058$  and peer-initiated Ego  $F(1, 182) = 16.92, p < .001$ , partial  $\eta^2 = .083$  climates. Girls reported playing with teammates that were more Task-focused ( $M = 5.90, SD = .93, d = .49$ ) than boys ( $M = 5.36, SD = 1.23$ ), whereas the boys reported experiencing a more Ego-focused climate ( $M = 4.10, SD = 1.50, d = .60$ ) than the girls ( $M = 3.28, SD = 1.21$ ).

MANOVA revealed no significant between group differences on goal orientation, Wilks' Lambda = .976,  $F(1, 182) = 2.23, p = .11$ , partial  $\eta^2 = .024$ ; intention, Wilks' Lambda = .999,  $F(1, 182) = .09, p = .92$ , partial  $\eta^2 = .001$ . Univariate ANOVAs also did not reveal a significant difference on enjoyment,  $F(1, 182) = .56, p = .45$ , partial  $\eta^2 = .003$ .

#### *Multivariate Analyses of Variance (Level of Sport)*

To assess for any differences in response patterns, MANOVAs or ANOVAs were conducted for both genders according to level (recreational, select, and school) at which the athletes played their best sport. A separate MANOVA was conducted for each set of dependent variables, that is: goal orientation (Task, Ego), perfectionism (Personal

Standards, Concern over Mistakes), parental involvement (Pressure, Support), peer-initiated climate (Task-focused, Ego-focused), intention (season, year), and enjoyment.

For the boys, the separate MANOVA revealed no between group differences on goal orientation (Task, Ego), Wilks' Lambda = .908,  $F(2, 97) = 2.38$ ,  $p = .053$ , partial  $\eta^2 = .047$ ; parental involvement (Support, Pressure), Wilks' Lambda = .928,  $F(2, 97) = 1.78$ ,  $p = .14$ , partial  $\eta^2 = .037$ ; peer climate (Task-, Ego-focused), Wilks' Lambda = .927,  $F(2, 97) = 1.86$ ,  $p = .12$ , partial  $\eta^2 = .037$ ; or intention (season, year), Wilks' Lambda = .930,  $F(2, 97) = 1.76$ ,  $p = .14$ , partial  $\eta^2 = .035$ . Univariate ANOVA also did not reveal significance for enjoyment,  $F(2, 97) = 1.90$ ,  $p = .16$ , partial  $\eta^2 = .038$ . For perfectionism, however, MANOVAs revealed a significant overall main effect, Wilks' Lambda = .891,  $F(2, 97) = 2.84$ ,  $p < .05$ , partial  $\eta^2 = .056$ . Univariate ANOVAs; however, did not reveal significant differences on the two dimensions: Personal Standards,  $F(2, 97) = 2.68$ ,  $p = .07$ , partial  $\eta^2 = .052$ , or Concern over Mistakes  $F(2, 97) = 2.82$ ,  $p = .10$ , partial  $\eta^2 = .046$ .

For girls, MANOVAs revealed no between group differences on goal orientation (Task, Ego), Wilks' Lambda = .968,  $F(2, 85) = .680$ ,  $p = .61$ , partial  $\eta^2 = .016$ ; perfectionism (Personal Standards, Concern over Mistakes), Wilks' Lambda = .938,  $F(2, 85) = 1.37$ ,  $p = .247$ , partial  $\eta^2 = .032$ ; parental involvement (Support, Pressure), Wilks' Lambda = .992,  $F(2, 85) = .17$ ,  $p = .95$ , partial  $\eta^2 = .004$ ; or peer climate (Task-focused, Ego-focused), Wilks' Lambda = .941,  $F(2, 85) = 1.30$ ,  $p = .27$ , partial  $\eta^2 = .030$ . Univariate ANOVA also did not reveal significance for enjoyment,  $F(2, 85) = 2.55$ ,  $p = .08$ , partial  $\eta^2 = .057$ . For intent to continue playing, however, there was a significant overall main effect for the level of sport, Wilks' Lambda = .857,  $F(2, 85) = 3.36$ ,  $p < .05$ ,

partial  $\eta^2 = .074$ . Univariate ANOVAs revealed significant differences on intention to play the next season,  $F(2, 85) = .67, p < .01$ , partial  $\eta^2 = .118$ , and intention to play the next year,  $F(2, 85) = .085, p < .01$ , partial  $\eta^2 = .107$ . Post hoc Scheffe tests revealed that select level athletes ( $M = 4.96, SD = .28, d = 1.30$ ) and school level athletes ( $M = 4.86, SD = .47, d = .55$ ) had greater intent to continue playing next season than recreational level athletes ( $M = 4.41, SD = 1.12$ ). Post hoc Scheffe tests also revealed that select level athletes ( $M = 4.92, SD = .28, d = 1.31$ ) and school level athletes ( $M = 4.82, SD = .59, d = .51$ ) had greater intent to continue playing next year than recreational level athletes ( $M = 4.47, SD = .80$ ).

#### Hierarchical Multiple Regressions – Predicting Task Orientation

##### *Boys*

In the first step of the model, the inclusion of Personal Standards and Concern over Mistakes contributed significantly,  $F(2, 94) = 4.34, p < .05$ , and accounted for 8.4% of the variance in task orientation. At step two, the addition of Parental Support and Pressure was significant  $F(2, 92) = 10.41, p < .001$ , and accounted for another 16.5% of variance. At step three, peer-initiated Task and Ego climates were added and contributed significantly,  $F(2, 90) = 7.91, p < .01$ , accounting for an additional 11.2% of variance. Overall the full model was significant,  $F(6, 90) = 8.51, p < .001$ , and accounted for 36.2% of the variance ( $\text{adj } R^2 = .32$ ). Within the full model, higher task scores were predicted by higher Personal Standards ( $\beta = .229, p < .05$ ), more Parental Support ( $\beta = .247, p < .05$ ), more Parental Pressure ( $\beta = .229, p < .05$ ), a more Task-

focused peer climate ( $\beta = .325, p < .01$ ), and fewer Concerns Over Mistakes ( $\beta = -.236, p < .05$ ) (See Table 3).

### *Girls*

The first step of the model, which included Personal Standards and Concern over Mistakes, was not significant  $F(2, 82) = 1.04, p = .36$  and accounted for only 2.5% of variance. At step two, adding Parental Support and Pressure was significant,  $F(2, 80) = 5.84, p < .01$ , and accounted for 14.9% of variance. Step three, which included Task and Ego peer climates, also was significant  $F(2, 78) = 4.04, p < .05$ , and accounted for an additional 8% of variance. Overall the model was significant,  $F(6, 78) = 3.86, p < .01$ , accounted for 22.9% of variance ( $\text{adj } R^2 = .17$ ). The girls reported higher Task scores when they experienced higher levels of Parental Support ( $\beta = .302, p < .01$ ) and teammates who were more Task-focused ( $\beta = .244, p < .05$ ) (See Table 3).

## Multiple Hierarchical Regressions – Predicting Ego Orientation

### *Boys*

For Ego orientation, the first step, which included Personal Standards and Concern over Mistakes, was significant,  $F(2, 94) = 4.72, p < .05$ , and accounted for 9.1% of the variance. Step two, which included Parental Support and Pressure, was not significant  $F(2, 92) = 1.70, p = .19$ , and contributed only an additional 3.2% of the variance. At step three, the inclusion of peer climates (Task and Ego) was significant,  $F(2, 90) = 5.05, p < .01$ , and accounted for an additional 8.8% of variance. Overall the model was significant,  $F(6, 90) = 4.04, p < .01$ , and accounted for 21.2% of variance

(adj  $R^2 = .16$ ). Higher Ego orientation scores were related positively to a peer Ego climate ( $\beta = .344, p < .01$ ) and peer Task climate ( $\beta = .233, p < .05$ ) (See Table 4).

### *Girls*

For Ego orientation, adding Personal Standards and Concern over Mistakes was significant,  $F(2, 82) = 7.69, p < .01$ , and accounted for 15.8% of the variance. Step two, which included Parental Support and Pressure, was not significant,  $F(2, 80) = 1.36, p = .26$ , and explained only 2.8% of the variance. Step three, which included peer climates, also was not significant,  $F(2, 78) = 1.85, p = .16$  and accounted for 3.7% of variance. The overall model was significant,  $F(6, 78) = 3.72, p < .01$ , and accounted for 22.2% of variance (adj  $R^2 = .16$ ). Higher Ego orientation scores were predicted by higher Personal Standards ( $\beta = .317, p < .05$ ), but no other variables (See Table 4).

### Multiple Hierarchical Regressions – Predicting Enjoyment

#### *Boys*

The first step, which included Task and Ego orientation, was significant,  $F(2, 93) = 16.50, p < .001$ , and accounted for 26.2% of the variance. Step two, which added Personal Standards and Concern over Mistakes, was not significant,  $F(2, 93) = 1.74, p = .18$ , accounting for only an additional 2.7% of the variance. At step three, when Parental Support and Parental Pressure were added, there was no significant influence,  $F(2, 89) = 2.50, p = .09$ , accounting for only an additional 3.8% of the variance. Step four, which included peer-initiated Task and Ego climates, was not significant  $F(2, 87) = .97, p = .38$ , and accounted for an additional 1.5% of the variance. The overall model was significant,  $F(8, 87) = 5.64, p < .001$ , and accounted for 34.2% of variance (adj  $R^2$

= .28). Enjoyment was predicted by higher Task orientation scores ( $\beta = .477, p < .001$ ), but no other variables (See Table 5).

### *Girls*

The first step, which included Task and Ego orientation, was significant,  $F(2, 82) = 6.09, p < .01$ , and accounted for 12.9% of the variance. Step two, which added Personal Standards and Concern over Mistakes, was not significant,  $F(2, 80) = 2.77, p = .07$ , accounting for only an additional 5.6% of the variance. Step three, which included Parental Support and Pressure, also was not significant,  $F(2, 78) = .66, p = .52$ , accounting for only an additional 1.4% of the variance. In step four, the addition of peer-initiated Task and Ego climates, was not significant,  $F(2, 76) = 1.50, p = .23$ , accounting for only an additional 3% of the variance. The overall model was significant,  $F(8, 76) = 2.83, p < .01$ , and accounted for 23% of variance ( $\text{adj } R^2 = .15$ ). Enjoyment was predicted by higher Task scores ( $\beta = .329, p < .01$ ), and fewer Concerns Over Mistakes ( $\beta = -.326, p < .05$ ) (See Table 5).

## Multiple Hierarchical Regressions – Predicting Intent to Play

### *Boys*

For intention to play next season, enjoyment was significant,  $F(1, 94) = 5.96, p < .05$ , accounting for 6% of the variance. Step two, which added Task and Ego orientations, was not significant,  $F(2, 92) = .23, p = .79$ , accounting for only an additional 0.5% of the variance. At step three, Personal Standards and Concern over Mistakes was added, but did not contribute significantly,  $F(2, 90) = 1.22, p = .30$ ,

explaining only an additional 2.5% of the variance. Step four, which added Parental Support and Pressure, was not significant,  $F(2, 88) = 1.21, p = .30$ , and accounted for only an additional 2.4% of the variance. In step five, the addition of peer-initiated Task and Ego climates was not significant,  $F(2, 86) = .01, p = .99$ , explaining 0.0% of variance. The overall model was not significant,  $F(9, 86) = 1.23, p = .29$ , and only accounted for 11.4% of variance ( $\text{adj } R^2 = .02$ ) (See Table 6). Intent was predicted solely by the amount of enjoyment the boys indicated having ( $\beta = .317, p < .05$ ).

For intention to play next year, step one of the model was significant,  $F(1, 94) = 4.38, p < .05$ , accounting for 4.5% of the variance. Step two, which added Task and Ego orientations, was not significant,  $F(2, 92) = .95, p = .39$ , accounting for only an additional 1.9% of the variance. In step three, the addition of Personal Standards and Concern over Mistakes did not contribute significantly,  $F(2, 90) = .21, p = .81$ , and accounted for 0.0% of the variance. Step four, which added Parental Support and Pressure, was not significant,  $F(2, 88) = 2.28, p = .11$ , and accounted for an additional 4.6% of the variance. Finally, the addition of peer-initiated Task and Ego climates was not significant,  $F(2, 86) = .38, p = .68$ , accounting for only 0.8% of variance. The overall model was not significant,  $F(9, 86) = 1.33, p = .23$ , and only accounted for 12.2% of variance ( $\text{adj } R^2 = .03$ ) (See Table 6). Intent to play next season was not related significantly to any variables.

### *Girls*

For intention to play next season enjoyment was a significant predictor,  $F(1, 83) = 19.06, p < .001$ , and accounted for 19.1% of variance. Step two, which added Task

and Ego orientations, was not significant,  $F(2, 81) = 1.53, p = .22$ , and accounted for only an additional 3.0% of the variance. In step three, the inclusion of Personal Standards and Concern over Mistakes, was not significant,  $F(2, 79) = 1.32, p = .27$ , accounting for only an additional 2.5% of the variance. Step four, which added Parental Support and Pressure, was not significant,  $F(2, 77) = .39, p = .69$ , and accounted for only an additional 0.7% of the variance. Finally, the addition of peer-initiated Task and Ego climates did not contribute significantly,  $F(2, 75) = 1.12, p = .33$ , and accounted for only an additional 2.2% of variance. The overall model was significant,  $F(9, 75) = 3.15, p < .05$ , and accounted for 27.5% of variance ( $\text{adj } R^2 = .19$ ) (See Table 7). Greater intention to play next season was predicated by the amount of fun the girls reported having ( $\beta = .353, p < .01$ ).

For intention to play next year enjoyment was a significant predictor,  $F(1, 83) = 34.33, p < .001$ , and accounted for 29.3% of the variance. Step two, which included Task and Ego orientations, also was significant,  $F(2, 81) = 4.39, p < .05$ , adding 6.9% more variance. At step three, the inclusion of Personal Standards and Concern over Mistakes was not significant,  $F(2, 79) = .36, p = .70$ , and accounted for only an additional 0.6% of the variance. Step four, which added Parental Support and Pressure was significant,  $F(2, 77) = 3.98, p < .05$ , and accounted for an additional 5.9% of the variance. Finally, the addition of peer-initiated Task and Ego climates did not contribute significantly,  $F(2, 75) = .25, p = .76$ , accounting for only an additional 0.4% of variance. The overall model was significant,  $F(9, 75) = 6.30, p < .001$ , and accounted for 43.1% of variance ( $\text{adj } R^2 = .36$ ) (See Table 7). Greater intention to play next year was predicted by the amount of enjoyment the girls reported having ( $\beta = .339, p < .001$ ),



higher Task orientations ( $\beta = .312, p < .01$ ), and lower levels of Parental Support ( $\beta = -.230, p < .05$ ) and Pressure ( $\beta = -.287, p < .05$ ).

Table 1 presents a summary of the regression analyses that were conducted for the criterion variables.

Table 1

*Summary of Results from Regression Analyses*

	Outcome Variables	Boys	Girls
Task Orientation	Personal Standards	+	
	Concern over Mistakes	-	
	Parental Support	+	++
	Parental Pressure	+	
	Peer-initiated Task climate	++	+
	Peer-initiated Ego climate		
Ego Orientation	Personal Standards		+
	Concern over Mistakes		
	Parental Support		
	Parental Pressure		
	Peer-initiated Task climate	+	
	Peer-initiated Ego climate	++	
Enjoyment	Task Orientation	+++	++
	Ego Orientation		
	Personal Standards		
	Concern over Mistakes		-
	Parental Support		
	Parental Pressure		
	Peer-initiated Task climate		
	Peer-initiated Ego climate		
Intention to Play Next Season	Enjoyment	+	+
	Task Orientation		
	Ego Orientation		
	Personal Standards		
	Concern over Mistakes		
	Parental Support		
	Parental Pressure		
	Peer-initiated Task climate		
Intention to Play Next Year	Peer-initiated Ego climate		
	Enjoyment		+++
	Task Orientation		++
	Ego Orientation		
	Personal Standards		
	Concern over Mistakes		
	Parental Support		-
	Parental Pressure		-
Peer-initiated Task climate			
Peer-initiated Ego climate			

Note. Significance is denoted using “+/-”  $p < .05$ , “+/-”  $p < .01$ , and “+/-”  $p < .001$ .

Figure 2 presents a reconceptualization of the initial hypothesized relationships between the variables.

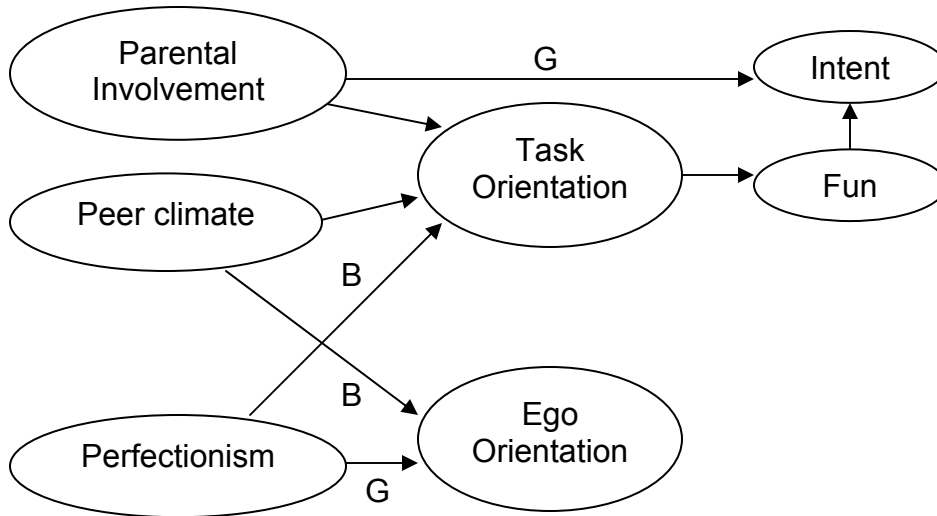


Figure 2. Reconceptualized model of relationships among variables of interest. Relationships labeled “G” are significant for girls only, relationships labeled “B” are significant for boys only, and all other relationships labeled above are significant for both boys and girls.

## DISCUSSION

The purpose of this study was to examine the relationships of perfectionism, parental involvement, and peer-initiated climates to children's goal orientations, enjoyment, and intention to continue to play sports. Girls and boys ages 10 to 14 years old were surveyed and their responses used to examine these relationships. In the sections that follow, the results of the major analyses are discussed.

### Task Orientation

Consistent with past research (Boyd & Callaghan, 1994; Goudas et al., 1992; Leff & Hoyle, 1995; White, 1996; White, Duda & Hart, 1992), parental support and a peer task environment were related significantly and positively to the girls' and boys' task orientations. Parental support is important during young athletes' sport experiences because parents want their children to enjoy sport, exert effort, and have fun (Anderson et al., 2003; Stein, Raedeke & Glenn, 1999; White, 1996). Further, when parents and teammates establish task-focused motivational climates, athletes are socialized into a similar orientation through behavioral modeling and feedback (Bandura, 1969, 1977; McPheson & Brown, 1988; Roberts, Treasure & Hall, 1994; Smith, 2003; Weiss, Smith & Theeboom, 1996). For example, when teammates yell supportive comments, clap after difficult performances (no matter the outcome) and acknowledge hard work or if teams do not keep score during scrimmages, the principles of a task-focused environment are being communicated. Parents can encourage a task-focused climate if they react to the level of enjoyment had by the child and ask about the process of the game versus reacting to physical dominance over another player or inquiring about the

score. If a task-focused environment is constructed and communicated to athletes by parents and peers, it is likely they will develop a goal orientation that is primarily task.

Boys' task orientations also were related to higher levels of personal standards and Parental Pressure, and fewer concerns about mistakes. This result is consistent with McArdle and Duda (2004) who found that task orientations are strongly related to high personal standards. In addition, the boys' results supported the idea that a task orientation was associated with adaptive perfectionism (Dunn, Dunn & Syrotuik, 2002; Gould, Dieffenbach & Moffett, 2002; Hamachek, 1978; Rice & Mirzadeh, 2000), suggesting that these athletes wanted to do well but were not as concerned with the mistakes they might make when playing. Athletes with this profile would be willing to try new skills or plays in order to improve and if a mistake occurs they would interpret it as an opportunity for improvement (Goudas et al., 1992; Hall & Kerr, 1997; Leff & Hoyle, 1995; White, 1998). They also would be more likely to persist in the face of challenges, use a self-referenced standard for success, and assign less importance to criticism from others, all of which are consistent with a task orientation (Chang, Wakins & Bank, 2004; Duda, 1993; Gilman & Ashby, 2003; Gould, Dieffenbach & Moffett, 2002).

Even though boys experienced more parental pressure than girls, which is consistent with past research (Siegle & Schuler, 2000) it did not have a negative relationship with task orientation. In fact, parental pressure was associated with higher task orientations in boys, almost as if for boys parental pressure is experienced as positive involvement and a source of external motivation. At this age, boys may experience extra involvement from parents, be it pressure or support, as positive. Sport may provide parents, in particular fathers, an avenue to interact and emotionally

connect with their sons. Examples of this involvement could include, going to the park to play catch, talking about practice, competitions, signing a child up for more sports, and attending games and “yelling” supportive comments. Initially, this attention may feel positive and rewarding because it may represent an increase in interaction and attention; however, if this “pressure” continues and/or increases as boys’ age it may begin to be perceived in a negative light, causing stress, anxiety, and the need to please others (Frost et al., 1990; Deci & Ryan, 1985; Stein, Raedeke & Glenn, 1999). So, although parental pressure may be associated with a task orientation, for 12 year olds, it may have more negative effects as the boys enter adolescence.

### Ego Orientation

When considered together, few of the variables were significant predictors of ego orientation. Consistent with previous research (Hall, Kerr & Matthews, 1998; McArdle & Duda, 2004; Smith, Balaguer & Duda, 2006), higher levels of ego orientation were related to peer-initiated ego and task climates for the boys. Boys at this age compare themselves to others on their own teams or in their leagues in order to assess their own skill ability, talent and physical dominance, and if they consider themselves to be equal to or better than other boys their age they can experience success and competence (Wentzel, 1999). Furthermore, boys who hold an ego orientation would be attracted to others who hold a similar perspective to their own and then collect to form a team that reinforces this ego-focused approach (Smith et al., 2006; Smith, Balaguer & Duda, 2006). Boys at this age report increased enjoyment if they perceive acceptance

by their peer group (Smith et al., 2006), therefore they would adopt the prominent goal orientation of their teammates.

For girls, ego orientation was related only to their level of personal standards regarding their sport performances. Consistent with previous literature (Flett, Sawatzky & Hewitt, 1995; Hall, Kerr & Matthews, 1998; Hewitt & Flett, 1991; Mills & Blankenstein, 2000), individuals who endorse a high ego orientation also will have high personal standards. Girls at this age appear to be striving for excellence, demonstrating ability over others and experiencing feelings of competence when they achieve these standards, consistent with an ego orientation (Ames & Archer, 1998; Hom, Duda & Miller, 1993; Nicholls, 1984, 1989; Roberts, Treasure & Kavussanu, 1996). For example, this athlete would set high, individual outcome goals and experience enjoyment, proficiency, and success when these are achieved.

### Enjoyment

Research has demonstrated that enjoyment in sport is related positively to a number of variables, including a task orientation, parental support, and a peer task climate (Anderson et al., 1993; Hoyle & Leff, 1997; Ommundsen & Valgum, 2002; Patrick et al., 1999; Smith, Balaguer & Duda, 2006; Smith, Scanlan & Lewthwaite, 1986; Weiss & Smith, 2002, Weiss & Chaumonton, 1992; White, 1996; White, Duda & Hart, 1992; Weinberg et al, 2000). However, when all the variables were considered together in the regression analyses, task orientation was the strongest significant predictor for girls and the only one for boys. For both boys and girls, enjoyment was associated with a focus on improvement and skill mastery when playing their best sport, and the

utilization of a self-referenced set of performance standards. Children who operate from a task orientation establish their own self-referenced, and more realistic, standards of excellence for practice and performance, and thus when those standards are achieved the children experience enjoyment. Because a task-oriented individual is interested in the process of self-improvement (e.g., skill mastery, practice goals, team collaboration, and levels of effort) they have a wider variety of acceptable achievement standards and therefore increased opportunity to feel successful. For example, a youth basketball player would have goals in the areas of shooting percentage, assists, stamina, and dribbling ability. Gould and Carson (2004) suggested that learning to appreciate the need for and importance of practice and performance during the early years of athletic involvement (a task approach) would help athletes increase their chances of excelling at their sport and becoming elite performers.

For girls, the less they viewed mistakes as failures and the fewer negative reactions they had toward their mistakes, the more enjoyment they reported when playing their best sport. Hall et al. (1998) found that concern over mistakes was associated with cognitive anxiety, further, this anxiety and a preoccupation with mistakes, has been found to have detrimental effects on athlete's sport experiences and levels of enjoyment (Frost et al., 1990; Parker, 2002; Smith et al., 2006). Consistent with theory, perfectionistic individuals, specifically those highly concerned over mistakes, are internally motivated by a fear of failure (Hamacheck, 1978) and can react negatively to mistakes, which impedes fun and performance. Increased concern over mistakes relates to higher levels of anxiety, a failure orientation, and a belief that one will lose the respect of others (Frost et al., 1990; Frost & Henderson, 1991). Specifically, Frost et al.

(1990) found that females concern over mistakes increases from 6<sup>th</sup> to 8<sup>th</sup> grade, who reported great attention to detail and significant concern when mistakes occurred. At this stage of athletic, personal, physical and intellectual development girls may be vulnerable to evaluation, allowing mistakes and/or the concern about making them to influence their enjoyment.

### Intention

Consistent with past research (Boyd & Callaghan, 1994; Carpenter et al., 1993; Goudas et al., 1992; Harter, 1978, 1981), and the model outlined in the introduction, enjoyment was the primary predictor of the athletes' intention to continue participating in their best sports in the next season. Enjoyment is endorsed as the primary reason youth athletes participate in sports (Weiss & Chaumenton, 1992; Weinberg, Tenenbaum, McKenzie, Jackson, Anshel, Grove, & Fogarty, 2000). Past research suggests that if athletes experience enjoyment in sport they will persist in the face of challenges and continue to participate (Goudas et al., 1992; Hall & Kerr, 1997; White, 1998). Thus, enjoyment is important not only in forming interest in activity, but in sustaining that interest over time. In other words, enjoyment perpetuates involvement, which maintains the opportunity for continued fun. If children are enjoying their current sport experiences they would want to continue participating and likely report so when asked. In addition, because basketball (the primary sport surveyed) is played year round, with one season immediately following the other, it makes sense that the children's immediate level of enjoyment would best predict their intention in the upcoming next season.



However, when boys and girls reported their intention to continue playing their best sport for the next year, the results were more varied. For boys, none of the variables significantly related to intention, which may have been due to when the data were collected in relation to the sport's season. All the boys were playing basketball at the time the study was conducted and almost 94% indicated that it was their best/favorite sport. In addition, data were collected in the fall and early winter. Because basketball seasons occur every few months, the boys' prediction of playing a year out may have been too hard to predict and thus not related to the other measures in the study. It also may have been that the boys were reaching an age where a multitude of other factors (not measured in the current study) were affecting their decision to return to their best sport. For example, they may be trying new sports or being encouraged to focus on one sport to the exclusion of others, experiencing a change in physical stature that may make them less competitive in their best sport, shifting to play a school sponsored sport (e.g., football, power lifting), or experiencing changes in their social group. Any of these reasons may have influenced their intention rating and made it not as strongly predicted by the variables under study. Clearly, additional research is needed that examines boys' intentions over longer periods of time and considers other possible factors that may influence why they do or do not continue.

For girls, their intention to play next year was related to greater levels of enjoyment, a higher task orientation, and lower levels of parental support and parental pressure. As previously stated, enjoyment is a primary reason why children continue to playing sports (Weiss & Chaumenton, 1992; Weinberg et al., 2000). When enjoyment is paired with a task orientation, athletes would experience fun while focusing on

improving skill level, accomplishing personal goals, and collaborating with teammates (Ames & Archer, 1998; Duda, 1992; Nicholls, 1989, 1992). For example, an athlete that operates from a task orientation would be able to persist in the face of obstacles, such as a disappointing season, difficulties with a coach or teammate, or frustration with her current sport performance, knowing that these are merely challenges. If this same athlete reports that she experiences enjoyment while participating, she would have positive experiences and feelings with which to combat any frustration she may endure, a hallmark of task orientation.

Interestingly for girls at this age, parental involvement appears to have a significant negative influence. In studies of female athletes, (Brown, Frankel & Fennel, 1989; Butcher, 1983; Higgins, 1985; Lewko & Ewing, 1980; Spreitzer & Synder, 1976), parental support and encouragement are highly associated with girls' initial decision to participate in sport (before the age of 13 years). This suggests that girls appreciate parental involvement at younger ages, but may not enjoy the involvement of parents as they mature.

Anderson et al. (2003) suggested that girls' individually perceived the ideal balance between parental encouragement and over-involvement based on personality differences. For example, one girl may be excited to have her father coach her basketball team whereas another girl would consider this oppressive and anxiety provoking. Consistent with research (Anderson et al., 2003; Leff & Hoyle, 1995), parental involvement, in particular Parental Pressure may have more of a negative association for girls than boys. Girls also may experience support and pressure differently due to gender role stereotypes or differences in socialization (Anderson et al.,

2003; Unger & Crawford, 1992). Instead of perceiving this pressure as an external motivator or the additional involvement of a parent as supportive, girls at this particular age may desire independence and a lack of parental involvement all together. Common expressions from girls at this age include, “My parents are so embarrassing” or “I wish they would just leave me alone” describing what parents experience as “that age.” Developmental psychology theorizes that during adolescence individuals are experiencing internal conflicts, forcing them to decide on the components of their identity. At this stage, adolescents often turn to peer groups, clubs, politics, and social influences (e.g., music, media) to determine who they want to be and what is socially appealing, versus the opinions of their parents (Miller, 2002). Even though parents may be excited about the participation of their daughter in sport, it appears at this specific age they may need to take a more “hands off” approach to involvement.

### Limitations

The findings presented in this investigation must be interpreted in light of several limitations. First, the sample was limited by a lack of cultural diversity and primary sport (basketball). Thus, results should be applied only to children of similar demographics. Second, time of data collection also may have influenced the results. Approximately half of the data were gathered in the fall performance season, whereas the other half was gathered in the spring. Children may have answered some intention questions differently due to the time of the year and the availability of their sport for the next season. For example, in the fall the next basketball season would have been a few weeks away versus in the spring the next season may have begun in multiple months.

Third, the reading level of the survey packet was age and ability appropriate and was screened on multiple subjects before the study began; however, numerous participants reported fatigue and frustration with its length, which may have influenced their reports. In the future, improvements could be made by shortening the packets and/or integrating the survey process as a formal part of league participation (i.e., every player takes it in a quiet setting before being able to register for a team). Fourth, all constructs were measured via self-report. Thus, participants' responses may have been biased, either through the need to manage a positive impression, a lack of self-awareness, and/or misperceptions about themselves or their behaviors. In future studies, researchers may want to include observational data, such as checklists or third-party surveys (e.g., coaches, parents, or researchers) taken at practice and performance venues in order to accurately assess the children's and teammate's goal orientations and behaviors.

### Future Research

The findings of the current study suggest that specific variables predict goal orientations, fun, and intention to continue playing. To substantiate these findings, larger samples from various populations should be collected. For example, replicating this study amongst children from a different area or those from more diverse racial/ethnic backgrounds will be important. Longitudinal research also would allow for testing of actual continuation in sport as opposed to a simple measure of intention. Ideally, athletes could be tracked and reassessed regarding their participation, enjoyment, levels of perfectionism and goal orientation as the environments created by parents and peers unfold. If particular groups of athletes were found to be at-risk for dropping out,

burnout, or demonstrating maladaptive approaches, interventions (counseling, sport psychology presentations, changes in organizations) could be introduced, and results from these interventions could be evaluated. In addition only a select few constructs were assessed in the current study, therefore, it would be advantageous to investigate other variables such as SES, divorce / single parent households, general parenting style, health factors of children (i.e., weight, height, body image), and academic performance in relation to their enjoyment and continuation in sport.

In addition to the quantitative data collected, interviews could be used to gather information from the athletes. Due to the thorough nature of interviews and specific follow up questions, this information could assist in constructing interventions, enhance current participation, and supplement existing knowledge or parental involvement, peer climate, and perfectionism.

It is imperative that perfectionism continue to be widely researched, especially in young children. Identifying aspects of perfectionism and the relationships with other variables will illuminate how adaptive and maladaptive perfectionistic approaches are expressed in young athletes. It is with this knowledge that adaptive strategies could be reinforced and maladaptive ones could be corrected.

#### Implications for Counseling, Consulting, and Sport

There are several ways the information from the current study might be used by counselors, parents, coaches, and sport psychologists. Specifically for task orientation, it is important to know how task climates are constructed by parents and peers, how to support task-focused approaches, and how they influence levels of enjoyment and

motivation. Behaviors that would support this orientation include supportive comments, a focus on process vs. outcome, self-improvement, an emphasis on effort, and encouragement in the face of obstacles. For ego orientations, it is important to know the cost/benefits of this orientation, and how to support healthy competition.

Parents also could be introduced to the tenets of parental sport involvement and support, encouraging them to discuss sport participation with their children to establish expectations for themselves and their children. For example, ask the children, "To what degree do you want me (your mother or father) involved in your sport experience?" (Stein et al., 1997, p.559). Once the question is answered establish an ideal level of parental involvement, respecting differences between genders, ages, and siblings. For parents and children, recognizing that their sport experience is unique to them and constructing a modifiable plan for their sport career will allow for greater understanding and less miscommunication. Coaches also may be help establish a supportive, task orientated environment by assessing the climate of their team in order to better recruit and select players, or be able to communicate their motivational approach before a players agrees to participate. Parents, peers, and coaches also could react reasonably to mistakes then encourage the athletes to reattempt the skill or activity, alternatively they could choose not to react at all, which would communicate that mistakes are part of the game and expected for improvement, consistent with a task orientation.

When counseling athletes and/or their parents, the information from this study could be used in individualizing interventions or establishing the goals of therapy for child and parent (i.e., increase enjoyment, continued participation, decrease in stress). Addressing performance standards, expectations for parental involvement and

suggesting ways to open lines of communication between child and parent will serve to increase the pleasure of everyone's experience. For example, the therapist could assess the client's level of perfectionism and goal orientation, using this information as a reference to make behavioral/goal adjustments during practice or performance. For example, parents, peers and players could increase positive feedback, establish more realistic goals, even decrease Concern over Mistakes through positive self-talk and cognitive restructuring.

Sport consultants and/or counselors could address possible behavioral changes, such as concentrating on decreasing the concern an individual has over making mistakes, celebrating skill mastery and establishing process goals for the athlete and parent(s). Nonetheless, enjoyment should be the paramount focus for youth sports. To do this, parents, teammates and coaches should continue to encourage principles of a task orientation.

Overall, the face of youth sport is shifting - whether that is due to an ever-changing generation of young participants, differences in parents and families, or the increased professional approach to youth sport. Research must continue to elucidate the dynamics, which influence this pivotal experience for children. Examining parents, peers, and perfectionism simultaneously serves to clarify their complex relationships with enjoyment and intention to continue playing sport, adding one more valuable perspective to youth sport. When more is known about the environment of youth sports and those who choose to partake, improvements can be made to increase participation and enjoyment, therefore enhancing the mental and physical health of our youth.

Table 2

Correlations for Boys (below diagonal) and Girls (above diagonal)

	1	2	3	4	5	6	7	8	9	10	11
1. Intent (season)	--	.581**	.439**	.291**	.083	.029	-.150	.133	-.196	.085	-.220*
2. Intent (year)	.099	--	.543**	.411**	.101	.125	-.043	-.002	-.213	.193	-.102
3. Enjoyment	.245*	.212*	--	.349**	.041	.038	-.149	.057	-.139	.273**	-.127
4. Task	.069	.091	.510**	--	-.113	.056	-.047	.364**	-.193	.326**	-.196
5. Ego	.005	-.131	.050	.021	--	.350**	.329**	-.118	.305**	-.132	.346**
6. MPSps	.143	-.023	.084	.154	.273**	--	.686**	.066	.335**	-.088	.296**
7. MPScom	.064	-.135	-.194	-.134	.256*	.523**	--	-.126	.551**	-.150	.490**
8. PIASsupport	.141	.105	.355**	.424**	.098	.150	-.087	--	-.339**	.171	-.099
9. PIASpressure	.089	-.280**	-.197	.030	.256*	.325**	.535**	-.230*	--	-.209	.559**
10. PEERtask	.044	.006	.230*	.510**	.113	.019	-.115	.504**	-.063	--	-.181
11. PEERego	.046	-.201*	-.173	-.182	.411**	.411**	.453	-.078	.477**	-.274**	--
<b>Boys</b>											
<i>M</i>	4.84	4.77	4.93	4.47	3.47	3.74	2.87	3.50	2.09	5.36	4.11
<i>SD</i>	.65	.84	.44	.65	1.09	.81	.97	.57	.70	1.23	1.50
<i>Skewness</i>	-4.86	-3.93	-7.96	-2.16	-.35	-.59	.27	-1.17	.56	-.73	.04
<i>Kurtosis</i>	25.07	14.85	67.99	7.80	-.60	-.86	-.56	2.46	-.29	.39	-.70
<b>Girls</b>											
<i>M</i>	4.83	4.81	4.88	4.60	3.24	3.38	2.44	3.67	1.72	5.90	3.28
<i>SD</i>	.61	.52	.33	.38	1.11	.81	.94	.40	.59	.92	1.21
<i>Skewness</i>	-4.23	-2.70	-3.60	-.48	-.41	-.42	.76	-2.45	1.19	-.77	.67
<i>Kurtosis</i>	20.04	6.24	14.75	-1.04	-.85	-.08	.24	8.54	1.84	-.52	.34

Note: Intention – season (I intend to continue playing best sport next season), Intention – year (I intend to continue playing best sport next year), Enjoyment (Factor derived from enjoyment questions), Task (Task Goal Orientation), Ego (Ego Goal Orientation), MPSps (perfectionism – Personal Standards), MPScom (perfectionism – Concern over Mistakes), PIASsupport (Parental Support), PIASpressure (Parental Pressure), PEERtask (Peer-Initiated Task-orientated climate), and PEERego (Peer-initiated Ego-oriented climate). Scores for Intent, Enjoyment, Task, Ego, and MPS range from 1 to 5, PIAS scores range from 1 to 4, and PEER scores range from 1 to 7. Total  $N = 188$ , Boys  $n = 100$ , Girls  $n = 88$ . \*  $p < .05$ , \*\*  $p < .01$



Table 3

*Hierarchical Multiple Regression Analyses Predicting Task Orientation for Boys and Girls from Perfectionism, Parental Involvement and Peer Climates*

	Boys (N = 97)			Girls (N = 85)		
	B	SE B	$\beta$	B	SE B	$\beta$
<b>Step 1</b>						
Personal Standards	.251	.092	.312**	.100	.071	.203
Concern over Mistakes	-.185	.078	-.272*	-.073	.063	-.168
<b>Step 2</b>						
Personal Standards	.149	.087	.186	.056	.069	.115
Concern over Mistakes	-.196	.080	-.289*	-.001	.067	-.203
Parental Support	.478	.109	.422***	.398	.106	.314**
Parental Pressure	.204	.102	.221*	-.080	.084	-.124
<b>Step 3</b>						
Personal Standards	.184	.084	.229*	.050	.066	.102
Concern over Mistakes	-.160	.075	-.236*	.028	.067	.065
Parental Support	.280	.118	.247*	.286	.104	.302**
Parental Pressure	.212	.102	.229*	-.010	.090	-.015
Peer Task climate	.171	.054	.325**	.100	.042	.244*
Peer Ego climate	-.066	.048	-.147	-.053	.039	-.170
Model	$F(6, 90) = 8.51, p < .001$			$F(6, 78) = 3.86, p < .01$		

Note: Boys:  $R^2 = .08$  for Step 1,  $\Delta R^2 = .17$  for Step 2,  $\Delta R^2 = .11$  for Step 3. Girls:  $R^2 = .03$  for Step 1,  $\Delta R^2 = .12$  for Step 2,  $\Delta R^2 = .08$  for Step 3. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 4

*Hierarchical Multiple Regression Analyses Predicting Ego Orientation for Boys and Girls from Perfectionism, Parental Involvement and Peer Climates*

	Boys (N = 97)			Girls (N = 85)		
	B	SE B	$\beta$	B	SE B	$\beta$
<b>Step 1</b>						
Personal Standards	.278	.151	.210	.393	.195	.271*
Concern over Mistakes	.150	.128	.134	.210	.173	.163
<b>Step 2</b>						
Personal Standards	.217	.155	.164	.434	.198	.299*
Concern over Mistakes	.071	.142	.064	.067	.195	.052
Parental Support	.231	.193	.124	-.226	.307	-.081
Parental Pressure	.299	.181	.197	.283	.244	.148
<b>Step 3</b>						
Personal Standards	.117	.153	.088	.460	.197	.317*
Concern over Mistakes	.046	.138	.041	-.022	.198	-.017
Parental Support	.020	.216	.011	-.275	.308	-.098
Parental Pressure	.088	.186	.058	.071	.266	.037
Peer Task climate	.201	.099	.233*	-.054	.126	-.044
Peer Ego climate	.254	.087	.344**	.212	.116	.230
Model	$F(6, 90) = 4.04, p < .01$			$F(6, 78) = 3.72, p < .01$		

Note: Boys:  $R^2 = .09$  for Step 1,  $\Delta R^2 = .03$  for Step 2,  $\Delta R^2 = .09$  for Step 3. Girls:  $R^2 = .16$  for Step 1,  $\Delta R^2 = .03$  for Step 2,  $\Delta R^2 = .04$  for Step 3. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 5

*Hierarchical Multiple Regression Analyses Predicting Enjoyment for Boys and Girls from Goal Orientation, Perfectionism, Parental Involvement and Peer Climates*

	Boys (N = 97)			Girls (N = 85)		
	B	SE B	$\beta$	B	SE B	$\beta$
<b>Step 1</b>						
Task Orientation	.348	.061	.509***	.315	.091	.361**
Ego Orientation	.012	.037	.029	.023	.031	.078
<b>Step 2</b>						
Task Orientation	.320	.063	.468***	.296	.090	.339**
Ego Orientation	.023	.039	.054	.035	.033	.119
Personal Standards	.052	.060	.094	.073	.060	.171
Concern over Mistakes	-.093	.050	-.200	-.121	.052	-.317*
<b>Step 3</b>						
Task Orientation	.304	.069	.444***	.330	.096	.378**
Ego Orientation	.029	.039	.071	.033	.033	.112
Personal Standards	.047	.059	.086	.085	.061	.196
Concern over Mistakes	-.046	.055	-.098	-.127	.058	-.333*
Parental Support	.074	.080	.095	-.109	.096	-.132
Parental Pressure	-.114	.070	-.181	-.015	.073	-.027
<b>Step 4</b>						
Task Orientation	.326	.076	.477***	.287	.100	.329**
Ego Orientation	.045	.041	.109	.034	.034	.115
Personal Standards	.051	.061	.092	.088	.061	.205
Concern over Mistakes	-.044	.055	-.095	-.124	.059	-.326*
Parental Support	.119	.086	.153	-.117	.096	-.141
Parental Pressure	-.093	.074	-.148	-.012	.079	-.021
Peer Task climate	-.054	.041	-.150	.067	.039	.186
Peer Ego climate	-.028	.036	-.091	.007	.035	.024
Model	$F(8, 87) = 5.64, p < .001$ $F(8, 76) = 2.83, p < .01$					

Note: Boys:  $R^2 = .26$  for Step 1,  $\Delta R^2 = .03$  for Step 2,  $\Delta R^2 = .04$  for Step 3,  $\Delta R^2 = .02$  for Step 4. Girls:  $R^2 = .13$  for Step 1,  $\Delta R^2 = .06$  for Step 2,  $\Delta R^2 = .01$  for Step 3,  $\Delta R^2 = .03$  for Step 4. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 6

*Hierarchical Multiple Regression Analyses Predicting Intention to Play for Next Season for Boys and Girls from Goal Orientation, Perfectionism, Parental Involvement and Peer Climates*

	Boys (N = 97)			$\beta$	Girls (N = 85)		
	B	SE B	$\beta$		B	SE B	$\beta$
Step 1							
Enjoyment	.361	.148	.244*		.817	.184	.437*
Step 2							
Enjoyment	.421	.173	.285*		.698	.196	.374*
Task Orientation	-.081	.119	-.080		.281	.173	.172
Ego Orientation	.002	.062	.003		.048	.055	.087
Step 3							
Enjoyment	.444	.176	.301*		.615	.202	.329*
Task Orientation	-.097	.121	-.096		.289	.174	.177
Ego Orientation	-.029	.065	-.048		.070	.060	.127
Personal Standards	.092	.101	.114		.075	.109	.093
Concern over Mistakes	.052	.085	.075		-.153	.096	-.215
Step 4							
Enjoyment	.465	.181	.315*		.621	.206	.332*
Task Orientation	-.171	.130	-.169		.254	.188	.156
Ego Orientation	-.048	.066	-.079		.077	.061	.140
Personal Standards	.076	.101	.093		.068	.112	.085
Concern over Mistakes	.004	.094	.005		-.112	.108	-.157
Parental Support	.155	.137	.135		.023	.175	.015
Parental Pressure	.163	.120	.175		-.104	.133	-.099
Step 5							
Enjoyment	.468	.185	.317*		.660	.209	.353*
Task Orientation	-.170	.144	-.169		.252	.193	.154
Ego Orientation	-.052	.071	-.085		.089	.062	.161
Personal Standards	.072	.106	.089		.049	.113	.061
Concern over Mistakes	.003	.095	.005		-.081	.111	-.114
Parental Support	.149	.151	.130		.069	.178	.044
Parental Pressure	.157	.129	.168		-.043	.145	-.041
Peer Task climate	.005	.072	.010		-.064	.072	-.095
Peer Ego climate	.009	.063	.021		-.080	.065	-.158
Model	$F(9, 86) = 1.23, p = .29$				$F(9, 75) = 3.15, p < .05$		

Note: Boys:  $R^2 = .06$  for Step 1,  $\Delta R^2 = .01$  for Step 2,  $\Delta R^2 = .03$  for Step 3,  $\Delta R^2 = .02$  for Step 4,  $\Delta R^2 = .00$  for Step 5. Girls:  $R^2 = .19$  for Step 1,  $\Delta R^2 = .03$  for Step 2,  $\Delta R^2 = .03$  for Step 3,  $\Delta R^2 = .01$  for Step 4,  $\Delta R^2 = .02$  for Step 5. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 7

*Hierarchical Multiple Regression Analyses Predicting Intention to Play for Next Year for Boys and Girls from Goal Orientation, Perfectionism, Parental Involvement and Peer Climates*

	Boys (N = 97)			$\beta$	Girls (N = 85)		
	B	SE B	$\beta$		B	SE B	$\beta$
Step 1							
Enjoyment	.404	.193	.211*		.863	.147	.541***
Step 2							
Enjoyment	.442	.225	.230		.705	.152	.442***
Task Orientation	-.029	.154	-.022		.379	.133	.272**
Ego Orientation	-.109	.080	-.137		.053	.042	.113
Step 3							
Enjoyment	.413	.231	.215		.682	.158	.427***
Task Orientation	-.043	.158	-.033		.367	.136	.263**
Ego Orientation	-.102	.085	-.129		.047	.047	.100
Personal Standards	.048	.132	.046		.071	.085	.104
Concern over Mistakes	-.073	.112	-.082		-.048	.075	-.080
Step 4							
Enjoyment	.313	.234	.163		.641	.154	.402***
Task Orientation	.027	.169	.021		.422	.141	.303**
Ego Orientation	-.072	.086	-.091		.055	.046	.116
Personal Standards	.062	.131	.059		.098	.084	.143
Concern over Mistakes	.036	.122	.040		.000	.081	.001
Parental Support	-.033	.177	-.022		-.287	.131	-.217*
Parental Pressure	-.326	.156	-.270*		-.229	.100	-.255*
Step 5							
Enjoyment	.284	.239	.148		.637	.158	.399***
Task Orientation	.050	.186	.038		.434	.146	.312**
Ego Orientation	-.046	.092	-.058		.049	.047	.103
Personal Standards	.078	.137	.074		.105	.085	.153
Concern over Mistakes	.037	.123	.042		-.014	.084	-.023
Parental Support	.026	.194	.017		-.303	.134	-.230*
Parental Pressure	-.289	.166	-.239		-.258	.109	-.287*
Peer Task climate	-.064	.092	-.092		.005	.055	.009
Peer Ego climate	-.057	.081	-.095		.034	.049	.079
Model	$F(9, 86) = 1.33, p = .23$				$F(9, 75) = 6.30, p < .001$		

Note: Boys:  $R^2 = .05$  for Step 1,  $\Delta R^2 = .02$  for Step 2,  $\Delta R^2 = .00$  for Step 3,  $\Delta R^2 = .05$  for Step 4,  $\Delta R^2 = .01$  for Step 5. Girls:  $R^2 = .29$  for Step 1,  $\Delta R^2 = .07$  for Step 2,  $\Delta R^2 = .01$  for Step 3,  $\Delta R^2 = .06$  for Step 4,  $\Delta R^2 = .00$  for Step 5. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

APPENDIX

CONSENT FORMS / DEMOGRAPHICS FOR PARENTS AND CHILDREN

**UNIVERSITY OF NORTH TEXAS  
INFORMED CONSENT FORM**

**Title of Study:** The relationships between Goal Orientation, perfectionism, satisfaction, and intention to continue in sport in children aged eleven to thirteen years old.

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Principal Investigator: LaTisha Braddock, M. A.  
Counseling Psychology Doctoral Candidate

Co-investigator: Trent Petrie, Ph.D.  
Faculty Advisor, Professor  
Department of Psychology

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Before agreeing to your child's participation in this research study, it is important that you read and understand the following explanation of the purpose and benefits of the study and how it will be conducted.

**Start Date of Study**

7/10/06

**End Date of Study**

7/09/07

**Purpose of the study**

You are being asked to allow your child to participate in a research study, which involves the examination of the relationships between how children approach sports, perfectionism, influences from peers, satisfaction, and intent to continue playing sport.

**Description of the study**

Comprehension of which approach to sport or goal orientation relates to the desire to be perfect, in addition, how these variables relate to peer influences, satisfaction, and intent.

**Procedures to be used**

Your child will be asked to complete questionnaires that will take approximately 10-15 minutes.

**Foreseeable risks**

Participation involves no foreseeable physical, psychological, or social risks. Participants will be assured that they can discontinue the survey at any time.

**Benefits to the subjects or others**

We hope to learn more about how children approach sport and perfectionism, increase the ability to identify gender differences in youth athletes in perfectionism, and understand how children approach sport, perfectionism, how peers influence sport, parental support, and satisfaction influence intent to continue sport.

**Procedures for Maintaining Confidentiality** Privacy is protected because your child will not be identified by name as a participant in this project, only group results will be reported. Confidentiality will be maintained by using only numbers on questionnaires. The questionnaires will be kept in a locked filing cabinet in the UNT Center for Sport Psychology and Performance Excellence office. The key that matches code numbers to

packets will be kept by the principal investigator in a different location. Also, the confidentiality of your child's individual information will be maintained in any publications or presentations regarding this study.

**Review for the Protection of Participants**

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 regarding the rights of research subjects.

**Research Subject's Rights**

If you have any questions about the study you may contact:

LaTisha Braddock  
Psychology Department  
University of North Texas

or

Dr. Trent Petrie  
Psychology Department  
University of North Texas

Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- LaTisha Braddock has explained the study to you and answered all of your questions. You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to allow your child to take part in this study, and your refusal to allow your child to participate or your decision to withdraw him/her from the study will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your child's participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as the parent/guardian of a research participant and you voluntarily consent to your child's participation in this study.
- You have been told you will receive a copy of this form.

---

Printed Name of Parent or Guardian

Date

---

Signature of Parent or Guardian

Date

**For the Investigator:**

I certify that I have reviewed the contents of this form with the subject signing above. I have explained the known benefits and risks of the research. It is my opinion that the subject understood the explanation.

---

Signature of Principal Investigator

Date



## Child Assent Form

### I would like your help.

I would like you to answer some questions.  
It will only take about 10-15 minutes to finish.

You are being asked to be part of a research project being done by the University of North Texas Department of Psychology.

This study is trying to figure out relationships between how you play the game, your desire to be the best you can, your peers, satisfaction, and how much you want to continue playing sport.

You will be asked to answer some questions about when you feel the most successful playing your sport. Successful means when you feel like you did a good job, such as performing a skill really well or winning a game. You will also answer some questions about how your parents and peers act.

If you decide to help with this study, please remember you can stop participating any time you want.

I will separate this page from the others and put a number on your answer sheet. This way no one will see your answers.

If you would like to help with this study, please sign your name below.

\_\_\_\_\_  
Signature of Child

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Date

### Children's Demographics

Please be sure to answer **every** question.

Feel free to ask me to explain anything you don't understand

For this questionnaire please make the following choices.

Levels of competitive sports:

- 1) **Select sport teams** includes club, academy, select, elite, and Olympic development teams
- 2) **School sport teams** includes teams sponsored by a middle school, junior high, or high school
- 3) **Recreational sport teams** includes organized teams sponsored by the city, YMCA, church leagues, or local club, you do not have to try out to be on these teams

1. Gender:    ___ Male (1)            ___ Female (2)					
2. Age:        _____					
3. Race / Ethnicity:            ___ White/Caucasian (1)            ___ Asian American (4) ___ Black/African American (2)        ___ Pacific Islander (5) ___ Hispanic/Latino (3)                ___ Other (6)					
4. In school, I am a(n):    ___ "A" student (90's)    ___ "B" student (80's)    ___ "C" student (70's)					
5. Below, please circle the people who live with you:		How many:	Age(s)	Did or do they play sport?	What was their highest competitive level? (Recreational, School, Select, College, or Professional)
Mother	_____	_____	_____	Yes / No	_____
Father	_____	_____	_____	Yes / No	_____
Step-Mother	_____	_____	_____	Yes / No	_____
Step-Father	_____	_____	_____	Yes / No	_____
Brother	_____	_____	_____	Yes / No	_____
Sister	_____	_____	_____	Yes / No	_____
Step-Brother	_____	_____	_____	Yes / No	_____
Step-Sister	_____	_____	_____	Yes / No	_____
Grandmother	_____	_____	_____	Yes / No	_____
Grandfather	_____	_____	_____	Yes / No	_____
6. Circle <b>all</b> the sports that you currently play:					
Baseball (1)	Football (6)	Lacrosse (11)	Tennis (17)		
Basketball (2)	Golf (7)	Rugby (12)	Track (18)		
Cheerleading/Drill (3)	Gymnastics (8)	Soccer (13)	Volleyball (19)		
Dancing (4)	Hockey (9)	Softball (14)	Other (20)		
Diving (5)	Ice Skating (10)	Swimming (15)	_____		
7a. Of the sports you circled, which one do you have the most fun playing: _____			7b. Number of years played: _____ yrs		
8a. Of the sports you circled, which is your best sport: _____			8b. Number of years played: _____ yrs		

9. Compared to other players my age who play my best sport, I am:	1 Less skilled than most	2	3 Average	4	5 More skilled than most
10. For your best sport, what position(s) do you play: <i>(list all)</i>	_____				
11. Describe your playing status in your best sport:	_____ Starter (start and play more than 50%)	_____ Primary substitute (don't start, but play 50% or more of the game)	_____ Secondary substitute (play less than 50% of game)		
12. Do you participate on a recreational team?	_____ Yes (1)	_____ No (2)			
13. Do you participate on a select team?	_____ Yes (1)	_____ No (2)			
14. Do you participate on a school team?	_____ Yes (1)	_____ No (2)			
15. If you participate on more than one team, what is your highest level of competition? <i>(check only one answer)</i>			_____ Recreation (1)		
			_____ Select (2)		
			_____ School (3)		
16. Your best sport is played at what level? <i>(pick the highest level in which you play that sport)</i>			_____ Recreation (1)		
			_____ Select (2)		
			_____ School (3)		
17. Average time per week you <b>practice</b> your best sport:			_____ hrs		
18. Average time per week you <b>play</b> your best sport:			_____ hrs		
19. I intend to continue playing my best sport...	Strongly Disagree		Maybe		Strongly Agree
for the next <b>season</b> .	1	2	3	4	5
for the next (1) <b>year</b> .	1	2	3	4	5
with this <b>team</b> next season.	1	2	3	4	5
with this <b>team</b> next (1) year.	1	2	3	4	5
with this <b>coach</b> for the next season.	1	2	3	4	5
with this <b>coach</b> for the next (1) year.	1	2	3	4	5
at the <b>current</b> competitive level. <i>(ex: I play select and intend to play select next year)</i>	1	2	3	4	5
at a <b>higher</b> competitive level. <i>(ex: I play recreation and intend to play select next year)</i>	1	2	3	4	5
at a <b>lower</b> competitive level. <i>(ex: I play select and intend to play recreation next year)</i>	1	2	3	4	5
20. I <b>have fun</b> playing my best sport.	1	2	3	4	5
21. I <b>like</b> playing my best sport.	1	2	3	4	5
22. I <b>enjoy</b> playing my best sport.	1	2	3	4	5
23. I am <b>satisfied</b> with my current experience in my best sport.	1	2	3	4	5

## REFERENCE LIST

- Anshel, M. H. (2003). *Sport psychology: From theory to practice* (4<sup>th</sup> ed.) San Francisco: Benjamin Cummings.
- Ames, C. (1984). Conceptions of motivation within competitive and noncompetitive goal structures. In R. Schwarzer (Ed.), *Self-related cognitions in anxiety and motivation*, Hillsdale, NJ: Erlbaum.
- Ames, C. (1992). Achievement goals, motivational climate, and motivational processes. In G. C. Roberts (Ed.), *Motivation in sport and exercise* (pp. 161-176). Champaign, IL: Human Kinetics.
- Ames, C., & Archer, J. (1987). Mother's belief about the role of ability and effort in school learning. *Journal of Educational Psychology, 79*, 409-414.
- Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivational processes. *Journal of Educational Psychology, 80*, 260-267.
- Ames, C., & Archer, J. (1998). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology, 80*, 260-267.
- Anderson, J. C., Funk, J. B., Elliott, R., & Smith, P. H. (2003). Parental support and pressure and children's extracurricular activities: Relationships with amount of involvement and affective experience of participation. *Applied Developmental Psychology, 24*, 241-257.
- Athletic Footwear Association (1990). *American youth and sport participation*. North Palm Beach, FL: Author.
- Bandura, A. (1969). Social learning theory of indentificatory processes: In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 213-262). Chicago: Rand McNally.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychology Review, 84*, 191-215.
- Bengoechea, E. G., Streat, W., & Williams, D. J. (2004). Understanding and promoting fun in youth sport: Coaches' perspectives. *Physical Education and Sport Pedagogy, 9*(2), 197-214.
- Blatt, S. (1995). The destructiveness of perfectionism. *American Psychologist, 50*, 1003-1020.
- Bloom, B. S. (1985). *Developing talent in young people*. New York: Ballentine.

- Boyd, M., & Callaghan, J. (1994). Task and ego goal perspectives in organized youth sport. *International Journal of Sport Psychology*, 22, 411-424.
- Brown, B.A., Frankel, B. G., & Fennel (1989). Hugs or shrugs: Parental and peer influence on continuity of involvement in sport by female adolescents. *Sex Roles*, 20 (7-8), 397-412.
- Brustad, R. J. (1988). Affective outcomes in competitive youth sport: The influence of intrapersonal and socialization factors. *Journal of Sport and Exercise Psychology*, 10, 307-321.
- Brustad, R. J. (1993). Who will go out and play? Parental and psychological influences on children's attraction to physical activity. *Pediatric Exercise Science*, 5, 210-223.
- Burns, D. D. (1980, November). The perfectionists script for self-defeat. *Psychology Today*, 34-51.
- Butcher, J. (1983). Socialization of adolescent girls into physical activity. *Adolescence*, 18, 753-766.
- Carpenter, P. J., & Morgan, K. (1999). Motivational climate, personal goal perspectives, and cognitive and affective responses in physical education classes. *European Journal of Physical Education*, 4, 31-44.
- Carpenter, P. J., Scanlan, T. K., Simons, J. P., & Lobel, M. (1993). A test of the sport commitment model using structural equation modeling. *Journal of Sport and Exercise Psychology*, 15(2), 119-133.
- Carr, S., & Weigand, D. A. (2002). The influences of significant others on the goal orientations of youngsters in physical education. *Journal of Sport Behavior*, 25, 19-40.
- Carron, A. V., & Chelladurai, P. (1981). Cohesiveness, coach-athlete compatibility, participation orientation, and their relationship to relative performance and satisfaction. In North American Society for the Psychology of Sport and Physical Activity (Ed.), *Psychology of motor behavior and sport* (p. 86). College Park, Maryland: Editor.
- Chang, E. C., Watkins, A., & Banks, K. H. (2004). How adaptive and maladaptive perfectionism relate to positive and negative psychological functioning: Testing a stress-mediation model in black and white female college students. *Journal of Counseling Psychology*, 51, 93-102.
- Coakley, J. (1992). Burnout among adolescent athletes: A personal failure or social problem? *Sociology of Sport Journal*, 9, 271-285.
- Coopersmith, S. (1967). *The antecedents of self-esteem*. San Francisco: Freeman.

- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Diaz, S. C (2005, September). Can sports promote competence? *Parks and Recreation*, 40(9), 28-33.
- Duda, J. L. (1988). The relationship between goal perspectives and persistence and intensity among recreational sport participants. *Leisure Science*, 10, 95-106.
- Duda, J. L. (1989). The relationship between task and ego orientation and the perceived purpose of sport among male and female high school athletes. *Journal of Sport and Exercise Psychology*, 11, 318-335.
- Duda, J. L. (1992). Sport and exercise motivation: A goal perspective approach. In G. Roberts (Ed.), *Motivation in sport and exercise* (pp. 57-91). Champaign, IL: Human Kinetics.
- Duda, J. L. (1993). Goals: A social cognitive approach to the study of motivation in sport. In R. N. Singer, M. Murphey, & L. K. Tennant (Eds.), *Handbook of research in sport psychology* (pp. 421-436). New York: Macmillan.
- Duda, J. L., Fox, K. R., Biddle, S. J., & Armstrong, N. (1992). Children's achievement goals and beliefs about success in sport. *British Journal of Educational Psychology*, 62(3), 313-323.
- Duda, J. L. & Nicholls, J. G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology*, 84(3), 290-299.
- Duda, J. L., Olsen, L., & Templin, T. (1991). The relationship of task and ego orientation to sportsmanship attitudes and the perceived legitimacy of injurious acts. *Research Quarterly for Exercise and Sport*, 62, 79-87.
- Duda, J. L., & White, S. A. (1992). The relationship of goal perspectives to beliefs about success among elite skiers. *The Sport Psychologist*, 6, 334-343.
- Dunkley, D. M., Blankstein, K. R., & Halsall, J. (2000). The relation between perfectionism and distress: Hassles, coping, and perceived social support as mediators and moderators. *Journal of Counseling Psychology*, 47(4), 437-453.
- Dunn, J. G. H., Dunn J. C., Syrotuik, D. G. (2002). Relationship between multidimensional perfectionism and goal orientations in sport. *Journal of Sport and Exercise Psychology*, 24, 376-395.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to personality and motivation. *Psychological Review*, 95, 256-273.

- Elliot, E. S. & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, 54, 5-12.
- Enyon, R. B., Kitchen, P.D., & Semotiuk, D. M. (1980). The economics of age-group swimming in Ontario. *Canadian Journal of Applied Sport Sciences*, 5, 132-136.
- Felker, D. W. (1986). Relationship between self-concept, body build, and perception of father's interest in sports in boys. *Research Quarterly*, 39, 513-517.
- Flett, G. L., & Hewitt, P. L. (2005). The perils of perfectionism in sport and exercise. *Current Directions in Psychological Science*, 14(1), 14-18.
- Flett, G. L. & Hewitt, P. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with pathology. *Journal of Personality and Social Psychology*, 60(3), 456-470.
- Flett, G.L., Hewitt, P. L., & Blankstein, K.R (1998). Psychological distress and the frequency of perfectionistic thinking. *Journal of Personality and Social Psychology*, 75(5), 1363-1381.
- Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Dynin, C. (1994). Dimension of perfectionism and Type A behavior. *Personality and Individual Differences*, 16, 477-485.
- Flett, G. L., Sawatzky, D. L., & Hewitt, P. L. (1995). Dimensions of perfectionism and goal commitment: A further comparison of two perfectionism measures. *Journal of Psychopathology and Behavioral Assessment*, 17, 11-124.
- Frost, R. O., & Henderson, K. J. (1991). Perfectionism and reactions to athletic competition. *Journal of Sport and Exercise Psychology*, 13, 323-335.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14(5), 449-468.
- Frost, R., Trepanier, K. L., Brown, E. J., Heimberg, R.G., Juster, H. R., Markis, G. S., & Leung, A. W. (1997). Self-monitoring or mistakes among subjects high and low in perfectionistic concern over mistakes. *Cognitive Therapy and Research*, 21(2), 209-222.
- Garner, D. M., Olmstead, M. P., & Polivy, J. (1983) Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2(2), 15-34.
- Gill, D. L. (1992). Gender and sport behavior. In T. Horn (ed.), *Advances in sport psychology* (pp. 143-160). Champaign, IL: Human Kinetics.

- Gilman, R., & Ashby, J. S. (2003). Multidimensional perfectionism in a sample of middle school students: An exploratory investigation. *Psychology in the Schools, 40*(6), 677-689
- Gilman, R., Ashby, J. S., Sverko, D., Florell, D., & Varjas, K. (2005). The relationship between perfectionism and multidimensional life satisfaction among Croatian and American youth. *Personality and Individual Differences, 39*, 155-166.
- Givvin, K. B. (2001). Goal orientations of adolescents, coaches, and parents: Is there a convergence of beliefs? *Journal of Early Adolescence, 21*, 227-247.
- Gould, D. (1987). Understanding attrition in children's sport. In D. Gould and M.R. Weiss (eds.) *Advances in pediatric sport sciences, Vol 2. Behavioral Issues*, (pp.61-85) Champaign, IL: Human Kinetics.
- Goudas, M., Fox, K., Biddle, S., & Armstrong, N. (1992). Children's task and ego profiles in sport: Relationship with perceived competence, enjoyment, and participation. *Journal of Sport Sciences, 10*, 606-607.
- Gould, D., & Carson, S. (2004). Fun and games? Myths surrounding the role of youth sports in developing Olympic champions. *Youth Studies Australia, 23* (1), 19-26.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology, 14*, 172-204.
- Gould, D., Lauer, L., Rolo, C., Jannes, C., & Pennisi, N. (2006). Understanding the role parents play in tennis success: A national survey of junior tennis coaches. *British Journal of Sports Medicine, 40*, 632-636.
- Gould, D., Tuffey, S., Udry, E., & Loehr, J. (1997). Burnout in competitive tennis players: II. A qualitative analysis. *The Sport Psychologist, 10*, 341-366.
- Gould, D., Udry, E., Tuffey, S., & Loehr, J. (1996). Burnout in competitive junior tennis players: A quantitative psychological assessment. *Sport Psychologist, 10*, 322-340.
- Greendorfer, S. L., & Lewko, J. H. (1978). Role of family members in sport socialization of children. *Research Quarterly, 49*, 146-152.
- Hall, H. K., & Kerr, A. W. (1997). Motivational antecedents of precompetitive anxiety in youth sport. *Sport Psychologist, 11*, 24-42.
- Hall, H., Kerr, A., & Matthews, J. (1998). Precompetitive anxiety in sport: The contribution of achievement goals and perfectionism. *Journal of Sport and Exercise Psychology, 20*, 194-217.



- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15, 27-33.
- Harter, S. (1978). Effective motivation reconsidered: Toward a developmental model. *Human Development*, 21, 34-64.
- Harter, S. (1981). A model of mastery motivation in children: Individual differences and developmental change. In W.A. Collins (Ed.), *Aspects of the development of competence: The Minnesota symposia on child psychology*, (pp. 215-256). Hillsdale, NJ: Lawrence Erlbaum.
- Hartup, W. W. (1989). Behavioral manifestations of children's friendships. In T.J. Berndt & G.W. Ladd (Eds.), *Peer relationships in children development* (pp.46-70). New York: Wiley.
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60, 456-470.
- Higgins, D. C. (1985). The influence of socializing agents in the female sport-participation process. *Adolescence*, 20, 73-82.
- Hom, L. H., Duda, J. L., & Miller, A. (1993). Correlates of Goal Orientations among young athletes. *Pediatric Exercise Science*, 5, 168-176.
- Horn, T. S. (2004). Development perspectives on self-perceptions in children and adolescents. In M.R. Weiss (Ed.), *Developmental sport and exercise psychology: A lifespan perspective* (pp.101-143). Morgantown, WV: Fitness Information Technology.
- Horn, T. S., & Harris, A. (1996). Perceived competence in young athletes: Research findings and recommendations for coaches and parents. In *Children and youth sport: A biopsychosocial perspective* (pp.309-329). Madison, WS: Brown and Benchmark.
- Horn, T. S., & Weiss, M. R. (1991). A developmental analysis of children's self-ability judgments in the physical domain. *Pediatric Exercise Science*, 3, 310-326.
- Hoyle, R. H., & Leff, S. S. (1997). The role of parental involvement in youth sport participation and performance. *Adolescence*, 32(125), 233-244.
- Jowett, S. (2005). Social networks in sport: Parental influence on the coach-athlete relationship. *Sport Psychologist*, 19(3), 267-288.
- Kanters, M. A., & Tebbutt, S. (2001). Fun First! Sports for kids: Working with parents to get the most out of youth sports. *Parks and Recreation*, 36(10), 72-79.

- Kawamura, K. Y., Hunt, S. L., Frost, R. O., & DiBartolo, P. M. (2001). Perfectionism, anxiety, and depression: Are the relationships independent? *Cognitive Therapy and Research, 25*, 291-301.
- Klint, K. & Weiss, M. R. (1986). Dropping in and dropping out: Participation motives of current and former youth gymnastics. *Canadian Journal of Applied Sport Science, 11*, 106-114.
- Leff, S. S., & Hoyle, R. H. (1995). Young athletes' perceptions of parental support and pressure. *Journal of Youth and Adolescence, 24*, 187-203.
- Lewko, J. H., & Ewing, M. E. (1980). Sex differences and parental influence in sport involvement of children. *Journal of Sport Psychology, 2*, 62-68.
- Lewko, J. H., & Greendorfer, S. L. (1988). Family influences in sport socialization of children and adolescents. In F. L. Smoll, R. A. Magill, & M. J. Ash (Eds.), *Children in sport* (pp. 287-300). Champaign, IL: Human Kinetics.
- Maehr, M. L., & Nicholls, J. (1980). Culture and achievement motivation: A second look. In N. Warren (Ed.), *Studies in cross-cultural psychology: Vol 2* (pp. 221-267).
- McArdle, S., & Duda, J. L. (2004). Exploring social-contextual correlates of perfectionism in adolescents: A multivariate perspective. *Cognitive Therapy and Research, 28*(6), 765-788.
- McElroy, M. A. (1982). Consequences of perceived parental pressure on the self-esteem of youth sport participants. *American Corrective Therapy Journal, 36*, 164-167.
- McPherson, B. D., & Brown, B. A. (1988). The structure, processes, and consequences of sport for children. In F.L. Smoll, R. A. Magill, & M.J. Ash (Eds.), *Children in sport* (3<sup>rd</sup> ed., pp. 265- 286). Champaign, IL: Human Kinetics.
- Miller, P. H. (2002). *Theories of developmental psychology* (4<sup>th</sup> ed.). New York: Worth Publishers.
- Mills, J. S., & Blankstein, K. R. (2000). Perfectionism, intrinsic versus extrinsic motivation, and motivated strategies for learning: a multidimensional analysis of university students. *Personality and Individual Differences, 29*(6), 1191-1204.
- Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review, 91*, 328-346.
- Nicholls, J. G. (1989). *Competence and accomplishment: A psychology of achievement motivation*. Cambridge, MA: Harvard University Press.

- Nicholls, J. G. (1992). The general and the specific in the development and expression of achievement motivation. In G. C. Roberts (Ed.), *Motivation in sport and exercise* (pp.31-56). Champaign, IL: Human Kinetics.
- Ntoumanis, N., & Vazou, S. (2005). Peer motivation climate in youth sport: Measurement development and validation. *Journal of Sport and Exercise Psychology, 27*, 432-455.
- Ogilvie, B. (1979). The child athlete: Psychological implications of participation in sport. *Annals of the American Academy of Political and Social Science, 445*, 47-58.
- Ommundsen, Y., & Vaglum, P. (1991). Soccer competition anxiety and enjoyment in young boy players: The influence of perceived competence and significant others' emotional involvement. *International Journal of Sport Psychology, 22*, 35-49.
- Papaionnaou, A. (1994). Development of a questionnaire to measure achievement styles in physical education. *Research Quarterly Exercise Sport, 65*, 11-20.
- Parker, W. D. (2002). Perfectionism and adjustment in gifted children. In G. L. Flett and P. L. Hewitt (Eds.), *Perfectionism theory, research, and treatment* (pp. 133-148). Washington, DC: American Psychological Association.
- Patrick, H., Ryan, A. M., Alfeld-Liro, C., Fredricks, J. A., Hruda, L. Z., & Eccles, J. S. (1999). Adolescents' commitment to developing talent: The role of peers in continuing motivation for sports and the arts. *Journal of Youth and Adolescence, 28*, 741-763.
- Petlichkoff, L. M. (1992). Youth sport participation and withdrawal: Is it simply a matter of fun? *Pediatric Exercise Science, 4*, 105-110.
- Rice, K. G., & Mirzadeh, S. A. (2000). Perfectionism, attachment, and adjustment. *Journal of Counseling Psychology, 47*, 238-250.
- Rice, K. G., & Preusser, K. J. (2002). The adaptive/maladaptive perfectionism scale. *Measurement and Evaluation in Counseling and Development, 34*, 210-222.
- Rice, K. G., Kubal, A. E., & Preusser, K. J. (2004). Perfectionism and children's self-concept: Further validation of the adaptive/maladaptive perfectionism scale. *Psychology in the Schools, 41*(3), 279-290.
- Reis, S. M. (1998). *Work left undone: Choices and compromises of talented females*. Mansfield Center, CT: Creative Learning Press.
- Roberts, S. M. & Lovett, S. B. (1994). Examining the "F" in gifted: Academically gifted adolescents' physiological and affective responses to scholastic failure. *Journal for the Education of the Gifted, 17*, 241-259.

- Roberts, G. C., Treasure, D. C., & Hall, H. K. (1994). Parental goal orientations and beliefs about the competitive-sport experience of their child. *Journal of Applied Social Psychology, 24*, 631-645.
- Roberts, G. C., Treasure, D. C., & Kavussanu, M. (1996). Orthogonality of achievement goals and its relationship to beliefs about success and satisfaction in sport. *Sport Psychologist 10*, 398-408.
- Scanlan, T. K., Angeles, C. A., & Simons, J. P. (1995). The construct of sport enjoyment. In G. C. Roberts (Ed.), *Motivation in sport and exercise* (pp.199-215). Champaign, IL: Human Kinetics Books.
- Scanlan, T. K., Carpenter, P. J., Lobel, M., & Simons, J. P. (1993). Sources of enjoyment for youth sport elites. *Pediatric Exercise Science, 5*, 275-285.
- Scanlan, T. K., Carpenter, P. J., Schmidt, G. W., & Simons, J. P. (1993). An introduction to the sport commitment model. *Journal of Sport and Exercise Psychology 15*(1), 1-15.
- Scanlan, T. K., & Lewthwaite, R. (1986). Social psychological aspects of the competitive sport experience for male youth sport participants: IV. Predictors of enjoyment. *Journal of Sport Psychology, 8*, 25-35.
- Scanlan, T. K., & Passer, M. W., (1979). Sources of competitive stress in young female athletes. *Journal of Sport Psychology, 1*, 151-159.
- Scanlan, T. K., & Simons, J. P. (1992). The construct of sport enjoyment. In G. C. Roberts (Ed.), *Motivation in sport and exercise*. Champaign, IL: Human Kinetics.
- Siegle, D., & Schuler, P. A. (2000). Perfectionism differences in gifted middle school students. *Roepers Review, 23*(1), 39-44.
- Slaney, R. B., Rice, K. G., & Ashby, J. S. (2002). A programmatic approach to measuring perfectionism: The Almost Perfect Scales. In G. I. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 63-88). Washington, D.C.: American Psychological Association.
- Smith, A. L. (2003). Peer relationships in physical activity contexts: A road less traveled in youth sport and exercise psychology research. *Psychology of Sport and Exercise, 4*, 25-39.
- Smith, M. D., Zingle, S. A., & Coleman, J. M. (1978). The influence of adult expectancy/child performance discrepancies upon children's self-concepts. *American Educational Research Journal, 15*, 259-265.
- Smith, R. E. & Smoll, F. L. (1996). The coach as a focus of research and intervention in youth sports. In F. L. Smith and R. E. Smoll, (Eds.) *Children and youth in sport: A biopsychosocial perspective*, (pp.125-141). Madison, WI: Brown and Benchmark.

- Smith, R. E. (1986). Toward a cognitive-affective model of athletic burnout. *Journal of Sport Psychology*, 8, 36-50,
- Spreitzer, E., & Snyder, E. E. (1976). Socialization into sport: An exploratory path analysis. *Research Quarterly*, 47, 238-245.
- Stein, G. L., Raedeke, T. D., & Glenn, S. D. (1999). Children's perceptions of parent sport involvement: It's not how much, but to what degree that's important. *Journal of Sport Behavior*, 22(4), 591-601.
- Steinberg, G. M., Singer, R. N., & Murphey M. (2000). The benefits to sport achievement when a multiple goal orientation is emphasized. *Journal of Sport Behavior*, 23, 407-422.
- Stipek, D., & MacIver, D. (1989). Developmental change in children's assessment of intellectual competence. *Child Development*, 60(3), 521-538.
- Terry-Short, L. A., Owens, G. R., Slade, P. D., & Dewey, M. E. (1995). Positive and negative perfectionism. *Personality and Individual Differences*, 18, 663-668.
- Trost, S. G., Sallis, J. F., Pate, R. R., Freedson, P. S., Taylor, W. G., & Dowda, M. (2003). Evaluating a model of parental influence on youth physical activity. *American Journal of Preventive Medicine*, 25(4), 277-282.
- Unger, R., & Crawford, M. (1992). *Women and gender: A feminist psychology*. NY: McGraw-Hill.
- Vazou, S., Ntoumanis, N., & Duda, J. L. (2005). Peer motivational climate in youth sport: A qualitative inquiry. *Psychology of Sport and Exercise*, 6, 497-516.
- Wall, M. and Côté, J. (2007). Developmental activities that lead to dropout and investment in sport. *Physical Education and Sport Pedagogy*, 12(1), 77-88.
- Weigand, D. (1994). *Perceived parental goal projections and parental pressure on the development of children's' and adolescents' goal orientation in sport*. Unpublished doctoral dissertation, University of North Texas, Denton.
- Weinburg, R., Tenenbaum, G., McKenzie, A., Jackson, S., Anshel, M., Grove, R., & Fogerty, G. (2000). Motivation for youth participation in sport and physical activity: Relationships to culture, self-reported activity levels, and gender. *International Journal of Sport Psychology*, 31, 321-346.
- Weiss, M. R., & Hayashi, C. T. (1995). All in the family: Parent-child influences in competitive youth gymnastics. *Pediatric Exercise Sciences*, 7, 36-48.
- Weiss, M. R., & Petlichkoff, L. M. (1989). Children's motivation for participation in and withdrawal from sport: Identifying the missing links. *Pediatric Exercise Science*, 1, 195-211.

- Weiss M. R., & Smith, S. M. (2002). Friendship quality in youth sport: Relationship to age, gender, and motivation variables. *Journal of Sport and Exercise Psychology, 24*, 420-437.
- Weiss, M. R., Smith, A. L., & Theeboom, M. (1996). That's what friends are for: Children's and teenagers' perceptions of peer relationships in the sport domain. *Journal of Sport and Exercise Psychology, 18*, 347-379.
- Wentzel, K. (1999). Social-motivational processes and interpersonal relationships: Implications for understanding motivation at school. *Journal of Educational Psychology, 91*, 76-97.
- White, S. A. (1996). Goal orientation and perceptions of the motivational climate initiated by parents. *Pediatric Exercise Science, 8*, 122-129.
- White, S. A. (1998). Adolescent goal profiles, perceptions of the parent-initiated motivational climate, and competitive trait anxiety. *Sport Psychologist, 12*, 16-28.
- White, S. A., & Duda, J. L. (1994). The relationship of gender, level of sport involvement, and participation motivation to goal orientation. *International Journal of Sport Psychology, 10*, 203-217
- White, S. A., & Duda, J.L. (1996). *The relationship between goal orientation and parent-initiated motivational climate among children learning a new physical skill: An exploratory study*. Manuscript in preparation.
- White, S. A., Duda, J. L., & Hart, S. (1992). An exploratory examination of the parent-initiated motivational climate questionnaire. *Perceptual and Motor Skills, 75*, 875-880.
- White, S. A., & Zellner, S. (1996). The relationship between goal orientation, beliefs about the causes of sport success, and trait anxiety among high school, intercollegiate, and recreational sport participants. *Sport Psychologist, 10*, 58-72.
- Yoo, J., & Kim, B. J. (2002). Young Korean athletes' goal orientation and sources of enjoyment. *Perceptual and Motor Skills, 94*, 1043-1049.