A MIXED METHODS APPROACH EXAMINING ALPINE SKI

RACING AS A CONTEXT FOR POSITIVE

YOUTH DEVELOPMENT

by

Christina Ann Heilman

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STATEMENT OF DISSERTATION APPROVAL

The dissertation of **Christina Ann Heilman**

has been approved by the following supervisory committee members:

Maria Newton	, Chair	**6/16/2011** Date Approved
Melinda Houston	, Member	**6/16/2011** Date Approved
James Hannon	, Member	**6/16/2011** Date Approved
Karen Paisley	, Member	**6/16/2011** Date Approved
Carol Werner	, Member	**6/16/2011** Date Approved

and by **Barry Shultz** , Chair of

the Department of **Department of Exercise and Sport Science**

and by Charles A. Wight, Dean of The Graduate School.

ABSTRACT

In 2002, the National Research Council and the Institute of Medicine (NRCIM) developed a framework designed to guide practitioners in optimizing youth development. It proposes that settings characterized by particular external assets positively impact youth's internal assets and thus foster youth development. Although popular belief suggests that participation in sports fosters positive youth development (PYD), NRCIM's framework has been underutilized and not examined empirically. Consequently, this mixed methods study sought to understand the relationship between youth's perceptions of the external assets captured by the social psychological climate (ego-involving climate, task-involving climate, and caring climate) and internal personal and social assets (e.g., self-efficacy, intrinsic motivation, fun, and connectedness) in early adolescent competitive ski athletes. Boys and girls ($n = 88$, $Mage = 13.44$ years old, $SD = .50$) from nine alpine ski racing teams across the Western Unites States volunteered to complete reliable and valid measurements. Quantitatively, simple correlation and multiple regression analysis examined the relationships between the external, social psychological climate and the internal, psychosocial assets. Simple correlation analysis revealed that task and caring climates were positively associated to psychosocial assets. Perceptions of an ego-involving climate were negatively related to fun. Findings from the regression analysis revealed that athletes positive perceptions of a task-involving climate significantly predicted intrinsic motivation, positive perceptions of a caring climate

significantly predicted connectedness, skiing self-efficacy, and general self-efficacy, whereas perceiving an ego-involving climate was a significant negative predictor of fun. Collectively the quantitative findings suggest a task-involving, caring climate may benefit youth athletes. Qualitatively, semistructured interviews with seven (*Mage* = 13.42 years) girls (*n* = 5) and boys (*n* = 2) explored the facets of the social psychological climate that optimize PYD. A general inductive approach analyzed the data, which resulted in the emergence of four overarching themes: (a) fun environment; (b) atmosphere of nurturance and support; (c) teamworks; and (d) coaching style. Based on these four themes, elements of enjoyment, cooperation, and supportive behaviors were identified as strategies in promoting PYD. These findings improve our understanding of the unique factors that contribute to healthy, psychosocial development within early adolescent ski racers.
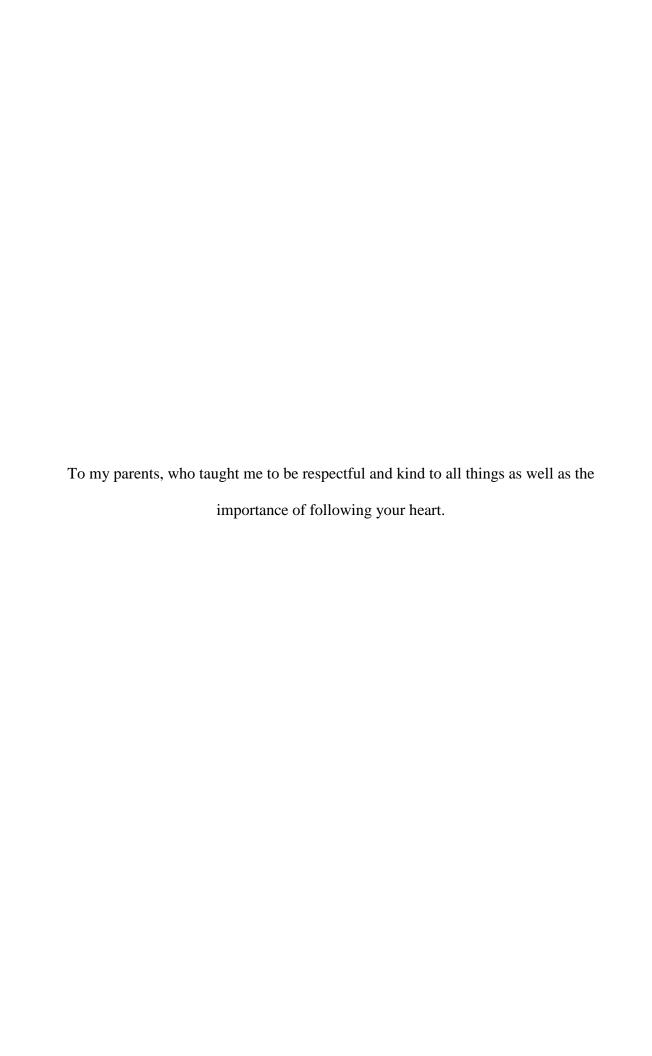
To my parents, who taught me to be respectful and kind to all things as well as the

importance of following your heart.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

CHAPTER 1

INTRODUCTION

Over the last 30 years there has been a widespread call to help young people

develop the skills needed to lead healthy, productive lives (Benson, 1997; Catalano,

Haggerty, Oesterle, Fleming, & Hawkins, 2004; Eccles & Gootman, 2002; Lerner,

Lerner, Almerigi, Theokas, Phelps, & Gestsdottir et al., 2005b; Pittman, 1991; Pittman,

Irby, & Ferberl, 2001; Roth & Brooks-Gunn, 2003). Historically, public and private

funding focused on preventing maladaptive behaviors (e.g., committing crimes, abusing

drugs and alcohol, dropping out of school, etc.) that were viewed as impediments to

youth development (Gambone, Klem, & Connell, 2002). As a result, programs were

designed to reduce these maladaptive behaviors (Pittman, 1991). However, problem-free

(i.e., no behavioral issues) youth are not necessarily prepared to succeed into adulthood

(Pittman, 1991). Therefore, youth advocates refocused their attention on building young

peoples' positive assets rather than on reducing or managing the problems they

encountered (Damon, 2004; Larson, 2000).

The sport context is an important setting in the lives of youth as well as a viable

context in fostering assets. Over 47 million youth participate in organized sports (Ewing

& Seefeldt, 2002). Additionally, youth have reported valuing sports more than academics

(Larson, 2000; Petitpas, Cornelius, Van Raalte, & Jones, 2005). As a result, sport is a

meaningful context among young people and, therefore, may be a fertile ground to foster positive outcomes within adolescents. Youth sport programs may be a viable vehicle for optimal development because they offer a high level of enjoyment and optimal challenge (Csikszentmihalyi, 1975), provide ample opportunities to develop positive adult, peer, and community relations (Weiss & Wiese-Bjornstal, 2009), and give individuals an opportunity to satisfy their need to belong, particularly to a group highly valued by their peers (Coleman, 1961; Poinsett, 1996). Because sport participation has meaningful consequences within young people, it is important to understand the climate of sport and its impact on youth. This study examined the influence of the social psychological climate on youth development outcomes within early adolescent competitive ski racers.

The focus on competitive adolescent alpine ski race athletes was chosen for four reasons. First, ski racing is a sport that focuses on individual performances where no team points are calculated, thus athletes on a team are teammates as well as competitors. Innately, this type of sport may underscore the importance of developing positive outcomes through teamwork. Second, research on competitive adolescent ski racers is limited to one. Bray, Martin, and Widmeyer (2001) conducted a study in the United Kingdom on anxiety within ski racers and found their support systems, mostly parents, increased anxiety during competition. Third, the sport of skiing is a lifelong activity; therefore, it is the hope the United States Ski and Snowboard Association (USSA; S. Bougus, personal communications, November, 2010) to instill a passion for the sport of skiing while learning life lessons. Fourth, research suggests there are associated developmental risks (e.g., lack of fun, burnout) and concerns about psychosocial growth in early adolescents participating in sport (Côté, Baker, & Abernethy, 2007; North

American Sport and Physical Education, 2010; Strachan, Côté, & Deakin, 2009; Wiersma, 2000). Due to these results and the uniqueness of focusing on individual findings, there is a need to learn more about adolescents engaging in competitive ski racing.

<p align="center">Positive Youth Development (PYD)</p>

General Introduction

      Rooted in the adolescent development literature, PYD refers to the myriad of people, supports, opportunities, and services for youth that focus on the acquisition of the competencies and skills needed for optimal youth development and healthy development into adulthood (Benson, 1997; Eccles & Gootman, 2002; Pittman, 1991; Pittman, Irby, & Ferberl, 2001). These personal and social assets include cognitive, social, emotional, and intellectual competencies, such as confidence, character, or perseverance (Lerner, Lerner, Almerigi et al., 2005b; Weiss, 2008). Thus, PYD emphasizes that all young people have the potential for healthy development and well-being. This potential is actualized when there are opportunities for young people to interact with influential peers, parents, and other adults that promote life enhancing skills, attitudes, and behaviors. It is also important to note that within the PYD literature, youth are referred to as young people, adolescents, and youth. In this study these three terms will be used interchangeably, but refer to the developmental time period of adolescence.

National Research Council and Institute of Medicine's

(NRCIM) Framework

Multiple frameworks exist that identify youth development goals (Lerner, Lerner, Almerigi et al., 2005b; Petitpas et al., 2005; Search Institute, 2010). The framework with the greatest scientific basis was created by the National Research Council (NRC) and Institute of Medicine (IOM) (NCRIM; Eccles & Gootman, 2002). The NRCIM is comprised of leading scholars in specific fields. Each NRC group is tasked with providing guidance relative to a specific health-related issue (e.g., youth development, obesity, drug dependence) in order to direct and focus policies and actions at the national and international level (IOM, 2010; NRC, 2010). Consequently, this particular NRCIM group reviewed and synthesized empirical literature, used practitioners' experience and wisdom, and examined theories to identify a framework to increase the healthy development and well-being of adolescents involved in community programs focused on fostering youth development (Eccles & Gootman, 2002). The NRCIM framework is not a theory, but rather a description of important elements in successful PYD programs. The NRCIM published the framework to educate the world on how to improve the lives of young people and serve as a standard for practitioners to follow in youth development settings. It is assumed that if practitioners implement the model then young people will accrue the skills and competencies needed for healthy development into adulthood. Yet, the critical factors identified by the NRCIM as contributing to positive development have not been empirically studied. This study focused on a selected portion of the NRCIM's framework and empirically examined the link between the climate of the context and youth development outcomes.

Similar to the other PYD frameworks, the NRCIM emphasizes two main elements. The first element is contextual features, which are all the external supports within and around a youth program setting essential for creating an environment conducive to shaping positive developmental outcomes. There are eight contextual features (Eccles & Gootman, 2002) that can be grouped in three categories, physical, psychological, and pedagogical. The physical features focus on physical safety (e.g., healthy, secure facilities). There are six domains that target psychological features, including: psychological safety, supportive relationships, opportunities to belong, positive social norms, support for efficacy and mattering, and integration of family, school, and community. Pedagogical conditions include opportunities for skill building (e.g., learn physical, intellectual, and social skills) and providing appropriate structure (e.g., clear rules and boundaries).

The second element in the NRCIM's framework includes personal and social assets. The NRCIM framework suggests that programs (e.g., after school programs, academic clubs, sport teams) that are characterized by the above contextual features positively influence the personal and social asset development in young people. Personal and social assets refer to the personal skills and competencies necessary for optimal physical, social, emotional, and psychological development of youth into happy and healthy contributing members of society (Eccles & Gootman, 2002). These personal and social assets have been deduced into four domains: physical, intellectual, psychological and emotional, and social development. An example of an asset in the social domain is connectedness or the perception of good relationships and a sense of belonging to a group. Positive achievement motivation and personal efficacy are examples of

components in the psychological and emotional domain. Within personal and social assets, this study targeted the two domains of social and psychological and will be referred to as the social psychological climate.

<div align="center">Social Psychological Climate</div>

As stated above, the NRCIM's framework suggests that youth programs characterized by contextual features are critical to personal and social asset development (Eccles & Gootman, 2002). Two essential psychological features are opportunities for skill building and supportive relationships. Opportunities for skill building refer to learning life skills and exposure to intentional learning experiences (Eccles & Gootman, 2002). Supportive relationships are defined as contexts that are warm and caring (Eccles & Gootman, 2002). Opportunities for skill building and supportive relationships can be illustrated in the sport setting when a young person learns a new skill or when the coach views mistakes as part of the learning process and provides mostly positive, informative feedback intended to help the athlete improve the skill while accommodating his or her psychological, emotional, and social needs rather than tending to the coach's needs (Perkins & Noam, 2007; Rhodes, 2004; Weise-Bjornstal, LaVoi, & Omli, 2010). There is no literature examining how these psychological and social contextual features impact personal and social assets. In the sport psychology literature, however, research has identified critical elements of the climate that parallel the contextual features identified by the NRCIM.

These features, known collectively as the social psychological climate, are ego-involving, task-involving, and caring climates. The social psychological climate refers to

one's perception of the prevailing atmosphere. The factors contributing to the atmosphere are the ways in which effort, ability, and interpersonal connections are valued, emphasized, and rewarded within a group setting (Fry & Gano-Overway, 2010; Newton, Fry, Watson, Gano-Overway, Kim, Magyar, & Guivernau, 2007). For example, the social psychological climate is how an adult leader interacts and influences the nature of the environment, which in turn impacts the overall atmosphere and affects a participant's thoughts, behaviors, and attitudes (Weiss, Amorose, & Wilko, 2010). In youth sport, coaches are the adult leaders whose practices, values, and behaviors create a climate that can alter a young participants' psychosocial and behavioral responses, such as a young person's willingness to take risks and learn from his or her mistakes (Danish, Petitpas, & Hale, 1993) or master skills and develop a sense of initiative necessary for optimal psychosocial development (Larson, 2006; Petitpas et al., 2005). Moreover, when young athletes observe their coach exhibiting prosocial behaviors, these behaviors are extended to and shared by sport participants, thus, creating a positive social psychological climate that is shaped both by adult leaders and peer teammates (Gano-Overway, Magyar, Fry, Kim, & Guivernau, 2009;Vazou, Ntoumanis, & Duda, 2005).

Ego-involving and task-involving climates, two important factors in the social psychological climates, are historically central components within achievement goal theory (Nicholls, 1984, 1989). Achievement goal theory proposes that motivation is influenced by personal dispositions as well as perceptions of the prevailing motivational climate in a particular setting. A motivational climate is based on a leader's cues and expectations in a setting that encourages an individual to process his or her competence in

a self- or other-referenced manner (Nicholls, 1984). There are two major motivational climates, namely ego-involving and task-involving.

An ego-involving climate is one of competition and comparison among others (Ames, 1992; Nicholls, 1984, 1989). For example, an ego-involving climate is created when coaches overly emphasize winning, reward only the best-performing athletes, provide attention to only the top athletes, punish athletes for making mistakes, or rely heavily on social comparison of athletic ability among team members. Because adolescence is a time when youth begin to rely more on peer comparison and evaluation for peers and coaches, an ego-involving climate may be detrimental to healthy development. (Weinberg & Gould, 2011; Wiese-Bjornstal, LaVoi, & Omli, 2010). Consequently, a young person in an ego-involving climate may become overly concerned with evaluation and comparison with peers, which may reduce intrinsic motivation for learning and the activity (Wigfield & Eccles, 1992). More importantly, a perceived ego-involving sport climate is associated with negative psychosocial development characterized by lack of enjoyment, decreased motivation, anxiety and worry, body concerns, low self-esteem, and increased dropout (Duda, 2001; Duda & Balaguer, 2007; Martens, 1987). Therefore, sport may not be a fruitful context for PYD if the climate is perceived as ego-involving.

By contrast, a task-involving climate refers to an environment where success is based on mastery, improving, or understanding (Ames, 1992; Nicholls, 1984, 1989). To create this climate, a coach focuses on individual improvement, effort, and intrinsic motivation. In a task-involving climate, young people are encouraged to focus on self-referenced standards such as self-improvement, gaining knowledge, and learning new

skills, which can enhance motivation, self-esteem, and positive affect (Ferrer-Caja & Weiss, 2002; Hellison & Templin, 1991; Koka & Hein, 2002, Mitchell, 1996; Standage, Duda, & Pensgaard, 2005; Wentzel, 1997; Wigfield & Eccles, 1992). Moreover, research consistently illustrates that youth athletes who perceive a task versus an ego-involving climate demonstrate positive developmental skills, such as self-efficacy, positive affect, and adaptive achievement patterns (see Weise-Bjornstal, LaVoi, & Omli, 2010). These findings suggest that coaches who foster a task-involving climate are instrumental in shaping healthy youth development. In general, task-involving climates are more commonly associated with valuable developmental outcomes, whereas ego-involving climates are frequently associated with negative outcomes (see McArdle & Duda, 2002).

Although ego-involving and task-involving climates are the main components to the motivational climate, research suggests this may not be a complete guide to the motivational climate or the social psychological climate (Elliot, 1999). There is emerging evidence that a caring climate may be another characteristic of the social psychological climate (Fry & Gano-Overway, 2010; Gano-Overway et al. 2009; Maygar, Guivernau, Newton, Kim, Watson, & Fry, 2007; Larson 2006). Ego-involving and task-involving climates differ from a caring climate in that caring is built on the principle of supportive mentoring rather than competence. A caring climate is defined as a supportive, inviting, and nonjudgmental setting designed to encourage nurturance instead of isolation among individuals (Newton et al., 2007). Adult leaders who place an emphasis on a caring climate provide a psychologically safe environment by fostering hope when youth experience failures, giving support while youth are trying to achieve a goal, or modeling respectful behaviors to youth athletes, in turn, young people replicate these behaviors to

those surrounding them. Thus, an adult can create an interpersonal adult-youth connection that generates a reciprocal exchange of a positive, mutually beneficial relationship between the adult and the youth (Noddings, 2003). This caring relationship may become a modeling behavior for youth to develop caring relationships among peers (Noddings, 2003).

The extent to which youth feel cared for has implications on an array of personal and social assets such as self-efficacy, social-emotional competence, personal mastery, and character development (Noblit, 1993; Noblit & Rogers, 1995; Noddings, 1995, 2002; Tappan, 1998; Wentzel, 1997). Within the school setting, caring connections between teachers and students are correlated with higher academic motivation and achievement in students (Battistich, Solomon, Watson, & Schaps, 1997; Catalano et al., 2004; Roeser, Midgley, & Urdan, 1996). Such caring teacher-student relationships may even buffer the potentially detrimental effects of negative peer behaviors (Battistich, Schaps, Watson, Solomon, & Lewis, 2000; McNeely & Falci, 2004; Wilson, 2004). In sport settings, higher perceptions of a caring climate are correlated with lower antisocial behaviors, higher prosocial behavior (Gano-Overway et al., 2009), and positive attitudes and caring behaviors toward teammates and coaches among young athletes (Fry & Gano-Overway, 2010). Within PYD settings, Gambone and colleagues (2002) highlight that the 'tipping' point of positive youth outcomes is when youth have at least one supportive relationship. Alternatively, maladaptive behaviors develop when youth have no support (Gambone, Klem, & Connel, 2002). Thus, a caring climate may be considered an appropriate context that helps to buffer youth from harmful maladaptive behaviors and promote PYD (Gano-Overway et al., 2009; Resnick, Bearman, & Blum et al., 1997).

As youth move from a situation of family life into a broader world of school, teachers, and extracurricular activities, it is important to examine the impact of settings outside the home. Researchers have suggested that settings with more positive contextual features are more likely to support a young person's potential for positive development (Eccles & Gootman, 2002; Lerner, Lerner, Almerigi et al., 2005b; Petitpas et al., 2005). Recently Weiss and Wiese-Bjornstal (2009), experts in PYD, synthesized the literature on fostering PYD through physical activity by writing, "A caring and mastery-oriented [task-involving] climate, supportive relationships with adults and peers, and opportunities to learn social, emotional, and behavior life skills –these are the nutrients for promoting positive youth development through physical activity" (p. 7). In spite of this rather strong declaration, research is relatively rare in supporting this claim and understanding how these contextual features influence the psychosocial development among early adolescent athletes.

Personal and Social Assets During Adolescence

Adolescence has been historically described as a period of storm and stress (Hall, 1904). It is marked by a dynamic process of biological, cognitive, social, and emotional transitions. For example, a major cognitive change is toiling with the idea of the self as young people try to understand a deeper meaning of themselves and society (Bandura, 1977; Erikson, 1963; Harter, 1999). Due to fundamental and dramatic developmental changes, early adolescence (between ages 10- to 14-years old) is a very stressful period sometimes accompanied by an increase in problem behaviors (Eccles & Gootman, 2002;

Harter, 1999, Steinberg, 2005). Consequently, there is a need to understand how to optimize positive assets in young adolescents during this time period.

There are a variety of psychosocial assets that optimize healthy youth development. Research suggests possessing more assets as a youth is better than having a few; however, the need for all assets is not essential for positive development in young people (Benson, 1997; Eccles & Gootman, 2002; Lerner, Lerner, Almerigi et al., 2005b). In fact, a mixture of assets in the domains may reflect healthy development (Benson, 2006; Eccles & Gootman, 2002) and lower the incidence of a wide range of youth problems (Catalano et al., 2002). As a result, the present study focuses on asset development in two of the NRCIM's personal and social developmental domains, namely, psychological and social.

The current study assessed a mixture of critical psychological and social assets. Key psychosocial markers for positive development in early adolescence are self, efficacy, intrinsic motivation, fun, and connectedness. According to developmental psychologist (Arnold & Meinhold, 2008; Bandura, 1994; Bowbly, 1969; Benson, 1997; Deci & Ryan, 1985; Eccles & Gootman, 2002; Harter, 1998; Lerner et al., 2000; Pittman, Irby, & Ferberl, 2001; Steinberg, 2007), these are broadly accepted PYD outcomes that represent both trait and state perceptions. The NRCIM framework does not directly address the issue of whether asset development occurs at the state or trait level. For instance, it is not clear if youth development programs are supposed to positively impact confidence in one's personal efficacy (a psychological asset) at the situation-specific, here and now state level, or at the more generalized, across situations trait level. Logically, given the focus on youth's holistic development into adulthood, at least some

of the assets should represent trait-like perceptions. As a result, the present study

evaluated assets that are both state (i.e., skiing self-efficacy, intrinsic motivation, fun, and

connectedness) and trait (i.e., generalized self-efficacy).

An important psychological asset in PYD is self-efficacy. Many theorists and

much research in a variety of settings suggest self-efficacy is an important cognitive

ability among adolescents (Bandura, 2006; Feltz, Short, & Sullivan, 2008; Harter, 1990;

Pajares, & Urdan, 2006; Yates & Youniss, 1998). As part of the NRCIM framework,

self-efficacy or personal-efficacy is under the psychological and emotional domain. Self-

efficacy is how one judges his or her capability to learn and perform behaviors at a

designated level, with certainty, and over time (Bandura, 1977; Bandura & Schunk,

1981). The perception of self-efficacy determines whether an early adolescent

participates in a certain activity, how long they participate, and how much effort they put

forth, especially in difficult situations (Eccles & Harold, 1991).

Adolescent research in sport and physical activity settings suggests efficacious

young people are likely to exert more effort, perform better, attempt new motor skills,

and persist longer in sport and physical activity than those with low levels of self-efficacy

(Eccles & Harold, 1991; Feltz & Magyar, 2006; Hellison & Templin, 1991).

Additionally, self-efficacy is theorized to increase when adult coaches or teachers

cultivate an atmosphere of low tension, helpful communication and encouragement, assist

in skill mastery, create enjoyment, and build competence (Feltz & Payment, 2005;

Hagger, 1998; Weiss & Ferrer-Caja, 2002). These findings suggest that self-efficacy is a

determinant of positive striving and that the context of physical activity can impact self-

efficacy. Although there is a vast amount of literature on self-efficacy, relatively little is

known about self-efficacy in competitive youth sport settings as well as within the larger NCRIM's PYD framework.

An important aspect in youth sport settings is achievement. The NRCIM framework regards positive achievement motivation as a critical psychological asset in youth development. Central to positive achievement motivation is intrinsic motivation (Elliot & Dweck, 2005). Intrinsic motivation is defined as performing something for its own purpose rather than for an extrinsic reward such as winning or recognition (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000). For example, past and present research indicates that intrinsically motivated youth are more likely to stay involved with their sport or physical activity, possess more positive self-perceptions, find enjoyment in activities, and have better relationships with peers and coaches (Ferrer-Caja, & Weiss, 2000; Seifriz, Duda, & Chi, 1992; Smith, 1999; Stuntz & Weiss, 2009, Weiss & Smith, 2002). Intrinsic motivation was a critical concept in this study.

A concept related to intrinsic motivation is fun. The presence of fun is a necessary component in early adolescence (Ewing & Seefeldt, 1996; Witt & Caldwell, 2002). Fun captures the playfulness or enjoyable emotional reaction experienced during a behavior. Across many disciplines the primary motivation for boys and girls for participating in an activity is fun (Arnold, & Meinhold, 2008; Dworkin & Larson, 2006; Ewing & Seedfeldt, 1996; Gould & Horn, 1984; Larson, 2000). Fun was also the most frequently provided reason to participate in sports among 8,000 American youth athletes (51% girls, 49% boys; Ewing & Seefeldt, 1996). Furthermore, the common reason adolescents drop out of activities or report negative experiences is not having fun (Dworkin & Larson, 2006; Weinberg & Gould, 2004; Weiss & Ferrer-Caja, 2002). Although the NRCIM does not

directly mention fun within its framework, it is a developmentally appropriate indicator of positive achievement motivation (Weinberg & Gould, 2011). As a result, fun was assessed in this study.

Another important asset within the NRCIM's social domain is connectedness. Connectedness is suggested as one of the strongest motivational needs for people to develop in healthy ways (Arnold & Meinhold, 2008; Bowbly, 1969; Ryan & Deci, 2000). It is defined by NRCIM's framework as one's perception of good relationships and trust with parents, peers, and adults (Eccles & Gootman, 2002). A major change in early adolescence is the increase in peer relationships and the importance of being connected to a social group outside of the family. Thus, peers and nonfamilial adults become the primary influence while the parental influence lessens (Larson, 2000; Scales, Benson, & Mannes, 2006). Positive peer and adult relationships help a young person to foster psychological and emotional well-being (Forgas, Williams, & Laham, 2005; Vazou, Ntoumanis, & Duda, 2005). Consequently, it is important to carefully consider connectedness as an essential social developmental asset.

Sport represents a powerful social context to foster connectedness among adolescents. It can provide connectedness through shared activities such as interacting with diverse peers, building positive relations with adult coaches, and achieving common goals. Overall, researchers seem to agree with the importance of connectedness as an asset (Arnold & Meinhold, 2008; Eccles & Gootman, 2002; Lerner, Lerner, Almerigi et al., 2005b; Richer & Vallerand, 1998; Ryan & Deci, 2000; Standage, Duda, & Ntoumanis, 2005). Yet, there still remains a gap in the literature related to how

connectedness links to youth sport participation within the NRCIM framework. The present study contributed to the scientific literature by addressing this void.

<div align="center">Study Purpose</div>

There is a need to determine whether contextual features of youth sport settings are associated with developmentally appropriate PYD assets in competitive, early adolescent athletes. The purpose of this study was to understand the relationship between youth perceptions of the social psychological climate (ego-involving climate, task-involving climate, and caring climate) and a young person's psychosocial assets of PYD (skiing self-efficacy, general self-efficacy, intrinsic motivation, fun, and connectedness) in early adolescent competitive alpine ski racers. In addition, this study qualitatively explored how the contextual features of the climate influences asset development.

Researchers in PYD have called for an increased use of mixed methods approaches to integrate knowledge, a vital component in advancing the understanding of human development for both practitioners and researchers. Specifically, in the sport setting, sport psychology researchers suggest the use of both quantitative and qualitative methods deepens our understanding of the link between the sport context and human development (García Bengoechea, 2002), aids in our understanding of the impact of the sport climate and psychosocial assets (Gano-Overway et al., 2009, Gould & Carson, 2008; Keegan, Harwood, Spray, & Lavalle, 2009), and assists in determining the key factors in effective design and implementation of PYD programs (Petitpas et al., 2005). To date, the social psychological climate has never been studied qualitatively in 13- to 14- year-old athletes. This study interviewed young athletes perceptions of the social

psychological climate to gain further and more nuanced understanding of how components of the climate influence assets.

<center>Significance of the Study</center>

The major significance of this study lies in better understanding the characteristics of the social psychological climate that are the most conducive to optimizing PYD assets. Many PYD advocates use the NCRIM framework to identify and decide on an array of policies, procedures, and fundings for the health and well-being of American's adolescent population involved in youth programming. Yet, research has never directly examined the NRCIM framework. This study hoped to validate the NRCIM framework. Furthermore, the utility of the framework has not been examined in a competitive youth sport setting. Not only does the current study represent an important step toward filling a gap in the literature by providing a scientific understanding of PYD through sport, but also it is also particularly relevant because findings might be applicable in the field. The practical significance lies in its potential to supply coaches with specific strategies to use in establishing an optimal social psychological climate in sport. This knowledge may assist in nurturing positive developmental growth among young athletes. As stated previously, the literature in PYD and sport psychology has called for more studies with a mixed methods design to further establish what, how, and why the sport context is a developmentally rich environment for youth to acquire the necessary developmental assets (Danish, 2002; Eccles & Gootman, 2002; Gano-Overway et al., 2009; García Bengoechea, 2002). More specifically, there is a need to better understand a youth's voice and its place in the development of programs to promote PYD (Eccles & Gootman,

2002; O'Donoghue, Kirshner, & McLaughlin, 2002). Therefore, this study used an explanatory mixed method design to identify and understand how a competitive youth sport climate impacts PYD assets.

Study Aims and Hypotheses

The main purpose of this study was to understand the relationship between youth's perceptions of the social psychological climate (ego-involving, task-involving, and caring) and the psychosocial assets of PYD (skiing self-efficacy, general self-efficacy, intrinsic motivation, fun, and connectedness). Therefore, the following aims are proposed:

AIM 1: To examine quantitatively the relationship between youth perceptions of the social psychological climate and psychosocial developmental assets in early adolescent competitive alpine ski racers.

> *Hypothesis: Perceptions of a task-involving climate and a caring climate will positively predict assets. Perceptions of an ego-involving climate will negatively predict assets.*

AIM 2: To explore qualitatively which contextual features in the social psychological climate influence psychosocial assets in early adolescent athletes.

> *Hypothesis: No a priori hypotheses are provided for this aim because of the exploratory nature of this investigation and the lack of research on how the climate influences psychosocial assets among competitive youth athletes.*

Limitations

The limitations of this study are as follows:

1. The participant skill level and duration of ski racing experience may vary among the athletes.

2. Coaching experience, certification, training, and education may vary.

3. Parent and/or legal guardian may be an unassessed factor contributing to the youth's perception of the social psychological climate. The youth may or may not be consciously aware of this effect.

4. The data are self-reported, which will include a self-reporting bias that may dilute the magnitude of the true association between the social psychological climate and the PYD assets. One possible self-reporting bias is that the participants may provide socially desirable responses (e.g., reporting the coach is caring but not truly feeling or believing the coach is caring) rather than honest answers.

5. The study's population is typically a racially homogeneous group of American adolescent ski racers. Therefore, it is not representative of all competitive ski racers, all adolescents, or all adolescents in youth ski programs.

6. During the qualitative interview, some participants may feel uncomfortable answering certain questions related to the social psychological climate or their personal and social assets. As a result, they may refuse to answer or respond in a socially desirable way.

Delimitations

The delimitations will be applied to the study:

1. Due to the selection of Western United States Intermountain Division alpine ski race programs, this selection site is not representative of all competitive ski race programs around the United States.

2. The study will include only 13 and 14 year old alpine ski racing athletes in the Intermountain Division, which will limit the study's generalizability to other 13 and 14 year old ski racing athletes around the United States.

3. Participants will have an inclusion criterion for the qualitative phase of the study. Only athletes who report a high task-involving, a high caring, and a low ego-involving climate will be included, which may yield a biased sub-sample of the parent sample.

Assumptions

The following are the assumptions of the proposed study:

1. The participants represent a typical population of girls and boys in Junior 3 ski racing.

2. The participants will understand the survey questions, answer honestly, and respond to the best of their ability.

3. The researcher administering the survey will not influence the participants.

4. The participants will understand the qualitative questions and answer honestly.

5. The participants will be able to identify and describe the different parts of the social psychological climate (ego-involving, task-involving, and caring).

6. The participants will be able to understand and articulate personal and social developmental assets.

<div style="text-align:center">Definition of Terms</div>

<u>Achievement Goal Theory</u> refers to how one defines success or failure in accomplishing a task or goals toward achievement. Research identifies two dichotomous goals: 1) ego orientation and 2) task orientation. Ego orientation refers to comparing oneself to others with a goal of demonstrating superior ability by outperforming others. Therefore, ego orientation is a means to an end. By contrast, task orientation is an end in and of itself, and it involves putting forth effort to master a skill or to improve oneself. These orientations develop one's perception of success and competence, influence what choices are made, and affect the performance outcome goal (Ames & Archer, 1988; Nicholls, 1984, 1989).

<u>Adolescence</u> the term is defined as the period between childhood and adulthood. It is a critical and formative transitional period of social, cognitive, emotional and psychological changes where a youth grows into maturity (Steinberg, 2005).

<u>Alpine Ski Racing</u> is a snow sport involving four racing disciplines: downhill, slalom, giant slalom, and super giant slalom. The purpose of these races is to make fast turns around gates down a ski slope to achieve the fastest time (USSA, 2010).

<u>Caring</u> is a fundamental relational activity that welcomes the cultivation of empowerment, mutual appreciation, genuine affection, personal growth, and self-actualization (Gordon, Benner, & Noddings, 1996). The essential characteristic of this

relationship is an ongoing and reciprocal contribution between the carer (the one caring) and the recipient of care (the cared for) (Noddings, 1984, 1992).

Caring Climate is described as a safe, supportive environment where youth feel welcomed and valued in a nonjudgmental way (Newton et al., 2007).

Developmental Assets® was coined by The Search Institute (Benson, 2006) and is defined as a framework that includes 20 *external* assets (e.g., peer, family, and other adult relationships) and 20 *internal* assets (e.g. self-efficacy, responsibility, achievement motivation) that promote positive experiences and opportunities required for healthy growth within young people.

Ego-Involving Climate is the social psychological motivational climate supporting comparison-based perceptions of competence and definitions of success (Newton, Duda, & Yin, 2000).

External Features entail eight common features among effective positive developmental settings and include: (a) physical and psychological safety; (b) appropriate structure; (c) supportive relationships; (d) opportunities to belong; (e) positive social norms; (f) support for efficacy and mattering; (g) opportunities for skill building; and (h) integration of family, school, and community efforts (Eccles & Gootman, 2002).

Intrinsic Motivation is a human behavior based on motivation to engage in self-determined activities that one finds interesting and absent of extrinsic rewards or punishments (Ryan & Deci, 2000; Vallerand, Deci, & Ryan, 1987).

Junior 3 (J3) Alpine Ski Racing is an alpine ski racing program (see alpine ski racing) for 13 and 14 year olds governed by The United States Ski and Snowboard Association.

Life Skills are defined as the abilities or attributes contributing to an individual's success in various settings (Danish, Nellen, & Owens, 1996). These are the behavioral, cognitive, interpersonal, and intrapersonal skills that are required to deal with the demands and challenges of everyday life (Danish et al., 2004; Hodge & Danish, 1999).

Motivational Climate evolved from achievement goal theory and refers to one's perception of a competence-based goal structure, ego or task, within a particular setting (Ames, 1992, Nicholls, 1989). The settings can be referred to a task-involving climate or ego-involving climate (Seifriz, Duda, & Chi, 1992; Newton, Duda, & Yin, 2000). The settings are based on how individuals are evaluated, the presence and extent of social comparison, the types of rewards and punishments, the leaders' communication, power, authority and leadership styles, and the interpersonal relationships (Newton, Duda, & Yin, 2000).

Organized Activities is a general term that includes any youth activity or program meeting outside of school time and on a regular basis in which an adult supervises the activity (Mahoney, Larson, & Eccles, 2005).

Organized Sport Programs refers to community or school-based programs that provide coaching, supervision, proper equipment, and safety rules, but they may also create expectations that exceed a young person's stage of growth and maturation, which may hinder one's ability to participate in sport (Camiré, Trudel, & Forneris, 2009; Washington, Berhardt, Gomez, Johnson, Martin, Rowland, Small et al., 2001).

Personal and Social Assets refers to a positive quality or skill for healthy development within four areas: 1) physical development (e.g., good health habits); 2) intellectual development (e.g., good decision-making skills); 3) psychological and

emotional development (e.g., good emotional, mental and spiritual health, confidence, prosocial values, or mastery motivation); and 4) social development (e.g., connectedness) (Eccles and Gootman, 2002). Often used synonymously with psychosocial assets.

Positive Youth Development is not a defined construct; therefore, there is no single operational term. Rather, it is a framework focusing on fostering a young person's positive assets (psychological, social, emotional, intellectual, and physical development) in enhancing settings (Benson, 2006; Eccles & Gootman, 2002; Lerner, Lerner, Almerigi et al., 2005b; Pittman, 1991; Roth & Brooks-Gunn, 2003).

Task-Involving Climate is the social psychological motivational climate supporting self-referenced perceptions of competence and definitions of success (Newton, Duda, & Yin, 2000).

Self-Efficacy refers to how one judges oneself in a particular situation (Bandura, 1977, 1981).

Social Psychological Climate refers to the factors in the setting that create one's perception of the environment. For the purpose of this study, three climates will be researched: ego-involving climate, task-involving climate, and caring climate. The social psychological climate originated from the motivational climate, the two most influential goals being ego-involving motivational climate and task-involving motivational climate, based upon competence goals. However, a caring climate may influence goals from a noncompetence-based model (Wiese-Bjornstal, LaVoi, & Omli, 2010).

Specializing Years occur during the ages of 13- to 15-years old among youth sport participants. The goal during the specializing years is to reduce involvement in several sports, increase the ratio of the amount of deliberate practice to play, become

more focused on competition, and acquire expertise in a particular sport (Côté, Horton, MacDonald, & Wilkes, 2009).

Sports "are institutionalized competitive activities that involve rigorous physical exertion or the use of relatively complex physical skills by participants motivated by internal and external reward" (Coakley, 2004, p. 21).

CHAPTER 2

LITERATURE REVIEW

Adolescence is remembered and observed as a time of great change. For instance, adolescence is a period where a young person struggles to understand the perplexing self –the erratic and unexplainable behaviors, thoughts, and emotions (Erikson, 1968; Gilligan. 1982; Kohlberg, 1969; Marcia, 1980; Piaget, 1972) that accompany the ages between approximately 10 and 20. These extraordinary aspects of personality might simply be part of the natural development process; however, it might also stem from the context in which young people live. As a result, adolescence cannot be fully understood without considering this context. Thus, adolescence is also a pivotal period of psychosocial development where experiences and contexts interact to balance positive and negative developmental outcomes (Arnett, 1999; Bradley, 2010). To further understand the relationship among adolescents, the contexts in which they live, and their developmental outcomes, this literature review examines adolescent development, the contexts of this development, the emergence of positive youth development (PYD), and the promotion of PYD through sport.

Perspectives on Adolescence Development

Defining Adolescence

The term adolescence derives from the Latin word meaning 'to grow into adulthood' (see Steinberg, 2005). Various theorists further define the term by different indicators such as biological, emotional, cognitive, interpersonal, social, educational, legal, chronological, and cultural markers (Erikson, 1959, 1968; Gilligan, 1982; Kohlberg, 1969; Piaget, 1932, 1973; Marcia, 1980; Steinberg, 2005). Although theorists define adolescence in different ways, one of the most fully developed approaches to development is an interpersonal perspective. This perspective describes adolescence as a stage that begins with relationships. These relationships start with parents, progress to peers, and end with the beginning stages of forming intimate relationship (Erikson, 1959, 1968). As a result, the meaning of the term adolescence depends on how one defines the boundaries of this life stage.

Adolescence is best described as a time when young people experience a progression of life stages instead of a time with a definite beginning and end. Over a period of a decade, fundamental biological, cognitive, and social changes occur universally in adolescence (Hill, 1983; Steinberg, 2007). Biological transitions consist of the physical, and often times awkward, changes that accompany puberty. Cognitive transitions include the emergence and ability to engage in complex, higher-order thinking (Piaget, 1972). Social transitions consist of the social milestones that youth achieve, such as being permitted to drive and vote, that correspond to a young person's increasing knowledge and capabilities. Undoubtedly, the period of adolescence embodies remarkable developmental transitions. All adolescents encounter these developmental

changes; however, each individual experiences the growth at different rates. From a psychological and developmental perspective, the different growth rates depend on multiple positive and negative life experiences and social contexts encountered during adolescence (Arnett, 1999; Eccles & Gootman, 2002; Larson, 2000). Consequently, a young person may develop more in some areas before he or she develops in others (Steinberg, 2007). Thus, the ages that comprise adolescence are somewhat arbitrary because every individual develops at his or her own unique pace.

Most social scientists and practitioners recognize that much psychological and social development takes place during the decade of adolescence, thus it makes more sense to define the boundaries of adolescent growth in a series of two stages rather than just one. The two stages, early and late adolescence, match that of the American educational school system. Early adolescence is the ages between 10- to 14-years old (junior or middle school), and late adolescence is 15- to 20-years old (high school and college). Or in other words, early adolescence is marked by the first half of the second decade of life and late adolescence encompasses the latter part of the decade. This study's focus is on early adolescence. However, the terms adolescence, youth, and young people will refer to the time period of 10- to 20- years old.

Understanding the stages of adolescence is a fundamental component to assisting young people in successfully navigating this period of development. Three influential theorists, Piaget (1932, 1973), Kohlberg (1969), and Erikson (1959, 1968) provide different perspectives on the stages of adolescent development. Piaget's (1932, 1973) theory of cognitive development refers to how humans gradually acquire intelligence through their actions in the world. Piaget's (1932, 1973) cognitive perspective reveals

that adolescents, and adults, are in a stage of formal operations. This developmental stage is characterized by the capability to think abstractly (Harter, 1983; Higgins, 1991; Piaget, 1932, 1973). According to Piaget (1932, 1972), an adolescent uses hypothetical-deductive skills to develop a hypothesis or systematically deduce the best way to solve a problem. For instance, an adolescent has the cognitive ability to begin devising plans to resolve dilemmas, understand and use metaphors, and plan ahead for the future. Consequently, adolescents do not need concrete experience to comprehend the possible result of a behavior or understand that situations may not be black-and-white but rather can be characterized by 'gray'. In fact, some theorists report that the increased sophistication of one's thinking is one of the most striking changes to occur during adolescence (see Steinberg, 2007). Overall, formal operations during adolescence is striking because the development of how intelligence is continuously acquired, constructed, and used.

Piaget's theory of cognitive development has advantages and disadvantages. The advantages of cognitive development are advanced verbal communication, awareness of people's individuality, development of a mature self-theory, understanding of love, and realization of the consequences of ones actions without the actual experience (Piaget, 1932, 1972). A disadvantage of adolescents' cognitive development is the incomplete understanding of the use of sarcasm. For example, adolescents tend to use sarcasm as a form of humor or to express criticism in a polite way. The subtleties of sarcasm can be misleading, such as someone taking the sarcastic remark seriously. Therefore, it is likely to be misunderstood by others, particularly peers (Piaget, 1932, 1972). Another disadvantage is an adolescent's inability to understand the complexities of one's self. For

instance, adolescents are in the process of forming an identity that is separate from peers while simultaneously yearning affiliation with these peers. Therefore, adolescents may become confused while trying to piece together and comprehend their identity. Moreover, adolescent egocentrism, how adolescents think about social matters, increases self-consciousness may be advantageous (personal uniqueness) or disadvantageous (feel awkward) depending on the situation (Piaget, 1972).

Overall, these newly developed skills help adolescents to start cognitively constructing theories about the world, relationships, and the self (Steinberg, 2007). Therefore, the development of knowledge is a dynamic system of continual balance between the person and the environment (Piaget, 1972). At any moment in development, the person and environment are interacting. For example, how a person understands the world is through the actions and behaviors of the developing person on the world. Consequently, Piaget provides a comprehensive theory about the psychosocial processes of human and adolescent development. While Piaget (1932, 1972) was an influential developmental psychologist and provided an explanation of cognitive development abilities, his model does not provide a framework fully capable of describing the dramatic developmental changes in adolescence.

Piaget influenced the works of psychologist Lawrence Kohlberg. Kohlberg (1969) adapted Piaget's theory by providing insight on adolescent growth from a moral development perspective. His research suggests adolescents are in a developmental stage called conventional moral reasoning. This means adolescents are inclined to choose actions that are perceived as good behaviors. Good behaviors are described as the actions society perceives as appropriate (Caprara, Scabini, Barbaranellie, Pastorelli, Regalia, &

Bandura, 1998; Kohlberg, 1969). More distinctively, rather than consciously deciding right from wrong, early adolescents (i.e., 10- to 14- years old) typically want to be viewed as a good people because good behaviors result in appreciation and appraisal from others (Kohlberg, 1969). In late adolescence (i.e., 15- to 20-years old), standing for what is right is synonymous with maintaining law and order through societal rules. Thus, adolescents perceive people who acknowledge and respect the rules as exhibiting good behaviors. The advantage of conventional moral reasoning is that it endorses good behavior because of the need for appraisal or following the rules. The disadvantage of conventional moral reasoning is people may firmly adhere to the societal conventions; therefore, fairness is rarely questioned (Kohlberg, 1969). If adolescents break a rule or do something wrong by society's conventions, then they have done something morally wrong and are not "good girls" or "good boys." Kohlberg (1969) suggests that conventional moral reasoning is a lower level of moral reasoning because people's actions are based upon society's rules instead of acting for universal humanity. Although Kohlberg's theory of moral reasoning provides an ethical perspective of adolescence, it does not give a complete picture of this dynamic developmental stage.

Last, the social psychologist Erik Erikson (1959) developed a theoretical model for the stages of life development. His model is regarded as one of the most fully developed approaches to development and has been widely influential (see Eccles & Gootman, 2002; Steinberg, 2005). The life-cycle model suggests that there are developmental tasks that must be dealt with at certain ages or stages of life. The tasks are sequential, but development depends on previous learning, experimenting, observing, and the ability to draw conclusions and synthesize information. Moreover, the sequence of

development is based upon psychosocial factors, meaning both the individual and the setting in which the individual experiences impact growth. Therefore, in each stage of development a person faces new challenges and hopefully masters the challenge for healthy development. If the challenge is not effectively completed, then the challenge may reappear and need to be resolved in future stages of development.

According to Erikson (1959, 1968), the challenge in adolescence is "Identity Crisis." This developmental stage is known as a crisis because this is the transition from childhood to adulthood where people experience a crossroads of who they want to be and what they believe society expects them to be. The young person, then, struggles with a multifaceted view of the self in order to define and redefine his or her identity. Peers are integral during this process because adolescents are exhibiting a personality that is either supported or denied by their peers (Bronfrenbrenner, 1979; Erikson, 1968). The failure to connect with a peer group can result in identity confusion (Erikson, 1968). Identity confusion may lead to amotivation, vulnerability to peer pressure, or uncertainty in a life path (see Paisley & Powell, 2007). On the other hand, identity development may result in a satisfactory view of one's self and the future (Erikson, 1968). Self-disovery during adolescence eases the passage to adulthood, whereas role confusion complicates it and can haunt a person through his or her adult years (Erikson, 1968).

A commonality across the various theories of adolescent development is that adolescence is a dynamic process. Youth are active agents in their growth. They think, feel, and react to their own behaviors and to the situations they face. Many cognitive, social, emotional, physical, and intellectual factors influence adolescent development. Therefore, it is critical to build upon this foundational knowledge and examine which

factors aid in an adolescent's healthy growth. One such factor is the importance of contexts or settings an adolescent encounters.

Influential Contexts During Adolescence

        While the fundamental changes adolescents experience are universal each youth encounters these experiences uniquely. As psychologists suggest, the difference in experience is partly explained by how the context influences the psyche (Bandura, 1977; 1986; Bronfenbrenner, 1979; Erikson, 1959; Harter, 1999; Piaget, 1932). The context incorporates all the factors and elements within and around the setting that may influence the person. For example, social development during adolescence results from the interaction between the universal changes (i.e., biological, cognition, and social) and the context in which these changes are experienced. Research reveals that the context is a crucial element in adolescent development because it can positively or negatively impact youth (Cook, Herman, Phillips, & Settersten, 2002; Dworkin & Larson, 2006; Fraser-Thomas, & Côté, 2009; Silbereisen, & Todt, 1994; Smetana, Campione-Barr, & Metzger, 2006). According to a leading adolescent scholar, adolescent development cannot be understood apart from the context in which young people grow up; therefore, one must understand the world in which adolescents live and how that world affects their behavior, psyche, and social relationships (Steinberg, 1989). For these reasons, it is important to recognize the different contexts adolescents' experience.

        The contexts of adolescence are shaped by a society. The contexts of American adolescents are the focus of this study. In modern American society, the lives and experiences of adolescents are shaped by four main contexts: family, school, peer groups,

and leisure (Steinberg, 2007). The contexts independently and synergistically shape the adolescent.

      <u>Family</u>. Perhaps the most influential factor in adolescent development is the family (Surjadi, Lorenz, Wickrama, Cogner, 2010; Veronneau, & Dishion, 2010). Within the family, parents are key agents in the lives of adolescents because their interactions influence the youth's cognitions, self-perceptions, affect, and behavioral outcomes (Caprara et al., 1998). More specifically, authoritative parenting is the most recommended and effective parenting style (Steinberg, 2007).

      Authoritative parenting refers to the use of warmth, moderate control, and logical decision-making to develop the adolescent into a "happy, capable, and caring adult" (Steinberg, 1989, p.148). Adolescents with authoritative parents typically experience healthy psychosocial development such as autonomy, self-direction, and familial emotional attachment (Parra & Oliva, 2009; Steinberg, 2007). The important elements in authoritative parenting do not depend on parents being married, divorced, separated, or full-time workers (Steinberg, 2007). Instead, the relationship between adolescents and their parents is about balancing affect and control (Capara, Scabini, & Regalia, 2006), with "optimal development taking place where there is a good stage environment fit between the needs of developing individuals and the opportunities afforded by their social environments" (Eccles, Midgley, Wigfield, & Buchanan, 1993, p. 98). It is suggested that environments with fewer rules and norms may cause an adolescent to feel lost (Capara, Scabini, & Regalia, 2006). Yet, it is important that adolescents are given adequate freedom to make choices about their education and future career. Although authoritative parenting is an effective way to positively influence adolescents, as the

young person changes so does the parent-child relationship. As young people grow through adolescence, relationships outside the family, such as with peers and nonfamilial adults, begin to increase in importance (Larson, 2000; Scales, Benson, & Mannes, 2006). Therefore, it becomes crucial for parents and adults to understand how to continuously refine the environment to create the synergy needed to support adolescent growth.

School. In American society, school plays an important role in the lives of many young people. Researchers, educators, and policy makers have evaluated a multitude of factors that contribute to successful schools. One of the most important factors is how the teacher influences the classroom environment (Battistich, Schaps, Watson, Solomon, & Lewis, 2000; Blum & Rinehart, 2000; Eccles, 2004; Reddy, Rhodes, & Mullhall, 2003; Steinberg, 2007). Effective teachers are similar to authoritative parents in that they share characteristics of warmth, support, and firmness (Steinberg, 2007; Teven, 2001). More specifically, researchers are examining how to create a supportive, yet demanding environment to aid in young people's achievement as well as their well-being (Battistich, Schaps, Watson, Solomon, & Lewis, 2000; Blum & Rinehart, 2000; Eccles, 2004; Reddy, Rhodes, & Mullhall, 2003). For example, Battistich and colleagues (1997, 1999) createated an environment where teachers incorporated respectful and caring behaviors that provided warm, stable relationships with students. The findings suggest a perceived caring classroom was related to enjoying class, liking school, and helping others learn (Battistich et al., 1997). Battistich et al. and other researchers in the school setting (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; McNeely & Falci, 2004; Roeser, Midgley, & Urdan, 1996; Wilson, 2004) have identified several positive developmental outcomes by creating educational environments that satisfy the young

person's needs. However, more research is needed to determine the specific contextual features of the setting that meet the needs of the diverse range of adolescents who possess a wide variety of capabilities and interests (Steinberg, 2007).

Peers. Although some research suggests that parents and schools are influential in the lives of adolescents, other research proposes that peers play an essential role in the developing adolescent. A major change in early adolescence is the increase in peer relationships. These peer relationships play a critical role in adolescent behaviors, cognitions, and emotions, thereby facilitating or debilitating psychosocial development (Bishop, 1999; Forgas, Williams, & Laham, 2005; Steinberg, 1996; Vazou, Ntoumanis, & Duda, 2005). In a longitudinal sample with 1,278 girl and boy early adolescents, both peer rejection and peer acceptance predicted an increase in problem behaviors (Veronneau & Dishion, 2010). It was suggested that youth rejected by their peers may feel angry or resentful, develop low self-esteem, behave agressively, befriend peers who are less well adjusted and model deviant behaviors (Steinberg, 2007; Veronneau & Dishion, 2010). Peer acceptance also predicted problem behaviors. Researchers suggest a high amount of peer acceptance may lead to adolescents experimenting with rule-breaking, which may further increase their social status (Allen, Porter, McFarland, Marsh, & McEthaney, 2005; Veronneau & Dishion, 2010). This is important to note because early adolescence denotes a time when young people test their autonomy and gain peer acceptance. Thus, small deviant behaviors may begin to predict an increase in problem behaviors, but this hypothesis has yet to be empirically established (Veronneau & Dishion, 2010).

Peers can also positively influence psychosocial development. Many theorists have suggested that it is only through experiences with peers that adolescents develop values and guidelines for moral behavior and psychological well-being (Piaget, 1932, Kohlberg, 1969; Steinberg, 2007). One reason is that adolescents are typically experiencing similar issues, such as identity and romantic relationship dilemmas, and their peers may serve as a support group where they can discus their struggles and concerns (Erikson 1968). Another reason is that spending time with peers allows for opportunities for interaction, which fosters the development of decision-making and the enhancement in an adolescent's mood (Steinberg, 2007). Thus, time with peers is one of the most enjoyable parts of an adolescent's day (Csikszentmihalyi & Larson, 1984). Additionally, social changes such as the two-wage-earner family and larger class sizes means that youth are exposed to more peer-based behavioral norms and roles than in the past when adult norms and roles dominated the lives of adolescents (Steinberg, 2007). Positive peer relationships may help a young person to foster the psychosocial and emotional well-being to guide youth in healthy ways (Forgas, Williams, & Laham, 2005; Vazou, Ntoumanis, & Duda, 2005). Undoubtedly, peers play an important role in influencing adolescent development. For this reason, it is important to understand how adolescents' peer groups can promote young people's psychosocial development.

Leisure. Leisure occupies approximately 50% of adolescents' time (Larson, 2000) and is, therefore, a vital context in which to explore youth development. Leisure is generally referred to as free time and is considered an important aspect for both exploration and development (Steingberg, 2007; Witt & Caldwell, 2005). Variability exists in how adolescents divide their leisure time. Many are working (Staff, Mortimer, &

Uggen, 2004), spending time on the computer, television, and listening to music (Larson, 1994; Roberts, Henriksen, & Rideout, 2005), or engaging in after school activities such as band, science clubs, and sports (Eccles, Barber, Stone, & Hunt, 2003). Although leisure time varies between adolescents, in general they are in better moods while engaged in voluntary leisure activities than compared to school or work (Csikszentmihalyi & Larson, 1984; Weinberg & Gould, 2011). Research also reports that leisure plays an important role in helping adolescents develop a sense of oneself (Witt & Caldwell, 2005), explore different relationships with others (Larson, 2000), and learn about the society surrounding them (Catalano et al., 2002). Furthermore, participation in structured and voluntary leisure activities, such as sport or music, is related to the greatest boost in mood and positive developmental benefits (Larson, 2000, Smith, & Smoll, 2002; Stattin, Kerr, Mahoney, Persson, & Magnusson, 2005; Weiss, 2008). In fact, sports are reported as the most popular leisure activity (Stevenson, 1994). Yet, very little is known regarding the influence of sport on developmental outcomes of adolescents.

Sport. Research on effective youth programs emphasizes that contexts that are organized, extracurricular, voluntary, challenging, relationship-building, and fun provide for maximum youth engagement (Eccles & Gootman, 2002, Hansen et al., 2003, Mahoney, Larson, & Eccles, 2005; Perkins, & Noam, 2007). Sport is one of the few areas in a young person's life that presents these characteristics. For example, research suggests youth sport programs offer a high level of enjoyment and optimal challenge (Csikszentmihalyi, 1975), they provide ample opportunities to develop positive adult, peer, and community relations (Weiss & Wiese-Bjornstal, 2009), and they give individuals an opportunity to satisfy their need to belong (Coleman, 1961; Poinsett,

1996). Furthermore, sport offers youth a context for quality personal development and a range of positive experiences essential for healthy growth (Fraser-Thomas, Côté, & Deakin, 2005; Petitpas, Cornelius, Van Raalte, & Jones, 2005).

Organized sport programs are also increasingly popular among young people (Camiré, Trudel, & Forneris, 2009; Weinberg & Gould, 2011). Organized sport refers to community or school-based sport contexts coached by an adult leader, with structured practices, and that are either recreational or have scheduled competitions (Camiré, Trudel, & Forneris, 2009; Committee on Sports Medicine and Fitness and Committee on School Health; Washington, Berhardt, Gomez, Johnson, Martin, Rowland, Small et al., 2001). Approximately 47 million youth participate in organized sports (Ewing & Seefeldt, 2002) indicating that this context is important and valued among a large segment of adolescents. Furthermore, participation in sport can have meaningful consequences for the athletes and those that surround them (Coleman, 1974; Larson, 2000). For example, if appropriately managed sports provide opportunities for adolescents to learn some of life's important lessons, while providing them a physical activity that potentially has intrinsic value (NASPE; National Association for Sport and Physical Education, 2010; National Center for Chronic Disease Prevention and Health Promotion, 1997; Perkins & Noam, 2007). Consequently, sport is a salient context youth inhabit.

Although sport participation represents a salient activity for adolescents, there are mixed results relative to the benefits of youth sport participation. Research reports many negative developmental outcomes among sport participants. These outcomes include an ethos characterized by the belief that only winning matters, alcohol misuse, burnout,

pressure to behave immorally, and other various maladaptive behavior patterns (Danish, Petitpas, & Hale, 1990, 1993; Duda, & Ntoumanis, 2004; Gibbons et al., 1995; Fraser-Thomas, Côté, & Deakin, 2005; Hansen et al., 2003; Strachan, Côté, & Deakin, 2009; Orlick, 1973). Research also reveals that youth sport programs are the only extracurricular activity linked to both positive and negative outcomes, whereas other leisure activities (e. g., academic clubs, performing arts, or volunteering) tended to be linked to positive outcomes (Barber & Eccles, 1999; Eccles et al., 2003). Therefore, the impact of sport programs on youth is equivocal. The potential and popularity of youth sport programs combined with the mixed outcomes associated with youth sport participation establishes a need to better understand the potentially beneficial and harmful characteristics of youth sport programs.

One influential socializing agent in youth sport programs is the coach. Once youth enter sport, coaches are the adult leaders who can impact the sport climate, thereby influencing athlete development (Weiss, Amorose, & Wilko, 2010). The behaviors, attitudes, and practices a coach exhibits are extended to and shared by sport participants. Thus, all team members and coaches collectively shape the sport climate. For example, coaches who create a climate built around positive and informative interactions with athletes tend to improve athletic skill while simultaneously role modeling appropriate psychosocial behavioral skills (Larson, 2006; Petitpas, et. al., 2005). An adolescent athlete may also experience a coach who emphasizes mastering a skill; thus the athlete puts forth maximal effort (Koka & Hein, 2003; Mitchell, 1996). In turn, this experience influences the norms of the group and program to develop healthy outcomes (Weinberg & Gould, 2007; Weiss, Amorose, & Wilko, 2010). In addition, supportive relationships

with teammates and friends in sports are associated with favorable positive developmental outcomes such as self-perceptions, emotions, motivation, and moral development (Smith & McDonough, 2008).

Sport programs also focus on performance excellence. Some programs may choose to emphasize winning and athletic performance rather than skill building and relationships. Although sport programs must focus on physical skills and performance, it is important to recognize that psychosocial development may be hindered in an environment where only physical skills are emphasized and valued (Côté, & Hay, 2002; Côté et al., 2009, Petitpas et al., 2005). Instead, it may be helpful if sport programs are more attuned to how the sport environment impacts not only physical achievement, but also the psychosocial development of the developing adolescent athlete.

Alpine ski racing. As a preliminary step towards a greater understanding of sport's impact on youth, the present study examines this relationship in a sample of competitive, Junior 3 (i.e., early adolescents ages 13- to 14- years old) alpine ski racers. Competitive youth sports have historically focused on athletic performance and achievement rather than more comprehensive developmental goals such as optimizing physical, intellectual, social, psychological, and emotional outcomes associated with participation (Goldberg & Chandler, 1995; Gould & Carson, 2006; Weiss, & Wiese-Bjornstal, 2009). In addition, research on youth sports has mostly focused on high school sports. As such, little attention and research has been given to competitive early adolescent athletes. Moreover, only one study has been conducted on adolescent ski racers. Bray and colleagues (2000) found somatic anxiety in British 13 to 14-year old competitive ski racers was correlated with how parents' and friends' evaluated their

performance. The early adolescent skiers were also concerned about how other competitors and friends evaluated their skiing in general. The authors suggest a need to identify, acknowledge, and address young athletes concerns about sport social evaluations. In addition, to date there is no research on American adolescent ski racers. The relative lack of research on adolescent skiers observations highlights the importance of understanding how the sport environment influences the psychosocial development of this population.

There are additional reasons the sport of alpine ski racing is being studied. Over the seventh-month ski race season athletes compete in approximately 20 races. For races, alpine ski teams typically travel more than 1 hour away for 50% of those races (USSA, 2010). Therefore, there is a decreased likelihood of nonskiing friends or parents attending these events (Bray, Martin, & Widmeyer, 2000). As a result, relationships among skiing peers and between coaches and young skiers are particularly salient in alpine skiing. Furthermore, it is likely that the context is particularly salient to skiers because of the amount of travel and time spent together that are apart from their family and others. It is possible that learning to make decisions, establishing one's identity, and maturation of morals and values, are critical developmental tasks in early adolescence that are influenced by the alpine ski racing environment. How the environment influences a particular adolescent ski racer, whether good or bad, is a question sport psychologists are just now beginning to address.

Alpine ski racing is an individual sport within a team setting. Alpine ski racing is an individual sport because no team points are calculated. Unlike other sports where the team with the most points wins, in ski racing a competitor starts with a set amount of

points with the goal of reducing those points to zero. Because each race, course, and skiing discipline is different, the reduction or addition of points is determined on a sliding scale. The amount of points that can be reduced or added to a racer's score is dependent on the level of competition at the race, the difficulty of the course, and the athlete's performance in each of the skiing disciplines. The points are used to assess how a racer performs in each competition as well as to compare a racer's performance from race to race and in different race disciplines. The points are also viewed as a tool to rank athletes nationally and internationally and to qualify them for championship races. Thus, points are used as a scoring system and a ranking system. The calculation of points begins during the Junior 3 level, continues through the collegiate or an Olympic level, and discontinues when the athlete leaves the sport. For alpine ski racers, the Junior 3 level thus marks a time when individual performances and competition begin to take center stage. Focusing on individual competition can be problematic because it may lower intrinsic motivation (Vallerand, Gauvin, & Halliwell, 1986), lead to sport withdrawal (Weinberg & Gould, 2011), and negate the importance of developing healthy assets through teamwork (Shields & Bredemeier, 2001). Alpine ski racing's focus on comparison of individual performances coupled with its high amount of traveling fosters the importance of better understanding how the alpine ski racing climate may be related to psychosocial developmental outcomes during the formative years of early adolescence.

There are numerous reasons why this study focuses on competitive Junior 3 alpine ski racers. First, the literature suggests that youth under the age of 12 are not consistently able to differentiate between the concepts of effort and ability (Nicholls, 1984; Fry, 2000). Since these concepts are critical to learning new skills and perseverance in

challenging tasks, it is important to limit the sample to youth over the age of 12. The cognitive differentiation of effort and ability is key to the more debilitating or negative motivational outcomes associated with youth sport. By focusing on Junior 3 skiers it is likely the influence of the context will be, if nothing else, more interesting than had younger skiers been targeted. The Junior 3 skier represents a fascinating intersection of cognitive maturity and competitive focus at a critical developmental period. Second, the USSA also hopes to instill alpine skiing as an enjoyable activity that lasts a lifetime, thus creating an environment that infuses a passion for the sport of skiing (S. Bougus, personal communications, November, 2010). Third, as stated earlier there has only been one study conducted on early adolescent ski racers (Bray et al., 2000). Thus, there is minimal research on this population and this study hopes to begin addressing this gap in the literature.

Last, young athletes specializing in a sport may experience less than optimal development. Côté (1999) and colleagues' (Côté, Baker, & Abernethy, 2007) developmental model of sport participation suggest athletes pass through three stages of development: the sampling years (age 6-12), the specializing years (age 13-15), and the investment years (16+). Elements differentiating each stage of development include the number of activities the youth participates in and the structure and design of the youth's practices and training. In general, youth participate in a variety of sports during the sampling years (age 6-12), a decreasing number of sports during the specializing years (age 13-15), and only one sport during the investment years (age 16+). The structure and design of youth sport practices change from a focus on deliberate play and an emphasis on motor development and fun during the sampling years to a focus on more balanced

ratio of play and deliberate practice during the specializing years, and then to a deliberate

practice during the investment years (Côté & Hay, 2002; Ericcson et al., 1993). The

athletes in this study are in the specializing years. The Junior 3 athletes are not

necessarily trying to become an elite alpine ski racer, but the specializing years are still

stressful. The risks of specialization include lack of enjoyment (Wiersma, 2000), reduced

physical health (Law, Côté, & Ericsson, 2007), burnout (Strachan, Côté, & Deakin,

2009), and potential negative psychosocial outcomes (Côté et al., 2009). Due to the

associated developmental risks versus rewards in the specialization years coupled with

the distinct and dramatic changes in adolescents under the age of 15, there are concerns

about the psychosocial growth among youth who are beginning to invest heavily in an

activity.

The concern about healthy development is not limited to alpine ski racing in the

United States (Bray et al., 2000). There is also a growing general concern about the

impact of sport on American youth (NASPE, 2010; Wiersma, 2000). The North

American Sport and Physical Education (NASPE; 2010) organization recently published

a position statement about the risks and negative outcomes associated in early

specialization among youth sport participants. Moreover, in a recent longitudinal study

assessing social-emotional development in American youth, Denham, Wyatt, Bassett,

Echeverria, and Knox (2009) suggest that there is a critical need to implement policies

that assist with alleviating negative youth outcomes, such as the increase in mental health

issues, the boost in delinquency and substance abuse, and the decrease in academic

performance among America's young people (Denham, 2006; Tremblay, 2000). The

authors note that these policies are needed because when developmental milestones of

social-emotional competence are not met, then children are at risk for psychopathology and multiple behavioral problems (Denham et al., 2009). In contrast, there are links between social-emotional competence and mental health, academic success (Denham, 2007) getting along with peers (Dougherty, 2006), and resilience with adversity (Saarni, 2000). Sport is also being viewed on an international level as a viable vehicle to promote healthy youth developmental outcomes to prepare youth for the demands and challenges of everyday life (Ennis, & Owens, 2002; Sport for Development and Peace International Working Group, 2006). Consequently, there is a world-wide concern to have programs promoting healthy youth. Sport may be a rich ground to foster positive developmental experiences and competencies. Before exploring this arena there is a need to investigate the meaning of youth development and the emergence of positive youth development.

<div align="center">Positive Youth Development (PYD)</div>

Defining Youth Development

Adolescence development, or youth development, is an umbrella term that characterizes the various growth trajectories of young people and is generally recognized as a distinct period in life (Erikson, 1968; Freud, 1969; Hall, 1904). In the early 1900s American society began to further explore the developmental possibilities associated with adolescence (Hall, 1904). Society acknowledged a responsibility to provide opportunities for youth to optimize learning and development. Over time, some people viewed adolescence as a point of increased delinquency. That is, the changes in adolescence were thought to characterize a time of normative developmental disturbances (Freud, 1969) or of identity crisis (Erikson, 1968). In the 1950s federal funding addressed the issue by

starting juvenile crime intervention and treatment programs. Treatment programs directed their efforts to fixing or preventing problem behaviors among young people. For example, youth behaviors such as low motivation, academic failure, sexual behavior, substance abuse, violence, and crime were viewed as problems to be repaired; therefore, programs had a deficit-oriented approach to cease delinquent or negative behavior (Anderson Moore, Lippman, & Brown, 2004; Catalano et al., Hellison, 2000). Through the mid- to late- 1900s, treatment programs continued to treat adolescents through the lens of a deficit-based model, which focused on alleviating single behavioral problems. Most programs were deemed ineffective due to the programs reactive approach and lack of multidimensionality (Pittman, 1991).

Over the last two decades, a new vision of normative adolescent development has gained widespread acceptance (Catalano et al., 2002; Eccles, 1999; Harter, & Monsour, 1992; Lerner, Lerner, Almerigi et al., 2005b; Pittman, 1991; Pittman, Irby, & Ferber, 2001; Witt & Caldwell, 2005). Instead of viewing young people as problems to be resolved, youth advocates began treating young people as resources who have the potential to achieve healthy development. This new approach was initiated by Pittman's (1991) seminal article that declared that youth without problems were not necessarily adequately prepared to emerge into adulthood. Currently researchers, practitioners, and programs encourage youth to contest these negative tendencies by developing personal and social assets to become productive, successful adults in today's society (Benson, 2006; Eccles & Gootman, 2002; Gano-Overway et al., 2009; Lerner, Lerner, Almerigi et al., 2005b; Weiss & Wiese-Bjornstal, 2009). This new approach is termed positive youth development.

<u>Emergence of PYD</u>

The PYD approach is a relatively new way of understanding how to foster healthy development in adolescent contexts (e.g., home, community, school, sport). This approach is not *new* due to decades of research on adolescent development, but rather a change in philosophy that utilizes an asset-based approach. PYD is emerging as a proactive way of promoting positive outcomes, such as confidence, competence, and caring (Lerner & Lerner, 2006). Viewing youth as resources, instead of problems in need of fixing, characterizes a paradigm shift in researchers understanding how young people develop. Yet even with this evolution of understanding exact definitions of PYD remain elusive.

The construct PYD is broad and open to interpretation (Damon, 2004; King et al., 2005). Positive youth development has been described as a process, journey, philosophy, outcome, phase, and movement. The term PYD is defined differently depending on the field of study applying the PYD construct. Furthermore, an array of government agencies, nonprofit organizations, and foundations fund and create an immense amount of research and resources for PYD (Benson & Pittman, 2001).

For example, The National Collaboration for Youth (NCY, 1998), a forty year old nonprofit organization defines youth development as "A process which prepares young people to meet the challenges of adolescence and adulthood through a coordinated, progressive series of activities and experiences which help them to become socially, morally, emotionally, physically, and cognitively competent" (sparkaction.org). Pittman, Senior Vice President of the International Youth Foundation (IYF), Executive Director of the Forum for Youth Investment (FYI), and leader in researching, understanding, and

writing about PYD believes PYD is "the ongoing growth process in which all youth are engaged in attempting to (1) meet their basic personal and social needs to be safe, feel cared for, be valued, be useful, and be spiritually grounded, and (2) to build skills and competencies that allow them to function and contribute in their daily lives" (Pittman, 1993, p. 8). In articulating their vision of youth development, MacDonald and Valdivieso (2001) explain, "what we want our children to acquire is a rich array of social and intellectual knowledge, attitudes, and competencies that will enable them to be caring people and productive citizens" (p. 172).

As with most relatively new areas of scientific study in the social psychological realm, lack of definitional agreement is a problem (Catalano et al., 2002; Damon, 2004; Lerner Lerner, Almerigi et al., 2005b). This study will use a definition by Weiss and Wiese-Bjornstal (2009), who stated "Positive youth development refers to development of personal skills or assets, including cognitive, social, emotional, and intellectual qualities necessary for youth to become successfully functioning members of society" (p. 1). This particular definition was chosen because it is based on an extensive review of PYD, encompasses the essence of all the PYD definitions and emanates from sport and physical activity psychology. The personal skills to be developed include, but are not limited to, confidence, motivation, caring, interpersonal interactions, and optimism (Benson, 2006; Eccles & Gootman, 2002, Lerner, Lerner, Almerigi et al., 2005b).

PYD Programs Features

PYD exists in an array of forms. It can be found in different settings, relationships, and institutions. For example, PYD occurs when youth experience

opportunities to belong and develop competencies through interactions with significant others in family, peer, school, and leisure settings (Eccles & Gootman, 2002; Weiss & Bjornstal, 2009). While each PYD framework has unique qualities, there are two common elements among all the frameworks: (a) appropriate contexts and (b) the growth of key youth developmental outcomes. First, an appropriate context refers to the features in settings that support youths' perception of a psychologically and physically safe environment. An optimal PYD context includes intentional programming of developmentally appropriate activities focused on autonomy, mastery, enjoyment, and learning (Roth & Brooks-Gunn, 2003, Witt, 2002). In addition, PYD is linked to contexts that have caring adult mentors who create positive social norms, good communications, and clear and consistent expectations (Gano-Overway et al., 2009; Rhodes, 2004).

Second, scholars, policy makers, and practitioners have identified an extensive list of key developmental outcomes (e.g., positive identity, social competence, skill mastery) important for healthy youth development. Although the field is just beginning to define the outcomes associated with positive developmental experiences, longitudinal research supports competence, social connection, and physical safety as universal needs and outcomes for adolescents (see Eccles & Gootman, 2002). In addition, scientific evidence from both short- and long-term experimental and observational studies support these as being key factors in developmental growth (see Carnegie Corporation of New York, 1992; see Catalona et al., 2002). More notably, it has been posited that when appropriate contextual features are aligned with the essential developmental assets youth acquire healthy outcomes and experiences (Dworkin, & Larson, 2006; Lerner, Lerner, Almerigi et al., 2005b; Petitpas et al., 2005; Phelps et al., 2009).

Although several frameworks exist for conceptualizing PYD, the most notable are (a) Lerner's Five C's; (b) Benson's Search Institute Developmental Assets®; (c) Pittman's Forum of Youth Investment; and (d) Eccles and Gootman's NRCIM's contextual features and personal and social assets. First, Lerner et al. framework (Lerner, Almerigi, Theokas, & Lerner, 2005a) consists of the five C's (Character, Confidence, Competence, Connection, and Caring). An additional C, Contribution, was added to the original five C's as another developmental outcome to attain after achieving the original five C's (Lerner, Lerner, Almerigi et al., 2005b). Data from longitudinal studies has linked the five C's to healthy outcomes among a nationally diverse sample of early adolescents (Lerner et al., 2005a, 2005b). The authors note that the outcomes are most likely to be positive when youth engage in activities with positive adult relationships and opportunities to display competence and leadership (Lerner et al., 2005a).

The second framework is the Search Institute's (2010) Developmental Assets® (Benson, 1997; Search Institute, Minneapolis, MN, 2010). This framework includes 20 *external* assets (e.g., peer, family, and other adult relationships) and 20 *internal* assets (e.g. self-efficacy, responsibility, achievement motivation) that promote positive experiences and opportunities required for healthy growth within young people. For example, socializing agents, such as parents, teachers, coaches or peers, help young people develop personal skills and qualities while participating in activities. Thereby, external assets are resources that foster internal assets to promote overall growth.

The Search Institute's framework parallels that of the third framework, namely the Forum of Youth Investment. Pittman et al. (1991, 2001) view young people as assets, and accordingly, society should provide youth a framework of (a) support; (b)

opportunities; and (c) programs/services. An example of this framework includes supportive role models, who not only provide challenging tasks with quality feedback for youth to learn within a safe setting, but also provide clear instructions and high expectations for youth to build healthy relationships.

The fourth framework emanates from the National Research Council (NRC) and Institute of Medicine (IOM) (NCRIM; Eccles & Gootman, 2002). The NRCIM is comprised of leading scholars in specific fields. The NRCIM group was tasked with providing guidance relative to describing program characteristics that positively impact young people, and then to use their findings to direct policies and actions (IOM, 2010; NRC, 2010).

Because the NRCIM framework has the greatest scientific basis and encompasses all the features of the other PYD frameworks, it is the framework used in the present study. The NCRIM group used theory, practical experience, and empirical research in the fields of psychology, anthropology, sociology, and others to identify program characteristics and positive outcomes that undergird health and well-being throughout adolescence and into adulthood (Eccles & Gootman, 2002). The framework emphasizes two main elements: contextual features and personal and social assets (discussed in a subsequent section). Contextual features are thought to be the building blocks of quality youth development programs. The features encompass particular situational supports and include the following:

1. a physical and psychologically welcoming and safe environment;
2. an appropriate structure that emphasizes clear expectations and allows for democratic power sharing;

3. opportunities for belonging through meaningful participation and engagement;

4. positive social norming through critical reflection of interpersonal and social/political processes;

5. support for efficacy and mattering that supports autonomy and enables responsibility;

6. integration of personal and community level commitment, opportunity, and involvement;

7. supportive and sustained relationships with adults; and

8. opportunities for skill building that afford participation in change processes;

These eight contextual characteristics represent the ideal features of a PYD setting. The contextual features set the stage for optimization of the four areas of personal and social assets (e.g. physical, intellectual, psychological and emotional, and social development). The NRCIM recommends research is needed to explore what key contextual features contribute to personal and social asset development (Eccles & Gootman, 2002). To date, there is no literature assessing how the contextual features influence personal and social assets. The present study focuses on a combination of contextual features and personal and social assets relevant to early adolescent athletes.

Social Psychological Climate

The current study is based on the NRCIM framework, which supports the premise that young people attain personal and social assets in an environment that facilitates certain contextual features for adolescent well-being (Eccles & Gootman, 2002). A greater number of positive contextual features in the setting result in a greater

contribution to positive development of youth (Dryfoos, 1991, 2001; McLauglin, 2000; Merry, 2000). Yet, all positive contextual features are not required to promote PYD (Catalano et al., 2002; Eccles & Gootman, 2002).

Two critical contextual features in the NRCIM framework are opportunities for skill building and supportive relationships. According to the NRCIM (Eccles & Gootman, 2002), opportunities for skill building refer to programs offering intentional learning experiences to improve physical, intellectual, psychological, emotional, and social skills. Supportive relationships offer opportunities to form adult and peer relationships that are warm, close, caring, and respectful with the goal of appreciating and valuing individuals.

Opportunities for skill building and supportive relationships are also two key factors in the PYD literature. The United States Department of Health and Human Services funded one of the most comprehensive reviews on PYD programs. Catalano, Berglund, Ryan, Lonczak, and Hawkins (2002) initially reviewed 161 PYD program evaluations, 77 of which met the initial criteria for the scope of the study. In the final analysis only 25 PYD evaluations met the criteria to be included in the study. To be included in the report, the 25 PYD evaluations employed either a control or comparison group design, described the population, described how the intervention promoted PYD, and provided evidence of having at least one significant effect of either enhancing PYD behavioral outcome (i.e., resilience, self-efficacy, positive identity, prosocial norms, etc.), reducing negative outcomes, or both. The majority of participants in these evaluations were in grades four through nine and new to the PYD program. Although Catalano et al. (2002) concluded that a wide range of approaches can result in PYD outcomes, the most

effective programs provided opportunities for skill building, such as decision-making and self-management skills and incorporated an environmental/organizational change. The environmental/organizational change included influencing teacher's classroom practices (i.e., opportunities for prosocial involvement) or influencing peer norms and perceptions (i.e., recognition for positive behavior). Effective programs intentionally promoted social, cognitive, and emotional competencies, personal and community prosocial norms, and self-efficacy. This comprehensive review supports the contention that programs with an objective of implementing contextual features aligned with a PYD approach can help young people develop healthy outcomes. Other reviews confirm Catalano et al. conclusions. For example, Roth et al. (Roth, Brooks-Gunn, Murray, & Foster, 1998) reviewed over 60 PYD programs aimed at prevention or intervention. The most effective programs involved caring adult-youth relationships and life skill development. The authors also stated that longer-term programs (i.e., 6 months or greater) were more effective than short-term programs. However, the evidence for the length of a program and its effect on development is minimal. Within the NRCIM framework and the PYD literature, it is evident that opportunities for skill building and supportive relationships are critical contextual features for youth to develop healthy assets.

Very little research directly or consistently examines the link between contextual features in programs (i.e., opportunities to belong and supportive, caring relationships) and PYD in young people. A primary aim of this study is to determine the relationship of key contextual features and PYD in youth involved in sport. The sport psychology literature has identified critical features of the sport climate that coincide with the contextual features suggested by the NRCIM. Collectively, the features are key

characteristics of the social psychological climate. The social psychological climate

refers to the factors contributing to the overall perceived motivational and relational

atmosphere in physical activity settings. More specifically, the social psychological

climate refers to the ways in which effort, ability, and interpersonal connections are

valued, emphasized, and rewarded in physical activity settings (Fry & Gano-Overway,

2010; Newton, Fry, Watson, Gano-Overway, Kim, Magyar, & Guivernau, 2007).

Ego-involving and task-involving motivational climates are important elements

within the social psychological climate, and are derived from the achievement goal

theory (Nicholls, 1984, 1989). Achievement goal theory has been one of the main

theoretical frameworks used to study motivation and behavior in youth sports.

Achievement goal theory proposes that motivation is influenced by personal dispositions

as well as perceptions of the prevailing motivational climate in a particular setting

(Nicholls, 1984, 1989). Personal dispositional differences refer to the manner in which

competence is construed. Competence can be processed in a self-referenced manner and

based upon personal improvement (i.e., task orientation) or it can be normatively-

referenced and demonstrated by outperforming others (i.e., ego orientation) (Nicholls,

1989). A motivational climate is based on a leader's cues and expectations in a setting

that encourages an individual to process his or her competence in a self- or other-

referenced manner (Nicholls, 1984). Therefore, factors in an ego-involving or a task-

involving climate play a substantial role in the activation and direction of achievement

behaviors in youth (Ames, 1992).

There are distinct differences between an ego-involving and a task-involving

climate (Ames, 1992, Nicholls, 1989). An ego-involving climate emphasizes social

comparison and superior ability. Coaches value performances and outcomes over the processes of learning and mastery. In contrast, in a task-involving climate, coaches encourage effort, self-improvement, and cooperation. Empirical literature (Newton, Duda, & Yin, 2000; Ommunsdsen, Robert, & Kavusanau, 1998; Treasure, 1997), as well as a small-scale meta-analysis (Ntoumanis & Biddle, 1999), support the theoretical suggestion that a task-involving climate is associated with more adaptive behaviors, cognitions, and emotions than an ego-involving climate. When athletes perceive a task-involving climate, they focus on their own standards and avoid concerns about the outcome, which can enhance motivation, self-esteem, enjoyment, positive psychosocial and psychomotor development, and reduce competitive anxiety (Ferrer-Caja and Weiss, 2002; Hellison & Templin, 1991; Koka & Hein, 2002, Mitchell, 1996; Standage, Duda, & Pensgaard, 2005; Wentzel, 1997; Wigfield & Eccles, 1992). In contrast, a perception of an ego-involving climate causes feelings of anxiety, maladaptive attributions, reduced effort, and unsportpersonlike behaviors (Quested, & Duda, 2010, Smith, Smoll, & Cumming, 2007; Weiss & Wein-Bjornstal, 2010). Consequently, the sport climate has the potential to thwart development. This becomes noteworthy because early adolescence is a time where one begins to rely more on peer comparison and evaluation from peers and coaches. Moreover, according to Treasure and Roberts (1994), the climate can override dispositional goals. Thus, the influence of the climate can influence development. Yet, there is no empirical evidence supporting how the motivational climate impacts PYD.

While ego-involving and task-involving climates are central to how the psychological climate has been articulated, research suggests this may not be a complete guide to the motivational climate or the social psychological climate (Elliot, 1999, 2005).

Drawing from the sport and PYD literature, there is mounting evidence that a caring climate exerts a significant influence in the life of a young person (Allen, 2003; Fry & Gano-Overway, 2010; Gano-Overway et al. 2009; Maygar, Guivernau, Newton, Kim, Watson, & Fry, 2007; Larson 2006; Rhodes, 2004; Roth & Brooks-Gunn, 2003). A caring climate is operationally defined as the extent to which individuals perceive a particular setting to be interpersonally inviting, safe, supportive and able to provide them with the experience of being valued and respected (Newton et al., 2007). Because the literature has recently begun to explore caring as an important factor in youth development, a more extensive explanation of caring is warrented.

The definition of a caring climate exists within relationships and was influenced by many researchers. Hellison (2003), creator of Teaching Responsibility Through Physical Education, suggests that caring is the basis of quality student teacher relationships and is critical to teaching responsibility. Philosopher Milton Mayeroff (1971) states that caring for others is to assist them in caring for themselves. Gordon, Benner, and Noddings (1996) define caring as a fundamental relational activity that cultivates empowerment, mutual appreciation, genuine affection, and support to assist in growth and actualization.

Educational psychologist, Noddings, (1984, 1992, 1996) has led the discussion of caring. Noddings' (1984, 1992) primary claim is that caring is fundamentally a reciprocal relational activity. This relationship is characterized by the carer (the one caring) and the recipient of care (the cared for). For the relationship to exist both parties must contribute; otherwise, it is obsolete.

Therefore, two specific traits facilitate the ethic of a caring relationship. The qualities of the one caring consist of engrossment and a motivational shift from the one caring to the cared for (Noddings, 1992). Engrossment is characterized by providing full attention and concern for the others' entire well-being, going beyond empathy. Therefore, the one caring authentically feels, sees, and hears what the cared for is attempting to communicate. The one caring acknowledges and accepts the cared for. The cared for feels a sense of belonging when his or her thoughts and feelings are valued. Thus, the one caring becomes engrossed in the cared for and the reciprocal relation thrives.

The second quality of the one caring is motivational displacement. It reflects the one caring shifting all his or her attention from the self to focus entirely on the cared for. As the attitude and energy of the one caring moves toward the cared for, the one caring displays a sense of concern, security, and improvement for the individual being cared for. Thus, the one caring accepts and supports the cared for. Simultaneously, the one caring views the cared for's world through his or her eyes. Thus, the one caring individually evaluates each situation for its uniqueness for the development of the cared for (Noddings, 1996).

Caring emerges from connections with others. If someone cares for someone else or is being cared for, then a feeling of connectedness or belonging arises (Noddings, 1984). A caring interaction is mutual between the one caring and the cared for, which may create an atmosphere of nurturance and support instead of isolation. Adults who exhibit caring behaviors (i.e., engrossment and modeling) tend to be more responsive to others' needs and provide opportunities to care (Noddings, 1984). Hence, caring provides an opportunity for human beings to experience a warm, compassionate relationship.

Thus, a culture of care is essential in lives of young people.

The extent to which youth feel cared for has implications for an array of personal skills such as self-efficacy, social-emotional competence, personal mastery, and character development (Noblit, 1993; Noblit & Rogers, 1995; Noddings, 1995, 2002; Tappan, 1998; Wentzel, 1997). Within the school setting, caring connections between teachers and students are thought to enhance students' academic motivation and achievement (Catalano et al., 2004; Roeser, Midgley, & Urdan, 1996) as well as buffer the potentially detrimental effects of negative peer behaviors (McNeely & Falci, 2004; Wilson, 2004). In this way, caring relationships between youth and adults are considered factors that protect youth from harmful social pressures and maladaptive behaviors (Resnick et al., 1997). Despite the mounting evidence that caring relationships are related to positive outcomes in youth, schools may be limited in their capacity to promote caring connections. With increased classroom sizes and the increased importance of standardized testing, teachers may be limited in their ability to foster a caring relation with each student in his or her classroom. In addition, caring is a reciprocal relational activity. Consequently, youth may not choose to care for their teacher or ignite a passion for academic learning. Therefore, the voluntary activities that youth participate in and have an existing proclivity for (i.e., band, sport) may be more suitable settings for mutual caring relationships to develop (Coleman, 1974; Larson, 2000).

Caring is an essential nutrient for healthy growth of young people and, as such, should be a central feature in researching youth sport programs. Newton, Watson et al. (2007) conducted the only experimental study to date that incorporated the components of caring. In a summer youth sport program, the researchers presented one group of youth

sport staff with a caring curriculum while the other staff did not receive any training. The experimental condition was integrated with the following caring strategies: caring-based staff training, sequential activities to foster group dynamics, and incentives for youth who exhibit caring behavior. Youth in the caring climate group reported significantly higher levels of empathy and willingness to participate in future programs. Other research has linked higher perceptions of a caring climate with lower antisocial behaviors and higher prosocial behavior (Gano-Overway et al., 2009) as well as positive attitudes and caring behaviors toward teammates and coaches among young athletes (Fry & Gano-Overway, 2010). These findings suggest caring sport programs may play an important role in optimizing PYD. However, there are only three studies to date examining a caring climate and developmental assets within a youth sport program. Therefore, there is a need to further explore how a caring climate contributes to youth development in sport programs.

Furthermore, research has yet to examine the link among perceptions of a caring climate, a task-involving climate, and an ego-involving climate on personal and social assets. Research consistently reveals that athletes who perceive task-involving and caring climates versus an ego-involving climate demonstrate adaptive psychosocial outcomes. In fact, Weiss and Wiese-Bjornstal (2009) recently synthesized the sport and PYD literature and declared that a caring, task-involving climate was an essential ingredient to promote PYD through physical activity. Although a powerful statement, research is fairly minimal in supporting this declaration. In order to create such a climate, it is paramount to better understand the ways in which the social psychological climate might foster personal and social assets among youth sport participants.

Personal and Social Assets

Having discussed the major contextual features associated with PYD programs

and youth sport programs, this literature review now turns to personal and social assets

likely to promote healthy outcomes in early adolescence. Researchers and practitioners

offer a multitude of suggestions of what constitutes the necessary assets for positive

development among youth (Arnold, & Meinhold, 2008; Benson, 2006; Eccles &

Gootman, 2002; Hansen & Larson, 2005; Henderson et al., 2005; Lerner et al., 2005a).

Supporting the empirical recommendations of both scientists and practitioners from the

resiliency and adolescent development literature (Clausen, 1993; Werner, 1982, 1992),

the NRCIM provides a comprehensive list of positive youth assets (Eccles & Gootman,

2002). The list is organized into four general categories: physical, intellectual, social, and

psychological and emotional development. Although each category is a complex,

interconnected system, the NRCIM suggests a young person can do quite well with only

a subset of assets in each category (Eccles & Gootman, 2002). In fact, a varied

combination of personal and social assets within each domain has resulted in positive

youth outcomes (Arnold, & Meinhold, 2008; Benson, 2006; Lerner et al., 2005a, 2005b)

and lowering the occurrence of youth problems (Catalano et al., 2002).

According to many developmental theorists, perhaps the most important assets for

early adolescence include self-efficacy, intrinsic motivation, fun, and connectedness

(Bowbly, 1969; Bandura, 1994; Deci & Ryan, 1985; Harter, 1998; Lerner et al., 2000).

These assets lie within the psychological and emotional development category and the

social development category in the NRCIM framework. The present study focuses on

these psychosocial assets.

<u>Self-efficacy</u>. Self-efficacy refers to one's beliefs in his or her own capabilities to learn a specific behavior at a designated level (Bandura, 1997). The theory of self-efficacy was developed within the framework of social cognitive theory (Bandura, 1977, 1997), which assumes that behavioral, environmental, and personal factors have a reciprocal, interacting relationship. Consequently, not only do behaviors affect the environment, but the environment also affects behaviors. Behaviorally, individuals are proactive agents in the regulation of their cognitions, motivations, actions, and emotions. As active agents, individuals use forethought and self-regulation to influence their functioning rather than being passive reactors to their environment. Environmental factors (e.g., interactions with others) also have an impact on behavior. For example, a coach's positive and instructive feedback can influence an athlete's belief in his or her own achievement, which impacts the young athlete's effort to reach particular goals (Feltz, Short, & Sullivan, 2008). This effort, then, influences a coach's reaction to the athlete (Horne, Lox, & Labrador, 2006).

Despite the interaction among different factors, probably the most critical aspect to this approach is one's belief that he or she can successfully perform a behavior (self-efficacy). Self-efficacy is a result of cognitive functions and is influenced by the limitations associated with the individual's development period (Harter, 1999). In adolescence, new cognitive abilities enable individuals to form multiple selves in different contexts. Adolescents do not have all the skills to coherently organize or hypothesize a self-portrait (Piaget, 1972). Piaget (1972) suggests adolescents are beginning to be able to think abstractly. When an adolescent first moves to this level of abstract thought, the young person is only able to think of each attribute of the self in

isolation (Fischer, 1980). For example, adolescents may think of themselves as intelligent at school, but inept at home and are unable to integrate these qualities into the idea of the self as one. The inability to integrate qualities of the self spares the young adolescent conflict over contradictory characteristics (Harter & Monsour, 1992).

Therefore, the exact means in which one *should* feel efficacious are likely to be quite situation specific. That is, a positive sense of self-efficacy depends on competence in those areas valued by the group in which one is a member (Ogbu, 1994; Shweder et al., 1998). Thus, a valued setting that focuses on self-efficacy in adolescence serves to shape goals (Dweck, 1991), assist in suitable social behaviors (Bandura, 1977), and aid in self-regulation (Higgins, 1991). In sport and physical activity settings, self-efficacy results from exerting more effort, persistence in the activity, improving skills, attempting new motor skills, perseverance on challenging tasks, feeling physically and mentally prepared for optimal performance, and enjoyment (Eccles & Harold, 1991; Vealey et al., 1998, Feltz & Payment, 2005; Hagger, 1998; Weiss & Ferrer-Caja, 2002). Furthermore, Chase (1998) showed that the primary sources of efficacy information for children and adolescent athletes and physical education participants were feedback from significant others and personal performance accomplishments. More specifically, 13- to 14-year olds indicated praise and encouragement from significant others as the most important to self-efficacy, followed by how the coach's evaluation was central to their confidence, and lastly their self-appraisal from successful personal performances indicated efficacy. Magyar and Feltz (2003) replicated these results with adolescent girl athletes. An early adolescent athlete's perception of his or her efficacy in sport is not only linked to personal and behavioral factors, but also from the setting or environmental influences.

Therefore, it becomes important for sport settings to understand how the features in the setting impact an adolescent athlete's confidence.

To summarize, both theory and empirical research suggest that self-efficacy is key to positive human development. It is essential that sport programs for youth incorporate rich opportunities for youth to feel efficacious in sport. Support is emerging for the potential for self-efficacy to be an important factor in sport; however, little is known about how self-efficacy is influenced in a sport environment. Even less is known about self-efficacy in early adolescent athletes. Therefore, self-efficacy is an asset evaluated in present study.

Intrinsic motivation. The NRCIM suggest positive achievement motivation is an essential psychological asset in PYD (Eccles & Gootman, 2002). Contemporary thinking views intrinsic motivation as a core aspect to achievement motivation (Ryan & Deci, 2000; Elliot & Dweck, 2005). Intrinsic motivation refers to individuals striving inwardly to be competent and self-determined in their pursuit to master a task (Ryan & Deci, 2001).

Studying intrinsic motivation is an essential psychological asset for youth development. It is important because intrinsically motivated people do an activity as an end in and of itself rather than for a means to and end or for an extrinsic reward (e.g., money, trophy) (Ryan & Deci, 2000). Additionally, intrinsically motivated people perceive themselves as the cause of their behavior, whereas extrinsically motivated people view the cause of their behavior to be outside of themselves (DeCharms, 1976). Therefore, intrinsic motivation is contrasted with external motivation because the externally motivated person completes a task to receive a reward or achieve a valued

outcome. Consequently, people's behaviors require motivation and to be intrinsically motivated in an activity gives someone the freedom to do what is personally important and vitalizing (Ryan & Deci, 2000). In essence, being intrinsically motivated is central to who we are because it emanates from a sense of satisfaction in learning, exploring, mastering a difficult task, or trying to understand something new.

Intrinsic motivation is an effective asset for youth development in sport and physical activity (Koka & Hein, 2002, Newton & Duda, 1999). In sport, intrinsically motivated athletes typically enjoy competition, benefit from self-competition, focus on fun, and want to learn skills to the best of their ability (McAuley & Tammen, 1989; Weinberg & Gould, 2011). Intrinsically motivated youth are also more likely to stay involved with their sport or physical activity, possess more positive self-perceptions, have better relationships with peers and coaches, and find enjoyment in the activity (Ferrer-Caja, & Weiss, 2000; Seifriz, Duda, & Chi, 1992; Smith, 1999; Stuntz & Weiss, 2009, Weiss & Smith, 2002). Moreover, Eccles and Harold (1991) reported if youth find their experience enjoyable they have a greater probability to participate by choice and with greater intensity and persistence. Intrinsic motivation is also linked to other developmental outcomes. For example, Ferrer-Caja and Weiss (2002) found that perceived competence and task-orientation are correlated with intrinsic motivation, thus linking intrinsic motivation to increased effort and perseverance. Furthermore, enjoyment, competence, and mastery in an activity can lead to higher self-esteem, which in turn is related to adherence and maintenance of sport and physical activity (Hagger, 1998). Therefore, intrinsic motivation is an important asset in healthy development.

In recent years researchers have found that the climate is influential in impacting

intrinsic motivation among youth physical activity participants (Mitchell, 1996, Ntoumanis & Biddle, 1999, Weiss, Amorose, & Wilko, 2008). Across physical activity disciplines, the social psychological climate is a key ingredient for intrinsic motivation in youth. Mitchell (1996) found intrinsic motivation was optimized when the physical education learning environment was safe and students did not feel their self-esteem or physical ability was threatened. Similarly, Koka and Hein (2002) found physical education teachers who provided positive feedback increased intrinsic motivation mostly through a student's decreased perception of threat to self. Sport psychology researchers (Kavussana & Roberts, 1996; Koka & Hein, 2003; Weiss, Amorose, & Wilko, 2008) indicate that intrinsic motivation was higher when youth perceived a motivational climate as more task-involving rather than ego-involving. Although the impact of motivational climate on intrinsic motivation has been studied extensively, studies are relatively rare in early adolescent athletes. In addition, there is a need to understand how a caring climate may contribute to intrinsic motivation.

Fun. A concept related to intrinsic motivation is fun. Fun refers to an enjoyable emotional reaction experienced during a particular behavior. Fun is a central determinant of whether youth continue to engage in any activity (Dworkin & Larson, 2006; Ewing & Seedfeldt, 1996; Gould & Horn, 1984; Larson, 2000). Some 8,000 youth athletes (49% male, 51% female) participating in school and nonschool athletic programs ranked fun as the most important reason for playing sports (Ewing & Seefeldt, 1996). Moreover, sport participation peaks in early adolescence but declines around the age of 13 (Seefeldt & Ewing, 1997). The dropout rate suggests that for every 10 youth participating in a sport season, three to four will dropout before the next season (Gould & Petlichkoff, 1988).

The most reported reason for discontinuation of a sport is not having fun (Dworkin &
Larson, 2006; Weinberg & Gould, 2011; Weiss & Ferrer-Caja, 2002). From these
findings, it can be inferred that fun is a developmentally appropriate indicator of positive
achievement motivation and PYD. Yet, the contextual features influencing fun in youth
sport participants are not known with certainty.

      Connectedness. Based upon educational, psychological, and adolescent
development literature, the NRCIM defines connectedness as perceived good
relationships and trust with parents, peers, and other adults (Eccles & Gootman, 2002).
Within the literature there is strong evidence to support the importance of connectedness
as a social asset in the NRCIM framework.

      Developmental psychologists have suggested that an adolescent's drive for
connectedness is one of the strongest motivational needs (Bowbly, 1969, Deci & Ryan,
1985, 2000; Erickson, 1968; Rossi & Rossi, 1990). Baumeister and Leary (1995) reported
the need to form attachments to others and the development of interpersonal relationships
as a fundamental human motive that satisfies a number of psychological needs. For
example, connectedness influences a variety of social cognitive (e.g., self-efficacy) and
emotional constructs (e.g., optimism), predicts behavior within many contexts, and if
absent, impacts psychological adjustment and well-being (Baumeister & Leary, 1995).
Furthermore, within different youth contexts, connectedness predicted academic success,
enjoyment of school, good mental health, positive personal and social identities,
confidence, optimism, decreased negative developmental experiences, and offset the
effects of problem behaviors (Battistich, Schaps, & Wilson, 2004; Hawkins, Doueck, &
Lishner, 1988; Resnick, 1997; Wentzel, 1991; Werner & Smith, 1992).

All youth, but especially early adolescents, need to fit in or feel connected. Thus, an early adolescent is highly motivated to become involved in a larger social network (Coleman 1961, 1990). Engaging in a large social network includes accepting the group's social norms, values, and expectations. Once an early adolescent becomes more involved with a group, then he or she is prone to internalize the group's values and norms and adopt them as their own (Bandura, 1977; Coleman, 1990, Shweder et al., 1998). Internalizing these values and norms may influence an individual's actions, whether good or ill intentioned (Deci & Ryan, 1985; Steinberg, 2005).

Adolescents tend to be especially receptive to their external environment (Erikson, 1968). In an optimal context, prosocial values are likely to develop in young people (Baumeister & Leary, 1995). When a context provides a place for connectedness in a positive social setting, developmental processes of youth can be guided to internalize proper moral values and attitudes (Eccles & Gootman, 2002). However, an individual can just as easily become a part of a problematic group. This is likely to occur when youth associate with groups exhibiting antisocial behaviors or when prosocial groups exclude an individual (Asher & Wheeler, 1985; Cairns & Cairns, 1994; Dougherty, 2006). Due to adolescents' motivation to become involved in a larger social network (Bowbly, 1969, Erickson, 1968; Rossi & Rossi, 1990), antisocial behaviors are cultivated into the young person's attitudes and actions. Thus, the social context provides a powerful opportunity to positively influence development when certain conditions are met (Baumeister & Leary, 1995; Erickson, 1968).

Sport is an important social context in the lives of adolescents and thus it can be a critical vehicle to promote connectedness. Sport can provide connectedness through two

opportunities: (a) making friends and (b) interacting with nonfamilial adults. These opportunities are important because around the age of 12 peer influences and nonfamilial relations become more significant as adolescents seek independence while also wanting guidance from adults (Ripke, Huston, Eccles, & Templeton, 2008; Weinberg & Gould, 2011).

Peer relationships are an important component of connectedness in sport. In interviews, adolescents reported that their involvement in sport increased their number of friends and that these peer relationships were stronger than those with other friends. (Patrick, Ryan, Alfed-Liro, & Fredricks, 1999). Peer relationships in sport can also enhance one's physical self-perceptions, enjoyment, and sport commitment (Weiss & Stuntz, 2004). Supporting these findings, Allen (2003) found peer relationships to be a strong predictor for participation in sport activities. Weiss, Smith, and Theeboom (1996) conducted interviews with 8- to 16-year old athletes and found companionship, self-esteem enhancement, intimacy, emotional support, loyalty, and prosocial behaviors as positive dimensions of peer relationships in sport. Loyalty and prosocial behaviors were more frequently identified in youth under 13, whereas intimacy was more frequently reported in youth 13- to 16-years old (Weiss, Smith, & Theeboom, 1996). They also mentioned negative dimensions of peer relationships. Youth athletes noted that betrayal, conflict, and antisocial behaviors, such as being self-centered, are negative facets of sport participation. However, they identified more positive dimensions than negative ones.

In an attempt to understand developmental issues associated with youth sport participation, Holt and colleagues (2009) interviewed 40 young adults (20 males and 20 females) who were competitive youth sport participants during their adolescence. Relying

on participants to retrospectively evaluate their youth sport experiences, the study's main finding was sport participation alone did not enhance positive development. Instead, social interactions were fundamental in how athletes learned life skills. More specifically, peer relationships within the youth sport context appeared to have the most meaningful and long-lasting effect in healthy development. The young adults participating in this study recalled that the skills they learned while competing as youths continued to be relevant in their adult lives. Research on peer relationships in sport has shown that peers positively and negatively influence youth. As a result, an early adolescent athlete's perception of good relationships (i.e., connectedness) is an important asset to further explore.

Connectedness can also be achieved by building positive relationships with adults. There is a growing body of research suggesting connection to nonparental adults can improve the health and well-being of young people (Larson, 2000; Scales, Benson, & Mannes, 2006). Holt and colleagues (2009) also reported that the young adults indicated that parents and coaches were influential in the development of life skills. Catalano et al., (2002), who reviewed 25 youth programs and Roth and colleagues (1998) who reviewed 15 prevention or intervention youth programs, both concluded that adult-youth relationships and healthy development outcomes were influential factors that positively influenced youth. This supports the finding that if youth have at least one supportive adult relationship this signifies a *'tipping point'* of healthy development (Gambone, Klem, & Connel, 2002). In addition, youth who have one such relationship are less likely to develop maladaptive behaviors than those who do not have a supportive relationship with an adult (Gambone, Klem, & Connel, 2002). This is also supported in other

literature. For example, nonfamilial adult relations can decrease behavior problems, decrease experimentation with sex or drugs, and increase academic performance in young people (Goodenow, 1993; Grossman & Bulle, 2006; Loncsak, Abbott, & Hawkins, 2002; Rhodes 2004; Scales, Benson, & Mannes, 2006).

Adolescents appear to be open to nonfamilial adults as they strive for independence from their parents, while still valuing advice from adult figures. For example, an adult-youth connection may help young people to trust themselves and their social interactions with others (Rhodes, 2004). The ability to trust oneself is important in the development of social support and self-efficacy because an individual can gain control over his or her life, create positive outcomes in the future, prevent negative outcomes from occurring, and understand how to socially interact with confidence (Bandura, 1997; Shields & Bredemeier, 2001). Therefore, youth benefit from adult-youth relationships because such relationships provide young people with resources that otherwise may be outside of their reach (Vygotsky, 1978).

Sport settings can facilitate the development of these relationships. Positive relationships can form quickly and easily because youth and coaches share common interests. For example, Grossman and Rhodes (2002) found that a shared interest was one of the few factors that predicted a positive mentoring relationship for young people. This interest is demonstrated when coaches share their passion for the activity with youth, thus creating an immediate bond. Drawing on 25 years of researching coach-effectiveness training, Smith et al. (1979) and Smoll et al. (1979, 2001) found that coaches who were trained in creating a supportive relationship with youth athletes and who gave higher quality instructions, better facilitated the adult-youth connection. Therefore, coaches can

facilitate development through meeting athletes' needs for belongingness or connectedness. Supporting these findings, Weiss and Stuntz (2004) identified implications for practitioners in developing connectedness. Most notably, coaches can increase connectedness by creating task-involving climates that promote cooperation versus competition. More recently, Weiss and Weise-Bjornstal (2009) advise that not only a task-involving climate but a caring climate and supportive relationships with adults and peers promote healthy growth, such as connectedness, within youth athletes.

Overall, these findings emphasize that connectedness is a central component in optimizing developmental outcomes for youth sport participants. Adolescents develop through connections with others. This supports the fundamental importance of trusting, supporting, and caring interpersonal sport relationships to healthy developmental outcomes. Yet, understanding how youth perceive connectedness within a sport context and how the social psychological climate is linked to athletes' developmental outcomes is limited. A scientific understanding of the contextual features associated with perceived connectedness among youth sport participants will help researchers and practitioners understand if and how the sport climate is linked to fulfilling relationships.

<div align="center">Promoting PYD Through Sport</div>

Despite mounting evidence that the social psychological climate is related to positive outcomes in youth, there are few sport programs that intentionally teach both sport and personal and social assets. Within these programs personal and social assets are typically referred to as life skills. Life skills are defined as the abilities or attributes contributing to an individual's success in various settings, such as honesty, integrity, and

respect (Danish, Nellen, & Owens, 1996). Sport program curricula that are intentionally designed to teach life skills include Sports United to Promote Education and Recreation (SUPER; Danish 2002; Papacharisis, Goudas, Danish, Thedorakis, 2005), Play it Smart (Petitpas, VanRaalte, Cornelius, & Presbrey, 2004), and The First Tee (Weiss, 2006). The sport program SUPER conducts workshops on sport-specific skills while incorporating a life skills curriculum for youth. Play it Smart focuses on adult-youth relationships and positive experiences to enhance healthy behaviors with over 10,000 high-school football athletes (playitsmart.org, 2010). Play it Smart has documented increases in grade point averages, standardized test scores, the proportion of those with a positive self-identity, and graduation rates among its participants (Petitpas et al., 2004). The First Tee is another evidence-based program successful in fostering character development through golf and education for over 13 years.

These instructional sport programs (i.e., SUPER, Play it Smart, The First Tee) share a common characteristic. The programs teach life skills by training adult youth leaders to teach life skills and create an appropriate sport context to foster adolescent development. These programs rely on adult leaders who emphasize enjoyable activities that empower youth to make decisions and build relationships. The instructional sport programs also create a task-involving climate where success is defined as learning and improving (Weiss & Wiese-Bjornstal, 2009). Thus, adult leaders in these programs are trained to optimize PYD, such as the psychosocial assets of interpersonal skills, self-efficacy, motivation, and confidence (Petitpas et al., 2004, 2005; Weiss, 2006).

Although some youth sport programs are specifically designed to foster PYD, the majority of youth participate in *organized* sport programs (Camiré, Trudel, & Forneris,

2009). Organized sport programs refer to community or school-based programs that are either competitive or recreational (Committee on Sports Medicine and Fitness and Committee on School Health; Washington, Berhardt, Gomez, Johnson, Martin, Rowland, Small et al., 2001). Alpine ski racing is an organized sport. Organized sport programs differ from the sport programs that intentionally incorporate a life skills curriculum. One main difference is that organized youth sports have historically focused on athletic performance and achievement rather than more broadly consider the potential physical, intellectual, social, psychological, and emotional developmental outcomes associated with participation. Coaches in organized sport programs typically receive little or no training on developing an appropriate contexts in which to promote PYD outcomes (Goldberg & Chandler, 1995; Gould & Carson, 2006). Without appropriate developmental training for youth coaches it is 'doubtful' PYD is taught (Petitpas et al., 2005). Therefore, by understanding which factors within a social psychological climate are most associated with developmental outcomes in a competitive organized sport setting, coaches and organized sport programs can effectively modify and implement these strategies.

<div align="center">Summary</div>

There is a pressing need to more clearly understand the contextual features of youth sport programs and if those features increase the likelihood of PYD. With so many rapid changes during adolescence comes a potential for both positive, as well as negative outcomes to develop in young people. Exposure to positive contexts assist young people in acquiring psychosocial assets such as self-efficacy, intrinsic motivation, fun, and

connectedness (Benson, 2006; Dworkin & Larson, 2006; Eccles & Gootman, 2002; Petitpas et al., 2005). Excessive exposure to negative settings can weaken the chances to gain the necessary personal and social assets to thrive in life (Côté et al., 2009; Dworkin & Larson, 2006; Orlick, 1973). Therefore, there is a need to understand the specific contextual features of the sport program that promote PYD. The current study focuses on the NRCIM framework, which supports the premise that young people attain personal and social assets in settings that intentionally provide PYD contextual features (Eccles & Gootman, 2002).

This literature review confirms the need for additional research questions related to youth development and programs designed to support and enhance PYD. These types of questions are best conducted through a mixed method design. Using both qualitative and quantitative methodologies capitalizes on the strengths of both these approaches while scientifically evaluating the critical contextual features of youth development programs and how they promote PYD (Eccles & Gootman, 2002; Roth & Brooks-Gunn, 2003). In fact, NRCIM states "mixed methods are the most appropriate way to answer the question of why a program is effective" (p. 222). This recommendation, coupled with a very limited research base testing the framework highlights the importance of focusing on a combination of contextual features and personal and social assets using an explanatory mixed methods design. Details of the explanatory mixed methods design are explained in the next chapter.

CHAPTER 3

METHODS

The purpose of this study was to understand the relationship between youth's perceptions of the social psychological climate (ego-involving, task-involving, and caring) and the psychosocial assets of PYD (self-efficacy, connectedness, intrinsic motivation, and fun). To address the purpose, a mixed methods research design was used. A mixed methods design allows the researcher to assess the outcome and the process by utilizing the strengths of both quantitative and qualitative methodologies (Creswell, 2005). The strengths of quantitative research include objectivity of research, accuracy of measurements, and generalizing results to a larger population (Denzin & Lincoln, 2003). However, in surveying participants, quantitative researchers are limited to the range of the response scale (e.g., 1-5), the anchors (e.g., strongly agree, strongly disagree) of the response scale, and the distribution about the mean for findings. Consequently, participants in a quantitative study are not allowed to express their personal views, thus limiting the depth of information as well as the individual variability gathered. Utilizing a qualitative approach helps to further examine the complex relationship of a social psychological climate by exploring the depth and breadth of the participants' voices. In combination, quantitative and qualitative methods provide a better understanding and meaning than each methodology used alone (Creswell & Plano Clark, 2007). Mixed

methods researchers find that using both numbers and narratives as a rigorous methodology assists in the understanding of a phenomenon by making practical sense of it, which is important in closing the gap between research and practice (Creswell & Plano Clark, 2007).

<div align="center">Mixed Methods Design</div>

This study used an explanatory mixed methods design. An explanatory design is two-phased with an emphasis on the first phase. In the first phase, quantitative data was collected and analyzed. In the second phase, qualitative data was collected and analyzed to help the researcher explain the quantitative results. Consequently, the two phases are sequential and related because quantitative data collection was first and was used to characterize a group whose individual members was then queried using qualitative methods. Thus, the qualitative data provided depth, context, and detail relative to the quantitative findings (Creswell, Plano Clark, Gutmann, & Hanson, 2003). In summary, the rationale for the explanatory design was to provide a general understanding of the research problem through the use of statistical numeric data (quantitative) and the exploration of participants' narratives (qualitative) for identifying a more complete and nuanced understanding of the social psychological climate that fosters personal and social assets in youth sport settings (Creswell & Plano Clark, 2007; Eccles & Gootman, 2002; Gano-Overway et al., 2009; Larson, 2006).

The following sections explain the methodologies for the quantitative and qualitative phases. Quantitative information includes participants, instruments, procedures, sample size justification, and data analysis. This is followed by qualitative

information on paradigm, participants, researcher as an instrument, data gathering methods, trustworthiness, and personal biography.

<div align="center">Quantitative Phase</div>

Quantitative data was gathered for two purposes. First, quantitative data was analyzed to determine the relationships between the aspects of a social psychological climate and PYD assets. The aim was to statistically describe and explain how much of the variance in the psychosocial PYD assets can be explained by the social psychological climate within the sample. As a result, the quantitative phase addressed the first aim of the study, which is to examine the relationship between youth perceptions of the social psychological climate and personal and social assets in early adolescent competitive ski racers. Second, the quantitative data was used to identify participants whose responses met the inclusion criterion for the qualitative phase of the study (Creswell & Plano Clark, 2007).

Participants

A criterion sampling procedure was used to select the participants because only the ski racers of coaches who agreed to participate within the Intermountain Ski Division of the USSA had an opportunity to volunteer for the study. The projected sample size of 85 was deemed adequate given the results of Cohen's (1988) power tables for multiple regressions and correlation analysis. Power was determined using the noncentrality parameter of the noncentral F distribution, λ. The equation was $\lambda = f^2 (u + v + 1)$, where f^2 is the estimated medium effect size ($f^2 = .15$, $\alpha = .05$), u is the number of predictors

(i.e., 3), and v is the degrees of freedom for the error variance (i.e., 87). The equation resulted in λ equaling 13.65. The λ, u, and v were used in the power table to determine a sample size of 85. In addition, King (1978) employed a nomogram for determining sample size in survey research. The nomogram is a chart that graphically calculates sample size by using a straight edge and aligning the population size (i.e., $N = 104$) with the amount of error for the study (5%) thus determining a need for 75% of the total population for an appropriate sample size. The nomogram indicated an appropriate sample size is 78. This study had a sample of 88, which met the recommended sample size for both Cohen (1988) and King (1978).

The sample included 88 competitive early adolescent ski racers (Mage = 13.44, $SD = .50$) from 9 teams within the USSA Intermountain Ski Division. Slightly more girls ($n = 47$) participated in the study than boys ($n = 41$). The sample consisted of mostly ($n = 84$) White/Caucasian athletes. Four participants self-identified their racial or ethnic background as: (a) Caucasian Asian; (b) Caucasian Philippine; (c) Asian Hispanic; and (d) Hispanic. With respect to years skiing, the participants averaged 10.69 years skiing ($SD = 1.66$), with 77% of the participants skiing 10 years or more. Thus, over three quarters of the participants had skied since they were approximately 3 years old. In addition, 72.7% of the participants had been ski racing at least 6 years (Mage = 6.49 years, $SD = 2.06$). Over half (60.2%) had been ski racing on that same team for 5 years or more ($M = 4.66$ years, $SD = 1.14$) or since they were about 8 years old. This corresponds with how well the participants reported knowing their teammates; 68.3% responded that they mostly knew or knew their teammates a lot before the start of the current ski season.

Measurements

Athletes completed a self-report questionnaire containing a total of 76 questions. The packet consisted of a demographic information sheet and valid and reliable questionnaires to assess the independent and dependent variables. The independent variables included perceptions of the social psychological climate (i.e., ego-involving climate, task-involving climate, and caring climate). The dependent variables were the psychosocial assets of PYD (i.e., skiing self-efficacy, general self-efficacy, intrinsic motivation, fun, and connectedness). Please see Appendices A-J for the complete questionnaire.

Demographic Information

Athletes were instructed to indicate their age, sex, race, number of seasons participating in ski racing, number of seasons skiing on their current Junior 3 team, and how well did they know their teammates before the start of the 2010-2011 season. These demographic variables were selected from previous youth sport researcher (Fry & Gano-Overway, 2010; Gould & Carson, 2008) and were primarily used to describe the sample.

Perceptions of a Social Psychological Climate

Bronfenbrenner (1979) and other ecological theorists agree that a person's perception of the climate is a stronger predictor of developmental outcomes than a researcher's objective assessment of the climate. Measuring a comprehensive set of positive and problem predictors aids in understanding what contextual features impact youth development (Catalano et al., 2004). Therefore, the adolescent athlete completed

questionnaires related to the perceptions of the social psychological climate in sport (i.e., ego-involving, task-involving, and caring climates).

   Perceptions of a motivational climate. The Perceived Motivational Climate in Sport Questionnaire (PMCSQ-2; Newton, Duda & Yin, 2000) is a 33-item hierarchically structured assessment of the degree to which athletes perceive an ego-involving climate and task-involving climate within their team. The 16 ego-involving items, comprised of three subscales, namely unequal recognition from the coach, punishment for mistakes, and intra-team rivalry. The 17 task-involving items also assessed three subscales, which are labeled cooperative learning, effort and improvement, and important role. The scale was adapted to the skiing environment. The stem "On this ski team…" was the stem of each item, "player" was replaced with "skier," "game" was changed to "ski race," and "coach" was changed to "coaches." Example items tapping a perceived ego-involving climate included "…skiers are taken off the hill for mistakes" and "…the coaches praise skiers only when they out ski team-mates." Example task-involving climate items consisted of "…skiers feel good when they try their best" and "…coaches encourage skiers to help each other learn." Athletes circled the number that appropriately reflects their response using a 5-point Likert response scale (1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; 5 = strongly disagree). Subscale scores were created by calculating the mean of item scores within the respective climate dimensions. The PMCSQ-2 is the most widely used instrument in motivational climate research within a sport context (Smith, Cummings, & Smoll, 2008) and has demonstrated adequate reliability (ego α = .75 - .90; task α = .77 - .91) with young athletes (Smith, Balaguer, & Duda, 2006; Weiss, Amorose, & Wilko, 2009). Newton and colleagues have supported the face, construct,

and concurrent validity in a group of adolescent female athletes (Newton, Duda, & Yin, 2000).

Perceptions of a caring climate. Assessing a caring climate was based on Noddings (1984, 1992, 2003) conception of caring relationships and Battistich and colleagues' (1997) construction of a caring community in the educational system. The Caring Climate Scale (CCS; Newton, Fry et al., 2007) is a 13-item instrument that assessed whether an athlete perceives the sport setting as a safe, supportive, and welcoming environment where he or she feels valued by coaches and teammates. The scale was slightly adapted to the skiing context. Athletes responded to items using a 5-point Likert response (1 = strongly disagree; 5 = strongly agree) scale with the stem "On this ski team…." Sample items included, "… accepts other for who they are," "… athletes feel safe," "… athletes feel comfortable," and "… athletes feel welcomed every day." A mean scale score was calculated for the CCS. The CCS scale has been used previously in youth sport participants (e.g., 9-17 years old) and found to be reliable (α = .91 - .92; Fry & Gano-Overway, 2010; Gano-Overway et al., 2009). The scale has also been shown to be valid. Face, construct, and predictive validity were supported in a group of physically active youth in a summer sport program (Newton et al., 2007). Concurrent validity was supported by correlations in the .40 range between perceptions of a caring climate and perceptions of a task-involving climate. Newton and colleagues (2007) also established convergent validity with a task-involving climate (r = .56) and discriminant validity with an ego-involving climate (r = −.36). Fry and Gano-Overway (2010) conducted an exploratory factor analysis on the CCS and confirmed the factor

validity (i.e., all loadings were greater than .50) in young athletes with age ranging from 10- to 17- years old.

Personal and Social Assets

PYD is a broad and evolving concept. In a review of youth developmental outcomes in the sport literature, Gould and Carson (2005) stated there are limited tools to measure PYD. To date, reliable and valid PYD instruments are limited to the 5Cs (Lerner et al., 2005a, 2005b), the Developmental Assets Profile (DAP; Benson, 2005), the Camper Growth Index for Children (CGI-C; Henderson, Thurber, Whitaker, Bialeschki, & Scanlin, 2006), the Youth Experiences Survey (YES, 2.0; Hansen & Larson, 2005), and the Positive Youth Development Inventory (PYDI; Arnold & Meinhold, 2008). Each tool is an important instrument, but no measure encompasses all the psychosocial assets of interest in the present study. Moreover, the instruments do not tap into the specific personal and social assets described in NRCIM's framework. Therefore, the psychosocial developmental assets were measured using four of instruments that have shown validity and reliability in early adolescence samples in either the sport or the youth development literature.

Psychological and Emotional Assets

NRCIM created a variety of assets under the psychological and emotional domain. This study focused on the psychological and emotional assets identified as critical during early adolescence (i.e., self-efficacy, intrinsic motivation, and fun).

Self-efficacy. Self-efficacy is a domain specific state construct (Bandura, 1997, 2001). It refers to an individual's confidence in performing a specific task in a specific time period (Bandura, 1977, Schwarzer & Jerusalem, 1995). Hence, there are many possible ways to evaluate self-efficacy, such as academic self-efficacy or decision-making self-efficacy. For the purpose of this study, three measures of self-efficacy were used: generalized self-efficacy, skiing self-efficacy-practice, and skiing self-efficacy-competition.

General self-efficacy was used to support NRCIM's definition of personal efficacy as a PYD asset of a young person's confidence to think, feel, and act in a healthy way. The General Perceived Self-Efficacy Scale (GSES; Schwarzer & Jersusalem, 1995) originated from Germany and has been translated across languages and cultures in 25 countries, which suggests a global underlying construct (Scholz, Dona, Sud, & Schwarzer, 2002). The 10-item scale measured perceived self-efficacy in managing everyday life situations. Athletes are asked how true the following example statements are: "When I am faced with a problem I can find several solutions" or "I am confident that I can handle unexpected events." The responses were anchored on a 4-point Likert-type scale ranging from 1 (not true at all) to 4 (true all of the time). The responses for each of the ten items are summed to give a total score, ranging from 4-40. Higher scores represent greater perceived general self-efficacy. The measure has shown high reliability ($\alpha = .92$) in male adolescents (Nebitt, 2009), across six time points in adolescents participating in 4-H (ranging from $\alpha = .69$ to .87; White, 2009), and in adolescent athletes ($\alpha = .80$; Toering, Elferink-Gemser, Jordet, & Visscher, 2009).

While use of generalized self-efficacy beliefs is increasing (May, 2009; Nebitt, 2009; Schwarder & Jerusalem, 1995; Toering et al., 2009), this study also focused on more classic understandings of self-efficacy, where self-efficacy is situation-specific (Bandura, 1977). Following the guidelines recommended by Bandura (2006), a 1-item measure of an athlete's perceived self-efficacy in skiing-practice and 1-item measure of an athlete's self-efficacy-competition were created. Athletes were asked to document their belief about their confidence in each setting with the questions "I am confident in my ability during ski practices" and "I am confident in my ability during ski competitions." Athletes responded on a 100-point scale ranging from 0 to 100 (0= Cannot do at all, 50 = Moderately can do, 100 = Highly certain can do) with increment units of 10. The response recorded equaled the total score for each item. For example, if an athlete marked 80 for "I am confident in my ability during ski competitions," then the composite score for self-efficacy in competition equated to 80. This is similar to Mills' and colleagues (2001) work in evaluating self-efficacy in both practice and competition among collegiate athletes participating in individual sports and in youth soccer athletes (Munroe-Chandler, Hall, & Fishburne, 2008).

Intrinsic motivation. One subscale (i.e., interest/enjoyment) from the Intrinsic Motivation Inventory (IMI; Ryan, 1982), as reworded for sport settings by McAuley, Duncan, and Tammen (1989), was used to assess intrinsic motivation. The full IMI is a 45-item scale assessing seven subscales, including interest/enjoyment, perceived competence, effort, value/usefulness, felt pressure and tension, perceived choice, and relatedness while the participant is performing their activity. For the purpose of this study only the interest/enjoyment subscale was used because the original authors state it is the

most appropriate subscale assessing intrinsic motivation (Ryan, 1982). Interest/enjoyment is a 7-item subscale with the stem, "For each of the following statements, please indicate how true it is for you, using the following scale…" Then the athlete used a 7-point Likert-type scale (1 = not at all true; 4 = somewhat true; 7 = very true) to indicate their appropriate response. The scale was slightly adapted to skiing by replacing "this activity" with "being on the ski team." An example item for the interest/enjoyment subscale is "I enjoy being on the ski team very much." The following two items from the interest/enjoyment subscale were reversed coded: "I think being on the ski team is boring" and "Being on the ski team does not hold my attention at all." Mean scale scores for interest/enjoyment was calculated. McAuley, Duncan, and Tammen (1989) found strong support for the psychometric properties of the IMI scale and the interest/enjoyment subscale. The interest/enjoyment has found to be reliable (a range across subscales α = .81-.94) with adolescents in physical education (Goudas & Biddle, 1994; Mitchell, 1996; Spittle & Byrne, 2009) and youth athletes (α = .83; Seifriz, Duda, & Chi, 1992). The scale is one of the most widely used instruments in sport psychology.

  <u>Fun</u>. Fun has a nearly universal meaning without being a complex construct (G. Ellis, personal communications, August 27, 2010). Since fun is a simple concept, it is reasonable to measure it in a single item (G. Ellis, personal communications, August 27, 2010). Fun was assessed using the single item measure called the funometer. The funometer evolved from a delightedness scale used in the tourism and marketing industry (Lee, 2008; Ralston, Ellis, Compton, & Lee, 2006). Athletes in the present study marked their level of enjoyment, or dislike, on a thermometer figure depicted on paper. The bottom of the thermometer is marked 0 indicating "No Fun at All." The scale has equally

spaced tally marks from 1 to 10, with a 10 marked as "Lots of Fun." The athletes were

asked to darken the thermometer on a specific tally mark that represents the overall level

of fun they experience on their ski team. If an athlete darkened between two tallies, then

the tally was rounded up or down to the nearest whole number. When the tally mark

appeared directly in the middle, then a ruler was used to measure the mark and determine

the closest whole number. This procedure was suggested by the author (G. Ellis, personal

communications August 27, 2010) and used in a doctoral dissertation (Belnap, 2009).

Although Belnap's (2009) doctoral dissertation was the only other study to use the paper-

format funometer, his findings suggest that fun was a predictor of character development

in sport camp participants (age ranging from 11- to 14- years old). In addition, other

researchers report fun as an important indicator of character development (Shields &

Bredemeier, 1995) and it is associated with an increase in the occurrence of prosocial

behaviors (Mandingo & Couture, 1996). As a result, the funometer was used to measure

fun.

Social Assets

Of the four social developmental assets outlined by the NRCIM (2002), this study

examined one social asset, connectedness. Connectedness refers to the perception of good

relationships and trust with parents, peers, and some other adults. More specifically, this

study focused on connectedness with peers.

Connectedness. The Acceptance Subscale of the Need for Relatedness Scale

(Richer & Vallerand, 1998) was originally developed as a measure used in the workforce.

Standage, Duda, and Ntoumanis (2005) adapted the measure for use in physical education

and it was used to assess the extent that athletes feel connected to their classmates. The items on the scale were slightly modified from the physical education class to the ski team in order to assess the relationships athletes share with one another on a team. The scale included five items with the stem "With the other athletes on this ski team I feel…" "supported," "understood," "listened to," "valued," and "safe." Athletes responded to the items using a 7-point Likert-type scale (1 = strongly disagree; 2 = disagree; 3 = slightly disagree; 4 = neutral; 5 = slightly agree; 6 = agree; 7 = strongly agree). Standage and colleagues (2005) reported an acceptable Cronbach reliability coefficient for the items (α range = .88 - .91) with physically active British youth ranging from 11- to 14-years old (Standage et al., 2003, 2005).

Procedures

Upon approval from the University's Institutional Review Board (IRB) for Human Subjects Research, the principal investigator initiated data collection. Contact was made with USSA ski directors of alpine ski racing. Then, each Junior 3 race coach in the Intermountain Division was contacted to distribute parental permission forms and establish dates and times to administer the questionnaire. Similar to other research on aspects of the social psychological climate, questionnaire distribution occurred in a team group setting during the middle to latter half of the season so athletes have an adequate amount of time to become familiar with the coaches' and teammates' behaviors and attitudes in establishing the climate (Smith, Balaguer, & Duda, 2006; Weiss, Amorose, & Wilko, 2009). The questionnaires in the present study were administered at the midpoint of the season and within a 2-week period. The principle investigator administered the

surveys to eight out of the nine teams. A colleague graduate student administered the ninth team due to the principle investigator's affiliation with this team.

During the first visit with each team, the researcher discussed the purposes and the procedures of the study with the athletes. After describing the study, the researcher distributed and explained the informed assent and informed consent forms. Only the athletes who both signed the informed assent and had an informed consent form signed by their parents or legal guardians participated in the study. Upon receiving a signed statement of informed assent and informed consent, the questionnaires were administered either at the beginning or end of a regularly scheduled skiing practice. During the administration of the questionnaire, the coach was absent because many of the questions directly ask about the coach. Excluding the coach from the situation helps in preventing a potential bias in an athlete's response to the questions. Identical instructions were given to all of the teams. Athletes were informed the study is affiliated with the University of Utah, questionnaires are completely confidential (e.g., their coach will not be informed of individual responses), and their responses would not impact their sport participation. Furthermore, it was explained that the study questionnaires were not tests with right or wrong answers to encourage the athletes to provide honest answers.

Then, details were given for the first page of the questionnaire. The first page requested athletes' contact information for a possible follow-up interview. The athletes were asked to write their first and last name, email, best phone number to reach them, and current school. Since the first page contained identifying information, it was emphasized that the principle investigator would be the only person with access to this information, which was locked at the University and the primary investigator is the sole holder of the

key. The athletes were instructed to fill out the information and hand it directly back to the researcher. Then, the pencil-paper questionnaires were administered. The total length of administering the questionnaire was approximately 20 minutes.

Data Analysis

Data were analyzed using PASW 18.0 (2010). After data entry, data cleaning and screening was conducted to examine the assumptions of independence, normality, linearity, homogeneity, and multicolinearity. Once the data was cleaned and screened, descriptive statistics and correlations were analyzed to explore general trends and relationships among data variables. Next, the first hypothesis (i.e., perceptions of a task-involving climate and a caring climate will positively predict PYD assets, while an ego-involving climate will have a negative prediction) was examined using standard multiple regression. The test of standard multiple regression allows the researcher to enter all the psychosocial climate variables into the regression equation at once, thus each climate was assessed in what it uniquely added to each of the PYD assets (Tabachnick & Fidell, 2007).

Qualitative Phase

Because of the complexities of human development, a quantitative study does not always allow for the factors that influence how youth may develop. Additionally, the context is likely to influence each youth in ways not captured by the questionnaires used in this study. Therefore, a need exists for studies to specifically address how youth

perceive the sport climate related to asset development (Gould & Carson, 2008; Holt, Tamminen, Tink, & Black, 2009; Petitpas et al., 2005).

Due to the multifaceted levels of the social psychological climate, it is difficult to fully understand how athletes interpret the climate. This limits our understanding of which factors are the most influential in promoting youth development as well as limiting our ability to construct applied strategies and interventions meant to provide the most appropriate climate for young athletes. Consequently, it may be beneficial to examine the social psychological climate by qualitatively assessing a young person's perception of the unique and rich phenomenon of this climate, thus arriving at specific recommendations to inform practitioners.

The second aim of this study was to address this issue through qualitatively exploring the processes by which the contextual features in the social psychological climate influence psychosocial asset development in youth in order to help explain the basis for the observed relationships in the quantitative phase of the study. The qualitative subsections include information on paradigm, participants, researcher as an instrument, data gathering methods, trustworthiness, personal biography, and reciprocity.

Paradigm

Research can be interpretive. Thus, the qualitative researcher needs to present a written discussion on a paradigm that directs his or her individual set of beliefs and feelings about the world. Paradigms inform researchers' assumptions of methodology (how one defines reality), ontology (nature of reality), epistemology (how one understands reality), and axiology (what is valued). The importance of a paradigm lies in

"[how] each interpretive paradigm makes particular demands on the researcher, including the questions he or she asks and the interpretations the researcher brings to them" (Denzin & Lincoln, 2003, p. 33). Subsequently, paradigms act as guides for ways to approach research (Denzin & Lincoln, 2003; Patton, 2002).

A pragmatic paradigm guided this study to understand youth perceptions of a social psychological climate. Pragmatism is a method in philosophy founded in the late 1800s by C.S. Peirce and William James. It is a practical approach to problems that presumes that humans are intelligent and capable of forming abstract theories from direct experiences (Feilzer, 2010; Morgan, 2007). One rationale for using pragmatism is that its philosophical foundation is characteristically linked with mixed methods research (Creswell & Plano Clark, 2007; Denscobe, 2008). Mixed methods research tries to integrate two methods, quantitative and qualitative (Bazeley, 2009). Woolley (2009) defines quantitative and qualitative as integrated "thereby producing findings that are greater than the sum of the parts" (p. 7). Thus, pragmatism combines deductive and inductive reasoning, utilizing subjective and objective knowledge, and using practical and applied research philosophies to address research questions. The pragmatic approach is a dialectic process of working on a continuum toward collaboration rather than deciding one strategy is superior over the other.

Participants

Consistent with an explanatory design, the results of the quantitative phase of this study were used to identify several athletes who met the inclusion criterion. Therefore, a purposive sampling approach was used to strategically select specific participants to yield

insights to the purpose and aims of the study. The inclusion criteria for the in-depth qualitative interview were the results from the self-reported questionnaire where the participants meet some quantitative standard (Marshall & Rossman, 2006; Patton, 2002). Because the quantitative results predicted that a high task-involving and a high caring climate were linked to PYD and a low ego-involving climate negatively predicted a psychological asset, the participants were selected based on self-reporting a high task-involving (i.e., $M \geq 4.5$ = agree), a high caring (i.e., $M \geq 4.75$ = agree), and a low ego-involving climate (i.e., $M \leq 1.75$ = disagree). This equated to 12 early adolescent athletes (8 girls and 4 boys) from six of the nine teams. Three of the athletes chose not to participate in the interview on their contact form, thus leaving nine athletes that were invited to participate in the qualitative phase of this study.

In qualitative research, it is recommended to continue sample selection to the point of redundancy and cease when no new information is gained (Lincoln & Guba, 1985). The ranges of sample sizes in qualitative research are from one to hundreds depending on the type of study (e.g., case study versus phenomenological). Because this study had an inclusion criterion, the variance between participants was minimized (Patton, 2002). Sampling was expected to reach redundancy of information fairly quickly in a relatively small sample of participants (Sandelowski, 1995). Initially, a minimum sample size of eight athletes was estimated. Upon completion of four interviews, there was redundancy of information regarding an early adolescents' experience of a high task-involving, caring climate. Three additional interviews were conducted in an attempt to fully saturate all categories. Thus, a total of seven interviews were conducted.

The principle investigator sent an e-mail to each of the participants that both agreed to be interviewed on the contact form and met the criterion score. All nine participants agreed to participate and this was followed up with a phone call to coordinate an interview. While all nine participants agreed to participate in an interview, two boys choose to not continue with the actual interview. Thus, the final qualitative sample consisted of seven early adolescent athletes (Mage = 13.42 years, SD = .53) from six teams. One athlete from each of the six teams was represented in the interviews with the exception of two girls who were from the same team. The ratio of girls to boys (5 girls and 2 boys) was also representative to the inclusion criterion. All of the athletes were White/Caucasian. The mean descriptive information paralleled that of the quantitative descriptive statistics. Please see Table 1 for descriptive information for the individual athletes in the qualitative sample.

Data Gathering Methods

Interviews. I, the primary investigator, collected data through semistructured interviews. I am a 33-year old female who has completed a qualitative methods course and has been involved in competitive sport for 20 years as an athlete, certified athletic trainer, sport psychology consultant in training, and graduate student researcher. I recognize that building trust is essential for the participant to feel comfortable during the interview (Kvale, 1996). Thus, I used several techniques to create a safe and positive interviewing environment (Wilson & Powell, 2001). First, each interview took place in a quiet, private location either at the participant's home or in a quiet office at the ski hill or

Table 1

Descriptive Information for Athletes in the Qualitative Phase of the Study (*n* = 7)

Name	Age	Years Skiing	Years Racing	Years Racing on this Team	How Well do you Know Teammates
Leah	13	11	8	8	A Lot
Jewels	13	7	5	5	Mostly
Tina	13	10	4	3	Moderately
Matt	13	11	7	7	A Lot
Mika	14	9	7	7	A Lot
Amanda	14	12	8	6	A Lot
Samantha	14	12	2	2	Hardly

Note: Pseudonyms have been used to protect the anonymity of the participants.

a hotel. The youth athlete sat next to the door with the door being left open in an attempt to provide more comfort.

Prior to the formal interview, I tried to create a safe, friendly environment. The procedures included thanking the athlete for the meeting, introducing myself, asking about their day and how the ski season is going, sharing ski stories dependant upon the current snow conditions, articulating clearly why the athlete was chosen for the interview, briefing the athlete on the interview process, and informing the athlete that his or her thoughts are a valuable and interesting source of information in understanding an appropriate ski racing climate. These measures were meant to inform the athlete and help him or her feel more at ease during the interview.

Next, it was stressed that the interview process is voluntary and confidential. Athletes were told they could stop the interview at any time and that there would be no penalty for choosing not to participate. Athletes were informed pseudonyms would be used to protect their confidentiality. They were also educated that the only exception in breaking confidentiality was if there was good reason to believe that the athlete or

somebody else is in possible danger and needs to be helped. This never occurred during the interview process.

Athletes were then informed that the purpose of this study was to discuss their sport experiences. See Appendix K for more details. Next, I reminded the athletes that the interview would be audio taped to fully capture their experience. The athlete was reminded that I would be the only one who has access to these tapes and they would be locked in my cabinet at the University. At this time any questions, comments, or concerns were addressed regarding the interview process or the study. The audio recorder was then placed on a stable surface close to the participant. Preinterview rapport building and study introduction ranged from 5-10 minutes.

Following the briefing, the in-depth semistructured interview began. The semistructured approach allows the interview to flow as a conversation in that the participant partially shares in the direction of the interview by guiding the interview with their thoughts and initiating material that the researcher did not think of in advance (Kvale, 1996). In addition, the semistructured approach allows the researcher to have predetermined, open-ended questions to assist in guiding the interview process and to ensure that all the participants receive a similar interview (Kvale, 1996).

The semi-structure interview guide was formulated through a variety of ways. First, the questions were based on past PYD and sport psychology literature focusing on contextual factors, youth experiences, and learning opportunities (Bhalla, 2009; Cramiré, Trudel, & Forneris, 2009; Galli, 2009; Garcia Benoechea & Strean, 2007; Eccles & Gootman, 2002; Fraser-Thomas & Coté, 2009; Hansen & Larson, 2005; Holt et al., 2009; Horst, 2005; Keegan et al., 2009; Larson, 2006; Petitpas et al., 2005; Vazou, Ntoumanis,

& Duda 2005; Weiss & Fretwell, 2005). The list of questions was then revised and organized several times based on the literature, the primary focus of the study, and the pilot studies with a 13-year old boy and a 14-year old girl. Some of the committee members and the qualitative research team members of this study gave suggestions and revisions to ensure questions were developmentally appropriate and targeted the study's research question. For example, abstract questions were minimized and more focus was placed on the athlete's concrete experiences (e.g., everyday sport experiences) in an attempt to capture the social psychological climate.

The finalized semistructured interview guide (see Appendix K) composed of nine interview questions to ensure that all major concepts regarding a task-involving, caring climate were addressed. Example questions included, "Can you describe to me what it's like being on your ski team" and "How do coaches make sure all skiers improve (practice and races)." I, the principle investigator, used various types of questions (e.g., follow-up) and probes to best comprehend the young athletes experiences. The interviews lasted between 25 and 58 minutes.

Upon completion of the formal interview, a postinterview debriefing was conducted. The debriefing began with thanking the athlete for sharing their thoughts and time. Then, I summarized the main points from the interview and asked if my synopsis was an accurate summary of the interview. Athletes were informed that I would contact them approximately 1-week later via e-mail to confirm my interpretations of this interview were correct. Last, athletes received my contact information and were encouraged to contact me if any questions or concerns arise. The total debriefing time was approximately 5 minutes.

Field notes. Field notes were taken both during and after each interview. During the interview, I noted key points rather than writing a detail description of the interview. Note taking is an important part of the interview because it can help the researcher to (a) formulate new questions during the interview; (b) allow for emerging themes to unfold which may be addressed in future interviews; (c) locate quotations from the recordings for later data analysis; and (d) serve as a backup in the event the tape recorder malfunctions or erases during transcriptions (Patton, 2002).

Immediately after each interview, reviewing the field notes helped me to capture my initial thoughts and reactions to the participant's content and interview experience. This reflection helped me recall the content addressed in each interview and assisted with data analysis (Patton, 2002) and lasted approximately 10 minutes (Kvale, 1996). Specifically for this study, sport experiences were identified and noted for each particular interview to help gain knowledge on major issues or emerging themes (see Interview Summary Appendix K).

Participant checks. The purpose of the participant check was for the athletes to confirm their quotes and to validate the summary interpretation of the interview. Thus, following transcription, approximately 1-week postinterview, I e-mailed the athletes an interpretive summary of the interview. The length of the participant check ranged from 1-2 pages of single-spaced text. Each athlete was asked to review the summary verification and to add, delete, comment, or clarify any misinterpretations. All athletes confirmed the summary was an accurate representation of their interview. Only one athlete had a verifying question, which was solved after one email correspondence. An additional aspect of the participant check was asking the athletes if there was anything I did not

think to ask that they would care to share. None of the athletes shared any last thoughts. This process helps to determine the extent to which the researcher's interpretation accurately matches the participant's thoughts (Patton, 2002) and to address additional information that arose from the first interview. To close, I offered a sincere appreciation to each participant for their willingness to discuss their thoughts and feelings.

Data Analysis

Data analysis began during transcription (Bird, 2005), thus starting after the first interview. I transcribed each interview verbatim from audio recordings into a word document. Each participant was assigned a pseudonym. While I transcribed each interview, I noted key words and quotes useful in answering my research question, while also being aware not to overlook text that initially appeared to not address my research question.

Data analysis followed a general inductive approach. It is important to note that this is a mixed method design wherein participants were selected based on quantitative criteria and the study's framework. Thereby, the research questions initially guided the researcher during data analysis. The nature of a mixed method study does not fit within a specific paradigm, thus a strong qualitative analytical approach was not a fully appropriate strategy to analyze data. As a result, a general inductive approach was used. Although a general inductive approach is not as theoretically based as other analytic strategies, it provides an efficient, systematic set of steps in analyzing qualitative data (Thomas, 2006).

The general inductive approach has three systematic guidelines. The three

guidelines are (a) condense raw data into a brief, summary format; (b) establish clear

links between the research objectives and the summary of findings derived from the raw

data; and (c) develop a framework of the underlying structure of experiences or processes

that are evident in the data (Thomas, 2006). In order to understand the experiences of

each interview transcript, analysis began with several, close readings of each interview

transcript. For every transcript, the aim was to note general themes occurring for each

individual and to note any similarities or differences among the interviews (Patton, 2002).

I strived to be open-minded when repetitively reading each transcript and to be aware that

important text may be in a response to a different question because questions were not

always answered in perfect sequence. In the process of reading, words or phrases

pertinent to the study were noted in the margins by either using the words of the

researcher or the actual words of the participant (Strauss & Corbin, 1998). This process is

known as microanalysis where the researcher identifies a word, a sentence, or a

paragraph through a line-by-line analysis, thus generating a range of themes reoccurring

across the data set (Schmidt, 2004).

Next, codes were assigned to the segments of the text that seemed central to the

purpose of the study. The peer qualitative research team met to discuss the codes and

emerging themes. In some cases, codes were the actual words of the athlete whereas in

other cases codes represented concepts existing in the literature. Regardless, the codes

represented what was embodied in the data (Strauss & Corbin, 1998). Related codes were

grouped to form initial categories. Similar categories were combined to decrease

redundancy. If more than one code fit into a category, the dominant category was chosen

(Schmidt, 2004). If a code did not fit into a category, then the description was labeled

'unclassified'. However, there were only two codes that were labeled unclassified.

During the process of coding and categorizing, I documented my thoughts and questions to discuss with my peer qualitative research team. Analysis continued until the data was summarized into three to eight overarching themes (Thomas, 2006).

Trustworthiness

In qualitative studies, trustworthiness refers to a high level of trust in the integrity of the data analysis (Marshall & Rossman, 2004). A type of trustworthiness is triangulation and is described as using multiple sources of data, methods, investigators, or theories to attain trustworthiness (Creswell, 1998). In the present study, triangulation of data was achieved by interviews, participant checks, and field notes.

Further trustworthiness was assured through three key methods. These include self-reflexive journal, peer qualitative research team, and audit trail. First, a self-reflective journal allowed me time to reflect on this journey and write my thoughts, feelings, and behaviors. This included surprising findings, frustrations, perceptions of the interview process, problems occurring, major themes arising, limitations of the study, or future research. Also, a self-reflective journal helped me to become a better interviewer for the next interviewee.

Second, a peer qualitative research team helped me to closely examine the research process. Originally, members of the peer qualitative research team included three doctoral students. However, only myself and another doctoral student met on a regular basis. The two members of the peer qualitative research team had a variety of qualitative experience and different professional, cultural, educational, and personal

experiences making our team's background a unique strength in supporting the data analysis of this research study. The peer qualitative research team met twice a month and corresponded via email as needed through the phases of data collection, analysis, and dissertation defense. The main purpose of the peer qualitative research team was to minimize bias by providing a technique to triangulate the data (Creswell, 1998; Patton, 2002). My peer qualitative research partner was not extensively immersed in the present study, thus reducing the impact of potential biases during data analysis. In helping triangulate the data, my partner performed a debriefing strategy where she asked critical questions, promoted discussions, and encouraged me to reflect throughout the different phases (Lincoln & Guba, 1985). Additionally, if a question or issue arose in a theme or category, it was resolved in a collaborative discussion. The discussion led to refining the themes and categories. Thereby, my peer qualitative research partner acted as an outside reviewer by observing and critiquing the process of the study, thus assisting in the trustworthiness of the study (Creswell, 1998).

A final method of trustworthiness, termed an audit trail, documented the data collection and analysis procedures. For example, the participant interviews, initial codes, and alterations to the codes were documented in a sequential order (Morrow & Smith, 2000). I realized an absolutely value-free query is not viable, thus the audit trail documents the report so it is clear that it is not representative of my personal perspective. Reporting a solid description of the data collection and analysis procedures stresses the importance of trying to minimize bias while maximizing accuracy.

<u>Researcher as an Instrument</u>

The role of the researcher differs between quantitative and qualitative studies. In quantitative studies, researchers cautiously search for objectivity. In qualitative studies researchers think carefully how to use one's thoughts, feelings, values, and experiences to maximize the depth of information gathered in as unbiased manner as possible. Consequently, qualitative researchers may be attentive to preconceived perceptions of the phenomenon under study and, therefore, become an integral part of the research process.

The researcher sets a tentative plan a priori to assist in the complexities of qualitative research. Consequently, I tried to be aware of the intricacy of human relationships, especially within adolescence. Adolescents may feel uncomfortable answering questions related to their thoughts and feelings about the social psychological climate as they relate to PYD. Therefore, I used previous literature to create a plan**.**

Fine and Sandstrom (1988) describe two dimensions the researcher may use when interacting with youth. The first dimension is the extent of the positive connection between adult and youth. Second, is the extent to which the adult has direct authority over the young person. These different dimensions offer the adult interviewer the role of supervisor, leader, observer, and friend. Friend is the related to the first dimension and is most successful due to a trusting adult-youth interaction (Fine & Sandstrom, 1988). Thus, I, the adult interviewer, tried to display interpersonal skills such as sensitivity, support, authenticity, personal investment, listening skills, personal interaction, and confidence in order to develop an awareness of each participant and their needs, which hopefully led to a trusting interaction.

Additionally, I have a high degree of personal investment in all youth becoming

successful, healthy adults. I am keenly aware of this preconceived notion. Although a researcher is passionate about a deep understanding of a phenomenon in order to take an insider's perspective, I tried to continuously evaluate my thoughts and actions to construct appropriate behaviors during the interview. As discussed earlier in the trustworthiness section, this was accomplished through a self-reflective journal and a weekly meeting with a qualitative research partner. These strategies assisted in creating a plan and being self-reflexive in order to better take the participants view (emic perspective) and not the researchers view (etic perspective).

Personal Biography

My interest in a social psychological climate as it relates to sports developed from personal experiences. My involvement in sports began during early adolescence and I continue to associate with sports today. However, my curiosity in PYD through sport sparked while working as a certified athletic trainer for six years. During that time, I worked with a variety of ages, athletic abilities, level of sports, and sport athletes and teams. The majority of my time was spent with injured collegiate athletes.

I found that when athletes became injured they experienced an array of negative personal thoughts, feelings, and attitudes. As an athletic trainer I worked with athletes and their concerns on a daily basis. Consequently, my role was to be caring, empathizing, goal setting, motivating, and educating athletic trainer who helped athletes both physically and psychologically to overcome injuries and to prepare for their return to competition. Thus, there was a multitude of levels in providing care to an athlete, which developed into multidimensional relationships with a variety of young athletes.

Through this process, I reflected on how I assisted an athlete in the healing process. I found the largest influence in helping athletes was by the type of social psychological climate I created. In addition, through my conversations with athletes about overcoming an injury and my time analyzing these conversations, I developed a sense that athletes did not have the necessary strategies to cope with injuries and their effects on sport, school, and life.

Not only did I help injured athletes, but also gave support to many 'healthy' athletes. It was not a rare occurrence that an athlete would seek me for guidance on how to handle the stresses of balancing sport, school, and life. Many described being stressed by a coach's behaviors and attitudes. This is similar to Seefeldt and Ewing (1997) findings in that one of the most frequent reasons youth reported for quitting sports was difficulties with coaches. Commonly, the athletes would say the coach only valued winning; therefore, other aspects of their life were devalued. This caused many athletes a great deal of anguish. Overall, I felt that most of the athletes I encountered were not properly equipped with the skills and competencies to overcome adversity.

These experiences sparked a curiosity in how young people develop positive psychosocial assets in a competitive sport setting. My curiosity eventually led to leaving the athletic training profession to begin practicing and researching PYD. As a practitioner, I guide 14- to 15-year olds on multiday backpacking trips that emphasize wilderness skills and leadership, volunteer as a youth telemark ski coach, and develop mental skills training for a youth ski racing team. As a researcher, I am interested in examining and influencing healthy developmental outcomes in all people, but specifically adolescents. Moreover, my attention is geared toward particular settings youth commonly

engage in and how these settings may or may not support the constellation of positive outcomes for youth. Therefore, this constitutes the main passion for pursuing a doctoral degree with a dissertation focusing on understanding PYD through sport.

I feel my experiences as a practitioner and a researcher aided my ability to understand and interpret the interviews with young athletes. While guiding youth on multiday outdoor adventures, I lived in a young person's world for 24 hours a day for up to three weeks. Although I am the adult leader on these adventures, I am also the minority. Consequently, I start understanding and interpreting a young person's world through continuous verbal and nonverbal interactions. Specific to sport, I have been involved in competitive sports for 20 years. As an athlete I participated in individual sports, which are similar to that of ski racing. Additionally, skiing is absolutely and unequivocally my favorite sport. Consequently, the young ski racer and I had similar interests: pursing individual sports and a passion for skiing.

These practical experiences transfer into the interview process. Kahn and Cannel (1957) recommend it is not enough to understand the mechanics of the interviewing but also to understand the respondent's world and forces that might enhance or inhibit responses. I cannot fully understand a young person's world due to being an adult. However, by repeatedly and intricately living with youth in the outdoors for two to three weeks and currently working with early adolescent alpine ski racers I am provided with vital experiences that assist in my understanding of a youth's language, behavior, and attitude. As a researcher, that helped me with the interaction and interpretation during the interview and research processes.

Although I view my prior experiences and subjectivity as strengths, I also took

measures to support, and not to hinder, the interview process. The measures taken to conduct a quality interview were previously discussed in the trustworthiness section.

<u>Reciprocity</u>

I recognize my approach in conveying an attitude that the participants' views may be valuable and useful to coaches, administrators, and/or parents in promoting PYD. Therefore, upon completion of my dissertation defense, I will do my best to give a voice to the youth's experiences, an emic perspective. I believe this will be beneficial because all too often youth voices are absent from inquiry, but ironically, the unheard youth are most affected by policy and program decisions. In addition, I will provide each participant a choice in articulating her or his own voice to coaches, administrators, and/or parents if it is deemed possible.

I recognize the importance of each participant's time and the resources they greatly contribute to this research process. Therefore, when preparing to share my results I will ask each athlete that participated in the qualitative interview what is the most beneficial or helpful way in sharing the results. Possibilities include: (a) providing a collaborative inservice training on PYD or appropriate social psychological climates or (b) providing an opportunity for youth, instead of the researcher, to articulate their ideas to adults. With athletes wanting to express their ideas, then my role is acting as a facilitator for them to convey their experience.

Last, I will create a report from the results of this study and send it to the coaches and directors that participated in this study. The report will include the overall findings of the study as well as individualizing the quantitative findings for each team. Additionally,

I will ask the Western director of USSA if the organization would like a summary report of this study.

Summary

This chapter on methodology began with a description of mixed methods research. The quantitative section described the participants, instruments, procedures, and data analysis. The participants were 13- and 14-year-old alpine ski racers competing in the Western United States who completed a 76-item survey to assess their perceptions of the social psychological climate and PYD assets. A correlational design was used for this study and PASW 18.0 (2008) was used for data analysis. The qualitative portion of the methodology described the selected participants, data gathering methods, data analysis, trustworthiness, personal biography, and reciprocity. A rather restrictive subsample of skiers who perceived the climate to be high task-involving, high caring, and low ego-involving were selected for the semistructured interview. Qualitative data analysis procedures followed a general inductive approach as outlined by Thomas (2006). Steps for trustworthiness include three key methods: self-reflexive journal, peer qualitative research team, and audit trail. The summary of the research results follows in Chapter 4.

CHAPTER 4

RESULTS AND DISCUSSION

Quantitative Phase

The quantitative phase of this study was guided by one research question, to

examine the relationship between youth perceptions of the social psychological climate

and psychosocial developmental assets in alpine ski racers. Two hypotheses guided this

investigation: (a) perceptions of a task-involving climate and a caring climate would

positively predict PYD assets; (b) perceptions of an ego-involving climate would

negatively predict PYD assets. Data were analyzed in relation to these hypotheses. Data

cleaning, tests of statistical assumptions and descriptive statistics, correlations, and

multiple regression results are provided as well as a discussion of the relevant findings.

Data Cleaning and Screening

A total of 89 skiers completed the survey. One participant did not complete two

pages of the survey and was removed from further analysis. This resulted in a final

sample of 88 skiers. Data from this complete set were screened. Ten percent of the

surveys were randomly chosen to confirm the data were entered correctly. No errors were

detected. Box plots, histograms, and frequency tables were examined for missing data.

Cross tabulations, *t*-test and Little's MCAR (Missing Completely At Random) were used

to examine the nature of the missing data. The cross tabulations and *t*-test showed less

than 5% of the data were missing. The Little's MCAR test supported the null hypothesis,

thus showing that the data were missing randomly. Using these techniques, it was

determined that the pattern of missing data was random. In the effort to maintain

sufficient sample size, expectation maximization (EM) was used to predict missing

values based on an algorithm of the remaining individual scale items (Dempster, Laird, &

Rubin, 1977).

Prior to conducting statistical analysis, the assumptions specified for the planned

analysis (i.e., standard multiple regression) were evaluated. Frequency tables, box plots,

histograms, probability plots, and standardized scores identified univariate outliers. The

specific cases containing the outliers were identified and inspected. In cases where a data

entry error was made, the researcher used the raw data to correct the value. In cases

where the data was an outlying value, the value was left unchanged. More specifically,

only five cases exceeded a *z*-score in excess of 3.29 ($p < .001$) and were representative of

the participants' remaining responses. Moreover, when examined in the detrended

probability plots, these cases appeared evenly distributed above and below the line, thus

signifying that the error was random (Tabachnick & Fidell, 2007). For these reasons and

the fact that Micceri (1989) reported that normality is relatively rare in psychology, the

data were left unchanged.

Skewness and kurtosis were visually inspected using probability plots,

histograms, and standard error coefficients for each variable. Several variables were

substantially skewed (i.e., skewness coefficient > 5.0; Tabachnick & Fidell, 2007; see

Table 2). Because multiple regression is sensitive to Type I error with skewed data,

Table 2

Skewness and Kurtosis for the Psychosocial Climate and PYD Assets

Variable	Skewness Statistic	*z-values* (Skewness / *SE*)	Kurtosis Statistic	*z-values* (Kurtosis / *SE*)
Task-Involving Climate	-0.59	-2.30	0.41	0.81
Ego-Involving Climate	0.90	3.50	1.56	3.06
Caring Climate	-0.20	-0.79	-0.86	1.69
Intrinsic Motivation	-1.83	-7.13	3.43	6.75
Fun	-2.24	-8.73	5.15	10.14
Connectedness	1.23	4.77	1.90	3.74
Self-Efficacy	1.50	-5.83	2.61	5.14
General Self-Efficacy	-0.44	-1.69	0.13	0.26

Note. SE is standard error. Skewness *SE* = .257; Kurtosis *SE* = .508

power transformations were conducted to normalize the data for the following dependant variables: intrinsic motivation, fun, self-efficacy, and connectedness (Tabachnick & Fidell, 2007). The data were transformed to bring skewness closer to normal by using the procedures for substantial skewness provided by Tabachnick and Fidell (2007). The transformation was successful in normalizing the data (see Appendix M). However, when the findings for the transformed data were compared to the original data, the outcomes of the standard multiple regressions resulted in no meaningful differences. In addition, Tabachnick and Fidell (2007) do not recommend data transformations when the transformation may threaten interpretation or when the means are skewed somewhat similarly because the procedure typically produces minimal overall effect. Because the findings revealed minimal changes when the analysis was conducted with the transformed variables, the original data was used in all subsequent analyses for ease of interpretation (Newton & Rudestam, 1999; Tabachnick & Fidell, 2007).

The next steps in data screening were checking linearity and homoscedasticity. Linearity and homoscedasticity relate to the assumption of normality between the predictor and the outcome variable (Tabachnick & Fidell, 2007). Scatterplots were visually assessed for linearity and homoscedasticity. This visual inspection was corroborated by simple correlations between each predictor and the outcome variable. A linear relationship existed.

Additionally, the variables represented heteroscedasticity. In other words, the plots on the graph did not bulge toward the middle. According to Tabachnick and Fidell (2007) a visual inspection of linearity in small samples is similar to "reading tea leaves" (p. 78) and heteroscedasticity is not critical to analysis of ungrouped data, although it can weaken obtained effects. As a result, the study proceeded with caution.

The next step in data screening was assessing multivariate outliers. Multivariate outliers were examined by calculating the Mahalanobis distance for each set of responses (Morgan, Leech, Gloeckner, & Barrett, 2011; Tabachnick & Fidell, 2007). Although two cases exceeded the critical chi-squared value ($p < .001$), upon further evaluating the raw data, the researcher determined that these case responses were within an acceptable range and should remain in the data set.

Regression requires that the predictors be independent of one another, that is, have simple correlation coefficients of $r < .9$ (Tabachnick & Fidell, 2007, p. 85). Examination of the bivariate correlation matrix revealed no multicollinearity in the data with a simple r's ranging from -.32 to .74 (See Table 3). The standard criterion for multicollinearity include the condition index, tolerance, and variance inflation factor

Table 3
Descriptive Statistics, Intercorrelations, and Coefficient Alphas for Scores on Questionnaire Scales

Measure	1	2	3	4	5	6	7	8
1. Task-Involving Climate	(.86)							
2. Ego-Involving Climate	-.54	(.84)						
3. Caring Climate	.74	-.60	(.91)					
4. Intrinsic Motivation	.44	-.33	.38	(.68)				
5. Fun	.33	-.41	.40	.67				
6. Connectedness	.55	-.35	.63	.28	.37	(.90)		
7. Skiing Self-Efficacy	.30	-.32	.39	.47	.54	.49	(.77*)	
8. General Self-Efficacy	.44	-.38	.44	.47	.37	.38	.50	(.82)
M	4.22	2.05	4.29	6.63	9.54	5.76	79.56	3.33
SD	0.43	0.52	0.51	0.48	0.88	1.06	18.82	0.41
Range	1 - 5	1 -5	1 - 5	1 - 7	0 - 10	1 - 7	0 - 100	1 - 4

Note. Coefficient alphas are presented in parenthesis along the diagonal. All coefficients are significant at $p = .002$. * represents a bivariate correlation between the two items that comprised this scale.

(VIF) and were computed between each predictor and outcome variable. The condition index is a measure of overlap among the variables. The test for multicollinearity has two components, a condition index of greater than 30 and two variance proportions greater than .50 for two predictors. (Tabachnick & Fidell, 2007, p. 85). The condition index in this study was 38.21, but no two variables had variance proportions over .50. Thus, the data met the criterion. The tolerance and VIF met the assumption of no multicollinearity (Field, 2009). Taken together, these findings suggest the data do not suffer severe multicollinearity.

A major assumption in regression is the independence of residuals. The Durbin-Watson test assumes errors in regression are independent if the statistic is close to two. The Durbin-Watson statistic met the assumption of independent errors ($d = 1.61$-1.82).

The present findings suggest the residuals were uncorrelated and the data met the assumption of the independence of residuals.

The final step in meeting the assumptions was independence. That is the participants on the same team were so similar that the data violated the assumption that all the scores are independent. It is possible that the assumption of independence would be violated because coaches and team members may collectively create an atmosphere that supports or discourages the development of psychosocial assets. Thus, the atmosphere may create a problem of dependency among team members. To account for this dependency, each team ($n = 9$) was included as a variable. A series of dummy contrasts were coded for each team. A one-way ANOVA was conducted to determine if teams differed on the predictors and the outcome measures. An ANOVA was conducted instead of hierarchical linear modeling because of the small number of athletes within each team. The one-way ANOVA reported no significant differences among all variables except for fun ($F (8,79) = 2.55$, $p = .02$). Fun scores ranged from 6 – 10 indicating some differences among the groups on this measure (i.e., 11 responses equaled 6-8, 13 responses equaled 9, 64 responses equaled 10). Because the responses included at least some variance (and were in the upper end of the scale), the fun variable was included in the analysis. Thus, there was no dependency within teams and it was deemed appropriate to proceed with the evaluation of reliability of the outcome measures, descriptive statistics, and the parametric statistics.

<u>Internal Reliability of the Outcome Scales</u>

Coefficient alphas were computed to obtain internal consistency estimates for most of the predictor and outcome scales. The fun variable was excluded from the analysis because it was a one-item scale. A bivariate correlation was computed for skiing self-efficacy because it was a two-item scale. Of the six other variables, the Cronbach's alpha reliability coefficients ranged from .68-.91 (see Table 3), suggesting that five out of the six scales met the acceptable criterion ($r > .7$; Cohen, 1968; George & Mallery, 2003). The lowest Cronbach alpha, $\alpha = .68$, was for intrinsic motivation. Because the results from this scale did not meet the acceptable criterion, findings should be interpreted with caution because a large amount of variance could prevent detecting a significant effect. In other words there is a greater likelihood for a Type II error. After calculating the initial analysis for the overall reliability for each scale, the subscales for ego-involving and task-involving were assessed.

While not of interest to this study, the PMCSQ-2 is comprised of six subscales. Researchers reading this document might be interested in the internal reliability of the subscales. The task- and ego-involving subscales met the acceptable criterion ($\alpha = .76$-.83) with the exception of one. The ego-involving subscale of intrateam rivalry had a questionable reliability coefficient ($\alpha = .51$). This reliability coefficient matches that of the original study (Newton, Duda, & Yin, 2000). Given the focus in this study on the larger subscales (task- and ego-involving subscales) and the fact that they were deemed reliable this subscale was not eliminated from further analysis.

Descriptive Statistics

       Overall, the participants reported a high task-involving climate, a high caring

climate and a low ego-involving climate (see Table 3). Thus, the skiers perceived that the

climate on their team emphasized cooperative learning as well as effort and the important

role of each member on the team. In regards to the caring climate, the athletes also

reported that they agreed that team members and coaches were kind and they felt safe and

had the experience of being treated fairly and with respect. The skiers tended to not

perceive that their team had an ego-involving climate. They disagreed with the notion

that ability was valued or rewarded. Moreover, the participants responded very positively

on all the PYD variables (intrinsic motivation, fun, connectedness, skiing self-efficacy,

and general self-efficacy). Nearly all the athletes reported that skiing was an enjoyable

activity (intrinsic motivation) and they had a lot of fun while participating on the ski

team. Athletes reported moderate levels of support and being understood and listened to

(connectedness) on their ski team. The skiers reported nearly 80% confidence in skiing

(self-efficacy). Athletes reported being moderately able to respond to difficult situations

and deal with life's obstacles and setbacks (general self-efficacy). For more details of the

descriptive statistics for the independent and dependent variables see Table 3.

Correlations

       The first step to addressing the research questions was computing the Pearson

product moment correlation coefficients to determine the relationship among the eight

variables. Table 3 displays small to moderate positive correlations between two

predictors (task-involving climate and caring climate) and each dependent variable (i.e.,

intrinsic motivation, fun, connectedness, skiing self-efficacy, and general self-efficacy).

Thus, the simple *r* correlations show that the more that the skiers felt cared for and valued

on their team and the more that they perceived trying hard was valued, the more

enjoyment and fun they tended to experience, the more support they felt and the more

able they believed themselves to be in skiing and in everyday life. In contrast, perceptions

of an ego-involving climate demonstrated moderate negative relationships with the

dependent variables. In other words, optimization of personal assets tended to be

minimized and even depressed the more that the skiers perceived that the climate on their

team emphasized differences in ability. These findings provide preliminary support for

the hypothesis guiding this aim.

Multiple Linear Regression

       Preliminary analysis. Prior to conducting the parametric statistics, an

independent-samples t test was conducted to evaluate if there were climate differences

based on sex. The test was insignificant for each of the social psychological climate

variables (task-involving: $t(86) = -1.55$, $p = .13$; ego-involving: $t(78.89) = -.18$, $p =.11$;

caring: $t(86) = -.18$, $p = .11$). This suggested that regardless of sex (i.e., girl or boy) there

were no differences in how the skiers perceived the social psychological climate. As

stated previously, there were no differences between how the teams perceived the

climate. Thus, the analysis proceeded onto the parametric statistics.

       Standard multiple regression. In order to fully address the first research question,

standard multiple regression analyses were conducted to investigate the social

psychological climate predictors of alpine ski racers' psychosocial assets (i.e., intrinsic

motivation, fun, self-efficacy in sport, general self-efficacy, and connectedness). This analysis determines which predictors have the strongest unique relationships to the outcome variables. Separate multiple regressions were conducted to evaluate whether the climate predicted each of the five psychosocial assets. The three climate predictors (task-involving, ego-involving, and caring climates) were entered simultaneously into each the analysis, to determine which perceived climate produced a unique predictive effect for each psychosocial asset.

All models were statistically significant: (a) intrinsic motivation, $F(3,84) = 7.24$, p <.001; (b) fun, $F(3,84) = 7.25$, $p < .001$; (c) connectedness, $F(3,84) = 20.12$, $p < .001$; (d) self-efficacy, $F(3,84) = 5.47$, $p = .002$; and (e) general self-efficacy, $F(3,84) = 20.56$, $p < .001$. The overall variance explained by the three climate predictors varied widely for the outcome variables and were 20.6% for intrinsic motivation, 20.5% for fun, 39.8% for connectedness, 16.3% for self-efficacy, and 23.5% for general self-efficacy. According to Cohen (1988), these are medium to large effect sizes. However, each predictor was not significant with respect to each outcome variable (see Tables 4-8). Positive perceptions of a task-involving climate only significantly predicted intrinsic motivation. Positive perceptions of a caring climate predicted connectedness and skiing self-efficacy. Negative perceptions of an ego-involving climate predicted fun. None of the climate variables emerged as a predictor of general self-efficacy. All the simple r's were significant for the climate predictors and general self-efficacy, but none had a unique relationship with this outcome. Collectively, the findings partially, and in some cases minimally, supported the hypothesis that the psychological assets were predicted by perceptions of the climate.

Table 4

Regression Analysis Summary for Psychosocial Climate Variables Predicting Intrinsic Motivation

Variable	B	$SE\ B$	95% CI	β	t	p
Constant	5.05	0.74	[3.59, 6.51]		6.86	.000
Task-Involving Climate	0.35	0.16	[0.02, 0.68]	.31	2.13	**.036**
Ego-Involving Climate	-0.10	0.11	[-0.33, 0.12]	.11	-0.92	.358
Caring Climate	0.08	0.14	[-0.21, 0.36]	.08	0.53	.601

Note. AdjR^2 = 0.21 (N = 87, $p <$ .001). CI = Confidence Interval for *B*. **Bold** is significant.

Table 5

Regression Analysis Summary for Psychosocial Climate Variables Predicting Fun

Variable	B	$SE\ B$	95% CI	β	t	p
Constant	8.65	1.37	[5.93, 11.37]		6.33	.000
Task-Involving Climate	0.04	0.30	[-.56, 0.65]	.02	0.14	.892
Ego-Involving Climate	-0.45	0.21	[-8.66, -0.03]	-.27	-2.15	**.034**
Caring Climate	0.38	0.27	[-0.14, 0.91]	.22	1.45	.151

Note. AdjR^2 = 0.18 (N = 87, p < .001). CI = Confidence Interval for *B*. **Bold** is significant.

Table 6

Regression Analysis Summary for Psychosocial Climate Variables Predicting Connectedness

Variable	B	$SE\ B$	95% CI	β	t	p
Constant	-1.41	1.41	[-4.21, 1.39]		-1.00	.320
Task-Involving Climate	0.52	0.31	[-0.11, 1.14]	.21	1.65	.103
Ego-Involving Climate	0.16	0.21	[-0.27, 0.59]	.08	0.76	.450
Caring Climate	1.08	0.27	[0.54, 1.63]	.53	3.97	**.000**

Note. AdjR^2 = 0.39 N = 87, p < .001). CI = Confidence Interval for *B*. **Bold** is significant.

Table 7

Regression Analysis Summary for Psychosocial Climate Variables Predicting Skiing Self-Efficacy

Variable	*B*	*SE B*	95% CI	β	*t*	*p*
Constant	43.46	29.88	[-15.96, 102.87]		1.45	.150
Task-Involving Climate	-0.65	6.65	[-13.87, 12.57]	-.02	-0.10	.922
Ego-Involving Climate	-5.10	4.57	[-14.18, 3.98]	-.14	-1.12	.267
Caring Climate	11.51	5.80	[-0.02, 23.04]	.32	1.99	**.050**

Note. AdjR^2 = 0.13 (*N* = 87, *p* = .002). CI = Confidence Interval for *B*. **Bold** is significant.

Table 8

Regression Analysis Summary for Psychosocial Climate Variables Predicting General Self-Efficacy

Variable	*B*	*SE B*	95% CI	β	*t*	*p*
Constant	2.04	0.62	[.81, 3.27]		3.30	.001
Task-Involving Climate	0.21	0.14	[-.0.06, .049]	.22	1.55	.126
Ego-Involving Climate	-0.12	0.10	[-0.30, .0.07]	-.15	-1.22	.227
Caring Climate	0.15	0.12	[-0.09, 0.39]	.18	1.21	.228

Note. AdjR^2 = 0.28 (*N* = 87, *p* < .001). CI = Confidence Interval for *B*. **Bold** is significant.

Exploratory analyses. The present findings failed to fully support the hypotheses.

For instance, perceptions of the climate did not predict general self-efficacy.

Furthermore, perceptions of a task-involving and caring climate did not collectively and

consistently predict the outcome variables. For example, a task-involving climate

predicted intrinsic motivation but not the other assets. These findings were puzzling to

the researcher. As a result some exploratory analyses were conducted to try to examine

different permutations of the variables in hopes of shedding light on the discordant

results. It is possible that the demographic variables accounted for some proportion of the

variance in psychological assets. It is feasible the variability in an adolescent skiers

psychological assets are linked to various demographic characteristics. For instance, it is

logical that the variables might be related to how long the skiers have been competing. To examine this possibility a series of standard multiple regressions, while simultaneously entering the demographic variables (age, number of years skiing, number of years ski racing, and how well one knew their teammates prior to the start of the season) as well as perceptions of the climate were performed for each psychological asset.

The regressions for intrinsic motivation, fun, connectedness, and skiing self-efficacy were not significant suggesting that the demographic variables did not account for meaningful proportion of the variance in the outcome variables. Only one model significantly changed, namely, general self-efficacy ($F(4,83) = 2.80$, $p = .03$). It should be recalled that perceptions of the climate did not predict generalized self-efficacy in the primary analysis. The four demographic variables accounted for 11.9% of the variance. The significant predictors were the number of years skiing (an inverse relationship) and the number of years ski racing (see Table 9).

To further examine this finding, another standard multiple regression was conducted which included only these variables (see Table 10). The overall model was significant (F (7,80) = 5.90, $p < .001$). The variance explained by the demographic variables and the three predictors was 34.1%, which is a large effect (Cohen, 1998). The overall variance increased 10.6% by adding these demographic variables to the predictor variables, indicating that the demographic variables contributed to general self-efficacy. It is possible this finding emerged because general self-efficacy is more psychologically proximal to the skier while the other variables are more distal. In other words, general self-efficacy is more trait-like while intrinsic motivation (for example) is more state-like.

Table 9

Regression Analysis Summary for Demographic Variables and Psychosocial Climate Predicting General Self-Efficacy

Variable	B	SE B	95% CI	β	t	p
Constant	1.58	1.19	[-.79, 3.95]		1.33	.188
Years Skiing	-0.07	0.02	[-0.11, -0.02]	-.27	-2.68	**.009**
Years Ski Racing	0.06	0.02	[0.02, 0.02]	.29	2.91	**.005**
Task-Involving Climate	0.21	0.13	[-.0.05, 0.47]	.22	1.61	.112
Ego-Involving Climate	-0.08	0.09	[-0.26, .0.11]	-.01	-0.82	.414
Caring Climate	0.17	0.12	[-0.06, 0.40]	.22	1.50	.139

Note. AdjR^2 = 0.21 (N = 87, $p <$ .001). CI = Confidence Interval for *B*. **Bold** is significant.

Table 10

Regression Analysis Summary for Demographic Variables Predicting General Self-Efficacy

Variable	B	SE B	95% CI	β	t	p
Constant	3.48	1.13	[1.22, 5.73]		3.07	.003
Years Skiing	-0.07	0.03	[-0.13, -0.02]	-.30	-2.64	**.01**
Years Ski Racing	0.06	0.02	[0.02, 0.11]	.31	2.70	**.008**

Note. AdjR^2 = 0.08 (N = 87, p = .03). CI = Confidence Interval for *B*. **Bold** is significant.

These findings, along with the fact that a task-involving climate and a caring climate were moderately related (r = .74), motivated the researcher to attempt to unravel the influence of the predictor variables on the outcome variables. For instance, it is possible that perceptions of a task-involving climate did not emerge as a predictor of connectedness because of the shared variance with a caring climate. To address this issue hierarchical regression was used to assess the improvement of the model at each stage of analysis. In other words, a hierarchical model sequentially assesses the contribution of a

variable or group of variables at predetermined points of entry. Theory or logic should determine the point of entry for a particular variable (Tabachnick & Fidell, 2007). For example, perceptions of a caring climate significantly predicted connectedness, thus caring was entered first, task-involving climate was entered next and ego-involving climate entered last. Overall, the significant contributor was entered first for each outcome variable during the hierarchical regression. The results showed only small, minute changes in the model, explained variance, and coefficients in most of the outcome variables when compared to the standard multiple regression. This suggests that with these outcome variables there was not much overlap between perceptions of a task and caring climate, indicating they were unique contributors to the assets.

Prediction of general self-efficacy was the only outcome variable that was significantly altered with this analysis (see Table 10). For general self-efficacy, years skiing and years racing were entered first, perceptions of a caring climate second, a task-involving climate third, and perceptions of an ego-involving climate last. Caring climate was entered first because it predicted skiing self-efficacy, which is similar to general self-efficacy. In each case the added contribution of the subsequent variable's addition to the model was assessed. The number of years skiing and racing accounted for 11.9% of the variance in general self-efficacy (AdjR^2 = .098, p = .005). A caring climate added an additional 18.5% (AdjR^2 = .28, p < .001), a task-involving climate contributed 2.8% (AdjR^2 = .30, p < .001), and an ego-involving climate added .5% (AdjR^2 = .297, p < .001). Although the final model was significant, $F(5,82)$ = 8.35, p < .001, the best model contributing to general self-efficacy was model 2. Model 2 contained the most explained variance and the lowest p values associated with the predictors. Model 2 contained the

predictors years skiing, years ski racing, and caring climate. The model was significant,

$F(3,84) = 12.25$, $p < .001$, and accounted for 30.4% of the variance (Adj$R^2 = .280$, $p <$

.001). The variance explained was a large effect (Cohen, 1998) and matches the findings

in the standard multiple regression that included the demographic variables and the

climate variables. Yet, the hierarchical regression model differs from the standard

multiple regression because the hierarchical model revealed that perceptions of a caring

climate uniquely contributed to general self-efficacy (Table 11). A caring and a task-

involving climate may have been 'fighting' for shared variance. When both caring and

task-involving climates were entered into the equation neither emerged as a significant

predictor. The model incorporating caring was retained for conceptual reasons. These

findings provide minimal support for the hypothesis that the climate would predict

general self-efficacy. Perceptions of a caring climate positively predicted general self-

efficacy, but minimally, and to a lesser extent than selected demographic variables.

Discussion

This study set out to investigate whether the social psychological climate might

play a role in contributing to PYD. More specifically, the study examined the relationship

between the facets of the social psychological climate (i.e., the task-involving, ego-

involving, and caring climate) and psychosocial assets (i.e., intrinsic motivation, fun,

connectedness, self-efficacy, and general self-efficacy) in competitive, early adolescent

alpine ski racers. No previous studies have examined this relationship using these

variables or J3 alpine ski racers.

Table 11

Hierarchical Regression Analysis Predicting General Self-Efficacy

Model	Predictor variable	B	SE B	95% CI	β	t	p
1	Constant	3.7	0.27	[3.15, 4.24]		13.49	.000
	Years Skiing	-0.07	0.03	[-0.13, -0.02]	-.29	-2.68	.009
	Years Ski Racing	0.06	0.02	[0.02, 0.10]	.31	2.85	.005
2	Constant	2.17	0.41	[1.36, 2.97]		5.33	.000
	Years Skiing	-0.07	0.02	[-0.11, -0.02]	-.27	-2.76	**.007**
	Years Ski Racing	0.06	0.02	[0.02, 0.10]	.31	3.24	**.002**
	Caring	0.34	0.07	[0.20, 0.49]	.43	4.74	**.000**
3	Constant	1.76	0.46	[0.86, 2.67]		3.87	.000
	Years Skiing	-0.06	0.02	[-0.11, -0.02]	-.26	-2.7	.008
	Years Ski Racing	0.06	0.02	[0.03, 0.10]	.32	3.31	.001
	Caring	0.20	0.11	[0.01, 0.41]	.25	1.87	.065
	Task-Involving	0.24	0.13	[-0.02, 0.50]	.25	1.85	.068
4	Constant	2.14	0.65	[0.86, 3.42]		3.31	.001
	Years Skiing	-0.06	0.02	[-0.11, -0.02]	-.25	-2.63	.01
	Years Ski Racing	0.06	0.02	[0.02, 0.10]	.31	3.16	.002
	Caring	0.17	0.11	[-.06, 0.39]	.21	1.46	.149
	Task-Involving	0.22	0.13	[-0.04, 0.48]	.23	1.66	.101
	Ego-Involving	-0.07	0.09	[-0.25, 0.11]	-.10	-0.82	.413

Note. CI = Confidence Interval for *B*. **Bold** is significant.

Although no study has examined this combination of variables, the athletes'

perception of the social psychological climate was similar to those found in other studies.

Newton et al. (2007) used the Perceived Motivational Climate in Sport Questionnaire

(PMCSQ) while the present study used the PMCSQ-2. Although the scales are different,

the PMCSQ-2 is based on the PMCSQ and it conceptualizes the climate in a hierarchical

manner with subscales underlying the higher-order (Newton et al., 2007). Newton et al.,

(2007) reported a task-involving climate as 3.98, ego-involving climate as 3.12, and a

caring climate as 3.8 among girl (*n* =138) and boy (*n* = 214) sport camp participants aged

9 to 17 years (*M*age = 12.18, *SD* =1.55). The present study reported a higher task-

involving climate (i.e., 4.22), a lower ego-involving climate (i.e., 2.05), and a higher

caring climate (i.e., 4.29) than Newton et al. (2007).

Similar, yet not as strong, differences were noted when comparing the present

finding with those of Sage and Kavussanu (2008). They conducted a study with 180

British footballers (i.e., soccer players) (156 males, 24 females) with the age ranged from

11 to 18 years (*M*age 14.1 years, *SD* = 1.8). At the end of the regular season, the young

athletes reported a task-involving climate of 3.90 and an ego-involving climate as 2.63.

The present study reported a higher task-involving climate (i.e., 4.22), a lower ego-

involving climate (i.e., 2.05),

Lastly, the reported caring climate scale in the present study (i.e., 4.29) was also

higher when compared to the finding of Gano-Overway et al. (2009). Sport camp

participants (girls = 198 and boys = 197; *M*age = 11.80 years, *SD* = 1.54) in their study

reported a mean caring climate of 3.86 (*SD* = .77). Overall, in comparison with previous

studies, the skiers in this study reported greater perceptions of task-involving and caring

climates and lower perceptions of an ego-involving climate. This might be due to the

length of time the athletes in this study have been teammates. Sixty percent of the athletes

reported being on the same team for 5 or more years, or since they were about 8 years

old, and 68.3% reported mostly knowing to knowing their teammates a lot before the start

of the season. Therefore, it is likely they are more apt to accept teammates for who they

are and help each other get better and excel in skiing due to several years of building

strong relations with coaches and peers. Another likely explanation is the amount of time

the J3 skiers spend together as a team and away from their family and other friends. Over

the course of a 7-month season, athletes and coaches travel more than an hour away and

stay in hotels for about half of their races. Thus, the coach or the ski race program has much more time (over the course of one season as well as over the course of many seasons given the length of time athletes remain members of the team) to cultivate a social psychological climate.

The primary aim of this study was examined through correlations and more directly through regression analysis. With respect to the correlation findings, in line with the hypothesis, perceptions of a task-involving climate and caring climate were positively associated with psychosocial assets in early adolescent athletes. Thus, the J3 skiers were more likely to experience enjoyment, confidence in skiing, and belongingness when their coach reinforced effort, emphasized working together as a team, and made certain that each skier felt as though they had an important role on the team. Also supporting the hypothesis, perception of an ego-involving climate was negatively associated with the psychological assets. As a result, athletes were less likely to experience positive psychosocial outcomes when they experienced being punished for their mistakes or when the coaches provided favoritism to the top skiers.

With respect to the regression, the findings partially supported the hypothesis. Positive perceptions of a task-involving climate significantly predicted intrinsic motivation. These findings support previous work (Cury, Biddle, & Famose, 1996; Ferrer-Caja, & Weiss, 2000; Koka, & Hein, 2003). For example, Cury, Biddle, and Famose (1996) used a causal modeling to examine how the context and dispositions were associated with intrinsic interest. Perceptions of a task-involving climate had a stronger association with intrinsic motivation than dispositional differences in adolescent girls participating in physical education.

Although past research indicates a task-involving climate is associated with feelings of self-efficacy, autonomy, connectedness, positive affect, and adaptive achievement patterns (Newton, Duda, & Yin, 2000; Newton, et al., 2006; Ntoumanis & Biddle, 1999; Ommunsdsen, Robert, & Kavussanau, 1998; Treasure, 1997; Weise-Bjornstal, LaVoi, & Omli, 2010), the results of this study indicated that this was not the case. The current study only found a link between a task-involving climate and intrinsic motivation. Fun, connectedness, and self-efficacy were not predicted by the extent to which the skiers perceived of a task-involving climate on their team. The link between a task-involving climate and intrinsic motivation makes theoretical, developmental, and logical sense. Perceptions of a task-involving climate are based on self-referenced effort. Athletes perceiving a task-involving climate sense that trying hard and becoming more skilled are valued on their team. As a result, the link between a task-involving climate and intrinsic motivation may be partly explained by coaches encouraging athletes to process their competence by their own standards, thus providing athletes the tools to inwardly strive for a sense of satisfaction in learning skiing skills. Being evaluated for self-referenced advancement is likely to promote feelings of autonomy, which is a key developmental milestone for adolescents. Another key developmental marker for youth is the desire to master new challenges. The promotion of a task-involving climate nicely sets the stage for task mastery and fulfillment of this desire. The skiers in this study might have experienced great satisfaction in their skiing because the task-involving climate promoted feelings of mastery and autonomy. Additionally, 75% of the athletes had been skiing since they were approximately 3 years old and they may inherently just love to ski. Athletes are not likely to stay involved in a sport for as long as the skiers in this study

have if they do not have a passion for it. Their passion combined with a climate that focuses on personal improvement may sustain and possibly further ignite their intrinsic motivation for skiing. This finding underscores that athletes experiencing a task-involving climate may optimally develop in a competitive ski setting.

An explanation for why a task-involving climate did not contribute to psychosocial assets might be because of the caring climate. Newton et al. (2006) found that caring for others was a mediator between perceptions of a task-involving climate and future expectation and sport interest, while self-responsibility mediated the relationship between a task-involving climate and enjoyment. These findings suggest three possibilities. First, it is possible that perceptions of a caring climate are more important than perceptions of a task-involving climate in relation to optimizing the particular assets in this study. Indeed, caring did emerge as a significant predictor of connectedness, skiing self-efficacy, and general self-efficacy. Another possibility is that the shared variance between caring and task-involving climates masked the contribution of a task-involving climate. Lastly, it is possible that some other facet of the climate is important in maximizing assets. It is likely that the climate is characterized by constructs other than effort (i.e., task-involving) and caring. It is possible that climates characterized by aspects of social emotional intelligence or self responsibility are important for maximizing portions of or particular assets.

This study further found young athletes' perception of a caring climate was positively associated with their attitudes toward feeling valued, supported, and understood by their teammates. This finding supports previous research that youth athletes' perceptions of a caring climate are related to positive attitudes and caring

behaviors toward their coaches and teammates (Fry & Gano-Overway, 2010). Similar to other caring youth-adult relationship literature suggesting that these types of connections facilitate psychological and emotional well-being among peers and adults (Larson, 2000; Scales, Benson, & Mannes, 2006), it appears that the caring climate also contributes to feelings of connectedness among adolescent skiers. This finding also support Noddings' (1992, 2003) contention that caring relations provide young people with an opportunity to care for others. It is also possible that when coaches exhibit caring behaviors young athletes watch and, then, model those behaviors with team members. Another possible explanation for this finding is that caring relations with an adult coach generates a reciprocal exchange of a positive, mutually beneficial relationship. Thus, the potential to reciprocate these warm emotions and thoughtful behaviors are actualized when youth experience a caring connection with peers. Additionally, the reason a caring climate predicted connectedness might be likely due to team members working together on ski tasks. In other words, through setting up and tearing down race courses or loading and unloading the vans for ski racing events, athletes get ample opportunities to get to know their teammates outside of the competitive setting and to develop friendships and connections with them. Thus, athletes come to respect and value their peers' thoughts and feelings, which may create closer bonds.

Youth sport participants' perception of a caring climate was also positively associated with self-efficacy. The extent to which youth feel cared for and its association to efficacy has been supported in the scientific literature of education (Noblit & Rogers, 1995), physical education (Hellison, & Templin, 1991), after school settings (Rhodes, 2004), and youth development programs (see Eccles & Gootman, 2002). This is similar

to the findings in sport. Chase (1998) found 13- to 14-year olds reported praise and encouragement from a supportive, significant coach as the primary source of efficacy. Although this study and others (Feltz & Magyar, 2006; Magyar & Feltz, 2003) positively associated a task-involving climate to enhanced self-efficacy beliefs, it is important to note that in this study coaches who provide a safe context for support and guidance uniquely contributed to competence in sport. This is likely due to coaches fostering an environment characterized by acceptance, willingness to help, and genuinely listening, which offers young athletes' an opportunity to feel competent in skiing. Another possible explanation is that the coach may foster hope when athletes experience failures or take time to understand each athlete's skiing goals, which may positively impact how they feel about their own skiing ability. It is also likely when athletes provide positive encouragement to all team members, regardless of good or bad performances, then young athletes experience their teammates being responsive to their needs. This may influence an athlete's belief in his or her own capability of achieving success in skiing, while also buffering the stress of their peers negatively evaluating them and their skiing ability. The caring climate, therefore, seems to compliment the young persons need to feel worthy and competent in sport.

The caring climate also predicted general self-efficacy. After accounting for the demographic variables (i.e., number of years skiing and racing), caring climate uniquely contributed 18.5% of the variance in general self-efficacy. Thus, a caring climate was linked to an athlete's belief in managing difficult problems in other life domains outside of sport. While the use of measures of generalized self-efficacy beliefs are increasing in the literature (May, 2009; Nebitt, 2009; Toering et al., 2009), no study has examined its

association with the social psychological climate. This study supports the notion that when athletes perceive a climate in which their coach is kind and supportive toward them and the team, their coach wants to help them, and their teammates show respect and acceptance for each other, then they are likely to feel generally efficacious. This is likely due to adolescents being especially receptive to their external environments (Erikson, 1968). Thus, when athletes experience a place where one's beliefs in his or her own capabilities to learn a specific behavior (i.e, skiing) is valued and within a safe, supportive environment, then the young athlete's efficacious process can be internalized and, then, developed in other life domains. Thus, this emphasizes the important role that a caring climate may play in shaping young athletes belief about their capabilities, both on and, importantly, off the ski slope.

Contrary to the hypothesis, neither a task-involving climate nor a caring climate predicted fun. Perceiving an ego-involving climate was a significant negative predictor of fun. The less a coach focuses on outdoing others, intra-team rivalry, punishment for mistakes, and recognizing only the most talented athletes, the more fun the athletes reported. This finding supports previous research that suggests a young person in an ego-involving climate is likely to experience lack of enjoyment, decreased intrinsic motivation for the activity, increased anxiety and worry, low self-esteem, and is more likely to dropout (Duda, 2001; Duda & Balaguer, 2007; Martens, 1987; Newton & Duda, 1999; Quested, & Duda, 2010; Smith, Smoll, & Cumming, 2007; Weiss & Wien-Bjornstal, 2009). For example, Newton et al. (2006) found an ego climate was negatively associated with enjoyment and leader respect. In addition, Cummings et al. (Cummings, Smoll, Smith, & Grossbard, 2007) found winning, a feature in an ego-involving climate,

was not a prerequisite for enjoyment in youth basketball. In addition, perceptions of their

coach demonstrating ego-climate behaviors were negatively related to having fun. It is

plausible that when coaches provide attention to only the top athletes, rely heavily on

social comparison of athletic ability, punish athletes for mistakes, and overly emphasize

winning, that these are the ego-involving features that are linked to young athletes not

having fun. The contrary seems also to be true. When a coach does not do these things

then fun is optimized. An explanation for why a task-involving climate did not contribute

to fun might be because early adolescents do not associate encouraging each other to

learn and excel in skiing as a positive affect. Additionally, caring behaviors of being

respectful and treating people fairly is about valuing the rights and concerns of others.

Therefore, creating a caring climate is about youths growing understanding of other

people's well-being and may not be associated with a fun environment. Instead, fun

might be more associated with their passion for skiing. Thus, skiing in and of itself might

explain why this is an enjoyable experience.

The findings also make sense from a practical standpoint. If young athletes' main

motives are to have fun, learn skills, and socially interact, but the climate is focused on a

normatively-referenced and demonstration of outperforming behaviors then the athletes

goals do not align with the climate and may help to explain the negative link between a

perceived ego-involving climate and fun. Another noteworthy point is that early

adolescence is a time where one begins to rely more on peer comparison and evaluation

from peers and coaches. Thus, the social comparison emphasized in an ego-involving

climate may cause an athlete to become overly concerned with evaluation and

comparison with peers. Because a main reason young athletes participate is for social

interaction, emphasizing social comparison may be a core motive of why athletes are not having fun. However, the underlying processes by which an ego-involving climate negatively predicts fun are not fully known and need further exploration. Overall, fun is an essential ingredient for youth sport participation (Ewing & Seefeldt, 2002) as well as increasing the likelihood of additional developmental outcomes to occur (Belnap, 2008; Shields & Bredemeier, 1995). As a result, we need to learn what climate features improve the sport experience in order to increase fun in early adolescent sport participants.

The quantitative portion of this study attempted to validate the NRCIM framework by examining how perceptions of a task-involving, ego-involving and caring climates influence psychosocial assets in competitive, early adolescent alpine ski athletes. In addition, this study serves to fulfill the need in sport psychology researchers for more studies identifying sport specific contextual features that optimize PYD assets (Gano-Overway et al., 2009; Hedstrom & Gould, 2004; Petitpas et al., 2005).

In summary, this study highlights that the sport climate has the potential to facilitate or thwart developmental outcomes. Clear support was found for a task-involving, caring climate contributing positively to youth sport experiences and developmental outcomes. Athletes' perceiving a task-involving climate positively predicted intrinsic motivation. When the coach emphasizes skill development and learning rather than the outcome or ability, then athletes actively engage in the sport. Athletes' perceiving a caring climate was a significant positive predictor of connectedness, self-efficacy, and general self-efficacy. Consequently, a climate that focuses on respecting team members, appreciating team members for who they are, and creating a safe, comfortable place where team members feel welcomed everyday, was

associated with enhancing relatedness between members of the same team, boosting confidence in sport as well as in their belief to manage difficult problems in other life domains. Perceiving an ego-involving climate was a significant negative predictor of having fun while participating on the ski team. Not surprisingly, an atmosphere that focuses on outdoing others is associated with a lack of fun.

This knowledge assists in identifying contextual features in sport programs that nurture positive developmental growth in early adolescent athletes. To further fill the gap in the literature, a qualitative examination of athletes perceiving a high task, high caring, and low ego climate was used to establish how the sport context is a developmentally rich environment for youth to acquire the necessary psychosocial assets. Therefore, the qualitative phase of this study provides a youth's voice to better understand how to promote PYD in youth sport settings.

<center>Qualitative Phase</center>

The qualitative phase of this study was guided by one main research question, to explore the process by which the contextual features in the social psychological climate influence psychosocial assets in early adolescent athletes. A general inductive approach was conducted to analyze the interview transcripts and to develop a framework of understanding regarding early adolescent athletes' perceptions of a task-involving and caring climate. The following section describes and discusses the findings of the qualitative phase of this study. Each lower and higher order category is presented and fully described. The relevance and meaning of each theme is then discussed relative to theory and research.

The interviews were transcribed and generated 68 single-spaced pages of text. Themes emerged from the raw data inductively. See page 99 for a more detailed explanation of the general inductive analysis. From the raw data, 22 lower and higher order categories were created. The 22 categories coalesced into 4 overarching themes: (a) fun environment; (b) atmosphere of nurturance and support; (c) teamworks; and (d) coaching style. See Figure 1 for hierarchical outline of the categories and themes.

I. Fun Environment
    a. Enjoyable Activity
        i. Enjoy Skiing
        ii. Shared Interest for skiing
    b. Being Playful
        i. Freeskiing
        ii. Humor and Joking Around
II. Atmosphere of Nurturance and Support
    a. Nice to everyone
    b. Encouragement
    c. Teammates Want Others to Achieve
    d. Friends and Family Relations
    e. Guidance in Other Life Domains
III. Teamworks
    a. Teambuilding Activities
    b. Logistical Teamwork
IV. Coaching Style
    a. Coach's Instructions
        i. Individualized Instructions
        ii. Positive, Informative Feedback
    b. Coach's Techniques and Strategies
        i. Drills and Analogies
        ii. Rewards Through Praise
        iii. Modeling Other Skiers
        iv. Skiers Participate in Practice Methods
        v. Mental Skills Training
    c. Coach's Emphasize and Facilitate Rigorous Training

Figure 1. Hierarchical Outline of Lower Order Categories, Higher Order Categories, and General Themes from General Inductive Analysis of Early Adolescent Alpine Skiers Perceptions of a Task-Involving, Caring Climate.

<u>Fun Environment</u>

The first overarching theme focused on the athletes' view that their ski race team was a fun environment. The higher order categories of enjoyable activity and being playful accompanied the fun environment.

<u>Enjoyable activity</u>. The athletes described how skiing was an enjoyable activity. Five of the athletes mentioned a deep enjoyment for skiing. Jewels stated:

> Um, like on a normal day, if you walk into the locker room, its like, a pretty energetic atmosphere. Like everyone, is pretty stoked [about] skiing like, you can tell everyone wants to be there, and like have fun and stuff, like they're not just doing it 'cause their parents are pressuring or pressure or anything. It seems like everyone does it because they like it. Um, well I don't know, skiing's fun so, and I really like, I like everybody on our team and the coaches are great so, it just, it gets me excited.

Jewels, and many of the other athletes, viewed skiing in and of itself as fun. Thus, they are intrinsically motivated to ski. Being intrinsically motivated in an activity allows a person a sense of satisfaction in learning a new skill or mastering a difficult task, thereby becoming a self-determined person (Ryan & Deci, 2000). This, in turn, benefits young athletes because they focus on self-competition by wanting to learn the skills to the best of their ability (McAuley & Tammen, 1989; Weinberg & Gould, 2011). In addition, intrinsically motivated people view themselves as the cause of their behavior. Thus, having an activity they enjoy gives them the freedom to do what is personally important and vitalizing (DeCharms, 1976, Ryan & Deci, 2000). The literature also suggests that fun is a central component to activity engagement (Dworkin & Larson, 2006; Ewing & Seedfeldt, 1996; Gould & Horn, 1984; Larson, 2000) and not having fun being the most frequent reason for discontinuation (Dworkin & Larson, 2006; Weinberg & Gould, 2007; Weiss & Ferrer-Caja, 2002).

Although it is known that fun is important to activity engagement, the reasons

underlying what makes skiing fun need to be discussed. Jewels described that a fun

environment includes having the autonomy to ski and experiencing good relations among

team members. Samantha also noted the importance of autonomy, relationships, and

sharing an interest or passion for skiing:

> Well, cause we spend a lot of time together, other than school, it's our passion almost. I think skiing…it's outside of school. At school, oh, we have the same class together. But, it's not something you actually enjoy. Skiing is your doing it for fun. You don't have to be there so everyone is there to have fun. You start talking and you water ski in the summer so then, like, you have other things in common as well. We have so much in common we just connect on a different kind of level. I think that we, um, have inside jokes…I don't know…we are so close. I think this year I got close to a lot of the girls. More than last year, we just bonded this year.

Samantha talked about skiing as an activity she chooses to do. In turn, voluntarily

participating in this activity provided her autonomy. Young athletes perception of

autonomy and control are important developmental characteristics. Autonomy is a critical

determinant of whether young athletes will strive for achievement (Weiss, 1993). In

addition, athletes' having a choice to participate in an activity does not only create a fun

environment, but may lead to positive affective states. Similar to Jewels and Samantha's

comments, young people are in better moods while engaged in voluntary leisure activities

than compared to school or work (Csikszentmihalyi & Larson, 1984). Additionally,

positive affective states also lead to increased motivation within young athletes (Weiss,

1993). In contrast, negative affective responses will decrease motivation (Weiss, 1993).

Research also reports that the positive affective states young people experience in

voluntary activities helps them to explore different relationships (Larson, 2000) and

satisfy their need to belong (Weiss, Smith, & Theeboom, 1996). These findings relate to

Jewels and Samantha's statements. Their accounts regarding having a choice to participate led to finding peers who share a similar interest. In turn, this allowed them the independence to discover new, bonding relationships with peers. Thus, participating in ski racing signifies that sport offers youth a context for quality personal and social development.

Another component of having fun is athletes sharing a passion for skiing among team members. Samantha stated that everyone enjoys skiing, which led to talking about other things team members have in common and to eventually forming a strong bond with them. Along with Samantha, Amanda noted that sharing a common interest allowed teammates to feel more deeply connected. Amanda stated, "Well I think we all kinda share the same experiences and the same life, 'cause we all ski race and we all love to ski so we all share that." This shared interest may assist in creating interpersonal connections among teammates and coaches; thus, making the environment fun to be in.

These athletes highlight important factors that contribute to a fun environment: being intrinsically motivated to ski, having the autonomy or choice to participate in skiing, and sharing an interest or passion for skiing. Although these reasons may be viewed as personal features rather than contextual features, they emanated from the common bond the skiers shared characterized by a deep connection and fun. Research supports that positive relationships develop between peers and with adults because of their shared interests (Grossman & Rhodes, 2002). Additionally, this shared interest was an important factor in predicting a positive mentoring relationhip for young people because adult leaders share their passion for the activity, which creates an immediate bond (Grossman & Rhodes, 2002). The same holds true for peers that share a passion

(Lerner, Fisher, & Weinberg, 2000, Weiss, Smith, & Theeboom, 1996). Fun was also a predictor of character development in sport camp participants, age ranging from 11- to 14-years old (Belnap, 2009). In addition, other researchers reported fun as a fertile ground for character development (Shields & Bredemeier, 1995) and fun is associated with an increase in the occurrence of prosocial behaviors (Mandingo & Couture, 1996). Consequently, sport is a fun setting among young athletes and, therefore, is a fruitful context to foster the psychosocial assets of enjoyment, instrinsic motivation for an activity, develop positive adult and peer relationships, and satisfy a young persons need to belong.

Being playful. All of the athletes mentioned how being playful contributed to a fun environment. Being playful was expressed through members of the team using humor, joking around, or having the opportunity to freeski. Freeskiing refers to choosing any ski line down the mountain, which may include taking air off cliffs or enjoying the free floating experience of skiing in powder. Freeskiing is not about racing to the bottom, which is the goal of alpine ski racing. Instead, freeskiing allows for creativity, personal expression, and enjoyment of the snow.

Athletes expressed having fun when given the opportunity to freeski. For example, when Tina was further probed about the most fun thing about ski racing, she replied, "Going out and free skiing. Big snow days…or if we have a lot of time between races we will go and free ski." Tina articulated free skiing as the most fun thing she does on the ski team, which occurred not only at practice, but she was also given the chance to free ski during races. Similar sentiments were expressed by Samantha, "It's really fun. Like, it's not all about we gotta train for the next race. Some days it snows a lot and there

is a race the next weekend, but we still go out and ski powder." Samantha described the environment as fun because the structure of practice being a balanced ratio of practicing skill development and playing. Although an emphasis on motor development is central in sport skill development, Samantha and Tina noted the importance incorporating variety into practices. Maintaining practices fluid and allowing for other enjoyable activities is an important element to keeping the environment fun (Weinberg & Gould, 2011).

In addition, the balance of playing and practicing technical skills is an essential characteristic during this stage of sport development (i.e., specializing years). Côté and colleagues (2007) suggest that focusing on balancing the ratio of fun and development during the specializing years is linked to positive psychosocial outcomes. In contrast, youth athletes specializing in a single sport who train many hours with the exclusive goals of excelling and skill development are more likely to experience negative outcomes (e.g., lack of enjoyment, burnout) (Strachan, Côté, & Deakin, 2009; Wiersma, 2000). Furthermore, most champion athletes fell in love with their sport before their talent blossomed and their aspirations were to become an elite athlete (Durand-Bush, & Salmela, 2002). This research emphasizes the importance of youth not specializing in sports too early. Thus, having the structure of practices designed to incorporate free time, autonomy, and play during practices appears of critical importance and is created in a fun environment.

In the case of Amanda, having the opportunity to develop other skiing skills during freeskiing was another component of creating a fun environment. Amanda stated:

It's really fun 'cause it's not like, really, just really all work and there's some fun stuff, like it's not just drills and practice and stuff all the time. Like we freeski every Saturday. Ya, and we learned not just racing, but how to be better skiers and we just like throwing tricks sometimes. We really want try to do stuff like that,

it's just like, not just racing and that makes it fun. Like last weekend, they also try and teach us, like, back country skills and stuff.

Amanda believed implementing other aspects of skiing as fun. Fostering an approach to meet the needs for skill development in other skiing skills appeared to be another important element to a fun environment.

Another strategy to meet the need for fun was joking around. Matt mentioned:

We all kinda joke around with each other, but it's all in good fun and ah, we respect each other. Um, [team members] just jokes about people skiing. Because we know that everyone is kidding and that you can just tell when someone is being serious…you can just tell.

In the same vein as Matt's statement, Tina mentioned joking around but also being respectful while joking. She commented, "It's just like all fun and games. If it's like it's a joke so the kids will say it nice enough so that it's like everyone can laugh along even the person that said it. It's not like a mean thing." Leah enthusiastically described joking with both teammates and coaches as fun.

Sometimes, they're [coaches] like kids themselves, they sort of play around with you. And there's a lot of joking around, like sometimes we'll play pranks on our coaches and they'll just laugh. They're not going to get mad, they're just going to laugh it off, like "Oh that was fantastic, that was so funny." Sometimes, actually some of the coaches, just two days – two days ago – yesterday we were plotting, the coaches and the kids together were planning to go against [the head coach's name]. And um, coming up with this whole prank and they were going to film him to see what his reaction was. And at some point, um, obviously the coaches set the guidelines and stuff, but at some point we're all really just, kids, joking around.

Joking respectfully amongst teammates and coaches was mentioned as influential to building a fun environment. This coincides with the literature that joking and kidding around freely adds to fun environment (see Weinberg & Gould, 2011). Because most youth participate in sport to have fun (Ewing & Seefeldt, 1996), coaches who understand this need for fun can structure the environment to add humor and jokes. It appears that

Leah's coach was able to find the balance between being a respected coach and being a playful team member.

Atmosphere of Nurturance and Support

With the athletes' descriptions of a fun environment as a backdrop, all of the athletes noted how teammates and coaches expressed concern for one another. As shown in the framework, what emerged from the interviews was nurturance and support as the second overarching theme. Being nice to everyone, encouragement, teammates wanting others to achieve, having positive friends and family relations, and guidance in other life domains were the five higher order categories that characterized this theme.

Being nice to everyone. Being nice to everyone was common for many of the athletes as they described the features of a task-involving, caring climate. Six of the seven athletes described how team members were nice to one another and how that contributed to a supportive atmosphere. During the interviews, the first question was to generally describe the ski race environment. Matt's first statement was, "Um, it's pretty fun" and his second statement was "Um, everybody's nice to everyone else." Matt further talked about people greeting you, "People say hi to you. Everyone knows you and say hey and things like that." Tina stated, "Most of the time, for me, all the kids on the ski team are really nice about everything. Um, well, I don't know. And they [coaches] check in with you." These comments suggest that an overall nice atmosphere is important and comes from teammates and coaches expressing an interest in each other's well-being. Basically, greeting each other and inquiring about someone's day offer simple, yet effective ways to exhibit supportive behaviors.

Two athletes provided specific examples of team members being nice. Amanda recalled:

> They just, um, they're all really nice, and like, if your, like, with teammates, if you're in the locker or something and like you're late to practice and you're not that far behind they'll wait for you, so they can go up the lift with you. They just, they don't just like take off or anything. And, ya, sometimes we [team] like, 'hey what's going on, what's the matter' and if its like 'I'm just really tired today'. Sometimes they're [coaches] like 'just take a couple free runs and see how you feel' they're not just into like making you do the course and making you do as well as you can, like if you're not having a good day they want you to be able to ski well the next day. So if you're feeling sick they might be like, 'hey do a couple free runs and if you're not feeling well, like end practice early.'

Even though Amanda was late to practice, her teammate displayed a thoughtful gesture by waiting for her. This suggests the young people on this team exhibit a mutual feeling and an understanding to support one another. In addition, coaches' conveyed support and concern by asking about athletes feelings. Leah also offered specific examples of how coaches were nice. Leah expressed:

> The coaches, like, they're all really nice, number one. Um, like they, they're so supportive in anything. I mean you don't have to- cause I know- I've know some people at my school that, like if they were on ski team, um, they would, like try to fish for compliments, cause that's like, who they are, but you don't need to do that because the coaches are really considerate.

Similarly, Leah described how her coaches were nice due to their supportive and caring behaviors. Similar to these athletes, several other athletes specifically mentioned how the entire team was nice. Overall, the athletes described being nice as displaying a sense of concern for one another, such as receiving a friendly greeting or being responsive to their needs.

These athletes also commented on how people were not disrespected. Matt stated, "My teammates don't come up to someone if they performed bad and say 'Oh, your terrible. And stuff like that.'" Furthermore, many athletes made remarks on how they

handled disrespecting each other. Amanda noted, "Usually, they [teammates] realize that they didn't do something good, so they'll apologize, and usually people are pretty forgiving." Amanda commented when the person behaving badly recognized his or her faults, then he or she asked for forgiveness. Tina also expressed that other teammates made comments if some one on the team was being treated poorly. Tina said, "Usually the teammates will be like 'dude that wasn't cool' yeah, and if we can tell it's mean most of the time we are like what was that? They just [gesture: head goes bows down] be quiet and say sorry [in a soft voice]." When probed if disrespect happened again, Tina replied, "No." Additionally, Jewels acknowledged what teammates would say toward a teammate who was disrespecting another member, "Why'd you do that like, what's, what's your problem, that's not cool, so its not, its not always like a lose, lose situation, usually, we kinda like, help each other get along, I think, ya." Jewels further explained specific techniques on handling problematic behaviors:

> Um, well, obviously like there's like, boy drama and girl drama. But its, pretty much on…The beginning of the season, we have a lot of trouble with that, everybody's just like, "You know what, you just have to let it all go," like, "This is everybody's day, you can't bring this up on the hill," like "No, just, just let it go," but sometimes at training, or like right now at the hotel and stuff we can get a little like, I don't know what word is, but, we kinda have, like, there's girl problems and boy problems so, in…there's negative remarks, but um, the second year's [J3's], they're like "OK, you know what, you don't need to be mean to them." Like, "Its fine, they're themselves" like, "just leave it alone, ignore them. If they're really annoying you, just ignore them, like they'll go away, like whatever, just keep going."

Despite behaving disrespectfully toward each other, teammates regulated this behavior by making comments that the lack of respect toward other teammates is not appropriate. In the case of Jewels, some of the older J3 athletes, the 14-year olds, provided advice on how to cope with the situation. However, sometimes the people being

teased might handle it themselves. Mika, specifically stated: "The person gets in their face. Or, after awhile it gets old and annoying. You feel bad for the person and stick up for them. But, you have to have a sense of humor. You need to 'bro-up'. Everybody gets teased about random stuff." Mika described that behaving inappropriately is not acceptable on the team. It is either dealt with by the person being disrespected (e.g., by standing up for himself or herself) or their teammates manage the situation by creating a prosocial environment (e.g., by having the person apologize). Both Jewels and Mika commented on the need for flexibility when the behaviors of others are less than ideal.

Three other athletes commented on how coaches manage disrespectful behaviors. Samantha's comment was similar to the other two. She stated:

> There was this incident because a kid wanted to quit because he was being made fun of or something. [Coach's name] sent out a big email and said you can't disrespect one another and this is one team so [coach's name] took care of it. In practice on Saturday [next practice], [coach said] how people come here to have fun and if you disrespect someone it ruins what someone is trying to achieve…not really like that but along those lines…like you can't treat each other poorly. It's not respectful. [Coach did] not [give] a specific example, but we have to be nice to each other. I think [the team took it] really well. Everyone thought about it, I think. It kinda scared us. When we got the email and knew we were going to talk about it everyone was like Oh, I hope that it wasn't me. Like I don't know…he didn't say any specific names. We didn't know who it was.

Similar to the other athletes, Samantha's coach managed disrespectful behaviors by communicating to the entire team that those types of behaviors are not tolerated. In addition, coaches emphasized to speak up when someone disrespects you and apologize if you are doing the disrespecting. Thus, coaches might have modeled appropriate behaviors and set expectations for athletes to treat each other with kindness.

The athletes in this study commented that being nice displayed a sense of concern and morality for one another. These behaviors are correlated with the PYD and sport

research. According to influential developmental theorists (Piaget, 1932, Kohlberg, 1969; Steinberg, 2007), interacting with peers help adolescents develop values and identities that set the stage for psychosocial well-being and moral development. From a moral development perspective, Kohlberg's (1969) research indicates that adolescents are inclined to behave in ways that society perceives as good. As a result, they maintain the rules by exhibiting appropriate behaviors. The athletes in this study modeled appropriate behaviors they witnessed in others and their coaches. The positive behaviors included prosocial actions (e.g., being friendly) as well as discouraging inappropriate or asocial behaviors (e.g., stopping others' disrespectful behavior).

Based on Kohlberg's research, sport psychology researchers Weiss and Bredemeier (1991) suggest young people mature in sport through five levels: (a) okay as long as I am not caught; (b) eye for an eye; (c) golden rule; (d) follow external rules; (e) what is best for all involved. Not everyone reaches the top level; however, their research indicates that the athletes in this study are functioning at Level 3, characterized by the belief that you treat others as you would like to be treated. Thus, these skiers are not making decisions based solely on self-interest. Instead, the athletes are beginning to adopt a more other-centered altruistic view.

Because these young people place a high value on promoting equality and standing up for their beliefs, Shields and Bredemeier (1995), leading scholars in moral development in physical activity and sport, would contend that these athletes exhibit the core components of character development: compassion and integrity. Compassion refers to empathy or the ability to take on and appreciate the feelings of others. When athletes possess compassion, they seek out to understand another person's feelings and

perspectives. Integrity is the ability to maintain one's morality or fairness. Therefore, the athlete will do the right thing when faced with a moral dilemma. Compassion and integrity are linked to athletes learning to overcome obstacles, developing self control, cooperating with teammates, and persisting when defeated (Ewing, Seefeldt, & Brown, 1996). The athletes in this study seem to be engaging in compassion and integrity, which are also behaviors associated with caring. Elements of caring, compassion, and integrity are sprinkled throughout other themes.

Youth conform to their peers' attitudes and behaviors because of the importance of social acceptance in early adolescence. Becoming integrated into a group usually entails adopting the group's social norms, behaviors, and values (Eccles & Gootman, 2002). Therefore, understanding the factors that contribute to a prosocial environment can help young people internalize healthy values and norms.

One such factor of the context is being nice to one another. The skiers' willingness and ability to care for one another is important for optimal development (Noddings, 1992). These types of caring interactions created an atmosphere of nurturance and support instead of separation from the team. Hence, youth experiencing a climate of care in the sport domain is instrumental in facilitating healthy development. It appears that the simple action of being nice to one another creates a positive and socially responsible environment that allows youth to experience physical and psychological safety, which is the foundation to promote healthy growth.

The athletes in this study described specific factors that contributed to the higher order category of being nice to one another. These included: greeting each other in a friendly manner, inquiring about someone's day, and regulating disrespectful behaviors

of teammates. These are basic and practical features in the setting that instill personal and social assets contributing to an adolescent's well-being.

Encouragement. Nurturance and support was also evident through encouragement. Encouragement was the result of both coaches and teammates verbal and nonverbal feedback. For example, Tina remarked that the encouragement from her team members made her feel supported:

> [I really like] they're [coaches] encouragement…yeah. Well, we [teammates] are always encouraging each other. Um, at the start of our race or training run or whatever, we'll be there and cheer each other on as hard as we can…to make sure like we are all at the start and there were 3 kids left to go….this was at training or whatever…and we were all yelling as hard as we could and it made everyone feel so good. Like, yeah.

Mika echoed a similar thought:

> Umm, I don't know, kinda like, but like the guys and the girl's team support each other a lot. Like they're always up there cheering each other on like, we'll get there cheering girls on they'll be up there cheering us on. So it's good when you're in the start and you hear a ton of people screaming for you when you're about to go. 'Cause it makes you feel like, somebody's watching you and its like, like, watching you do good, so it makes you wanna do better. Or like you can get kinda nervous or whatever and you're like "I don't know" and they yell at you. And you're like "crap I have to throw down now."

Similar to Tina and Mika, many of the athletes expressed positive emotions when coaches or teammates encouraged them. Giving group members positive reinforcement, instead of being negative and critical, can go a long way toward building trust and support (Weinberg & Gould, 2011). Thus, teammates providing encouragement increases an athlete's mood and helps build a stronger, cohesive team (Rosenfeld & Richman, 1997) as well as feeling cared for.

Also, alpine skiing is a mixed gender sport. Therefore, the athletes commented on how both the girls and boys support each other. Tina intertwined this mixed gender support with nonverbal encouragement. Tina further stated:

> Um, they [teammates] are always congratulating you no matter what. At the bottom of the hill, if you have some of your teammates down there, they'll be like great run. Like a lot of my friends will be at the bottom of the hill at the end of my run and they will be like give me a hug and say that was a great run and we tried to do the same for everyone. The girls like to hang out with the girls and the guys hang with the guys and stuff like that. But, the guys will still be at the bottom and we will give them a high five.

As Tina mentioned, teammates gave encouragement to the entire team, regardless of sex or performance. Expressions and feelings of concern for one another was a central component to encouraging teammates. Teammates provided many types of encouraging behaviors, such as cheering, hugging, and high-fiving, and providing emotional support on challenging tasks. The literature supports that providing emotional support is an important concept in building an effective team climate (Rosenfeld & Richman, 1997).

Encouragement was not limited to teammates, but coaches also gave verbal and nonverbal feedback. Samantha recalled:

> Yeah, and sometimes kids will start crying because they didn't do well. So you give them a hug 'cause they don't really want to talk about it. And I think that [coach's name] sometimes if you do really bad at a race he'll give you a big hug and stuff like that and it makes you feel better.

For most of the athletes, their teammates and coaches verbal and nonverbal encouragement was directly related to their feelings. Positive affective states lead to increased motivation (Weiss, 1993) and influence other developmental outcomes, such as optimism (Eccles & Gootman, 2002). This is important to note because early adolescents are at a developmental milestone of social-emotional competence (Benson, 2006; Denham et al., 2009; Lerner, Lerner, Almerigi et al., 2005b). Young people mostly

operate based on their emotions and connections to others. If these developmental needs are not met, psychologists suggest youth are at risk for psychopathic and behavioral problems (Denham et al., 2009). In contrast, if adolescents experience positive emotions and close connections, then healthy outcomes are likely to result (i.e., academic success, getting along with peers, resilience to adversity) (Denham, 2007; Dougherty, 2006, Saarni, 2000). Therefore, many researchers (Catalano et al., 2002; Eccles & Gootman, 2002; Lerner, Lerner, Almerigi et al., 2005b; Weiss & Wiese-Bjornsal, 2009) recommend PYD programs to provide opportunities for social-emotional competence. According to these athletes, the verbal and nonverbal encouragement and support while skiing provided by their teammates and coaches may be the ingredients to fulfill this competence.

All the athletes commented on the impact of receiving encouragement and support while at competitive races. Competitive races, by their very nature are ego-involving. That is, objective success in competition requires that an athlete outperform other athletes. In other words, athletes must display greater competence than their competitors. Ego-involving contexts tend to erode athlete motivation and affect (e.g., overly concerned about the evaluation from peers and coaches). Receiving positive support and encouragement from coaches may buffer the negative impact of competitive settings. It is possible that the encouragement offered by the coaches assisted athletes in competing in a more task-involved manner. Athletes perceive their competence in a self-referenced manner when task-involved. Mastery and improvement denote success when task-involved. Task involvement has been related to adaptive responses and outcomes in the literature (Ferrer-Caja & Weiss, 2002; Hellison & Templin, 1991; Koka & Hein,

2002, Mitchell, 1996; Standage, Duda, & Pensgaard, 2005; Wentzel, 1997; Wigfield & Eccles, 1992). Therefore, encouragement about performance can benefit athletes in several ways. The primary way encouragement can influence participants is by instilling a positive mood. Another way is that encouragement can be motivating. Thus, a statement like 'you can do it' serves as reinforcement to the athlete. In turn, the encouragement may stimulate a feeling of satisfaction and motivate them to improve if subsequent feedback indicates improvement (Weinberg & Gould, 2011).

Thus, sport is an achievement setting that offers a unique context to provide encouragement and support. The contextual features of encouragement may facilitate a range of positive experiences that assist young people in the acquisition and growth of healthy developmental outcomes. The specific elements the athletes in this study stated as encouraging included cheers, hugs, and high-fives.

Teammates want others to achieve. In addition to athletes and coaches supporting each other by providing encouragement, teammates also nurtured and motivated each other to do well in skiing. All of the athletes expressed a desire for their teammates to achieve. Samantha noted her desire for others to do well:

> I think everyone wants each other to achieve. I think that when someone else wins, the team wins. Even though you want to get top 10, but if someone else gets into the top 10 then you are really happy for them. If someone else gets last place, then you are supportive of them….'you'll do better next time, you just had a bad run'. And you just try to help them get through it because everyone has been in that position before. There are always …example [girls] in the back of the races, getting last, but we make fun with it. We are dead last but we still are going to win. It makes you feel like you are still there. And your still important…And when coaches tell you that you are doing really well, or it kinda makes you feel that you are contributing to the team. And if you win then you're representing [name of ski race team]. We [girls in the back of the races] are not giving up yet. Even though we are dead last, we're still trying to go strong and get to the bottom as fast as we can even though we are not doing very well overall, we are still doing well on a personal level.

Samantha articulated feelings of joy and empathy. She expressed feelings of joy when teammates performed well. An individual performing well meant he or she was representing the team and the team's achievement. This is unique because there are no team scores calculated in alpine ski racing. But, if a teammate performs well, then the perception among teammates is that the team does well. Another interesting point is that teammates are often competitors of fellow teammates. Even though their teammate is their opponent in a race, teammates are genuinely excited when their teammate out-performs them. This behavior shows motivation and excitement for one another's achievements. It also illustrates the sense of attachment and commitment teammates display toward one another.

Samantha also noted feeling empathy when teammates did not perform well. Understanding of a teammate's feelings transcended into supporting teammates and encouraging persistence. Samantha empathized, comforted, and provided coping skills when teammates performed poorly. These types of caring behaviors were common among many other athletes in this study. For example, Leah stated that all teammates provide support for each other and she recalled when a boy teammate helped her during a poor performance:

> Um, it's just, it's kinda, hard to explain. But it's sort of a thing where they all know, I've been here before, I know what this is like, and I know what helped me get out of it and so they can kinda sort of use that to help you. And, um, I remember like last year, I was having a really really tough day and, um, one of the boys on the team, who I considered a friend but I wasn't that close with, he ended up being the one who comforted me the most because he had had days just like that. And it's just sort of a thing, like 'I've been there before, I know how much it hurts, and I know how to help her out of it.'

Leah's experience demonstrated the value of receiving emotional support from a team

member. Her teammate, who wasn't viewed as a close acquaintance, consoled her by

providing empathy to her situation. Research suggests similarity among team members in

commitments, aspirations, and goals are important to a positive team climate (Carron,

Colman, Wheeler, & Stevens, 2002). The more aware group members are of similarities

among each other, the greater probability they will develop a strong team identity (Carron

et al., 2002). Teammates sharing a passion for skiing and a desire to perform well are

similarities that help build a supportive environment.

Similar to Samantha and Leah, Amanda and Mika expressed similar sentiments

about how teammates each other to achieve and are willing to help them ski better.

Amanda mentioned:

> Um like, they're not just like hoping that you fall and they win, they're cheering
> you on, and telling you that you had a good run, or if you didn't they're trying to
> support you and help, trying to help you do better next time. Um, like if you had a
> bad run, they'll [teammates] all just be like "ah, whatever," they'll like, help you
> and they'll try to help you do better, and if you crash or whatever, they'll like,
> comfort you, and make sure you'll be alright.

Mika stated, "They just kind of pep talk kinda thing, like they'll 'ah you can't do that

man', like, 'I know you're better than that', like, 'you could do totally better', like, 'I've

seen you do it' so."

It is evident that the athletes express sincere emotions of wanting their teammates

to perform well. Their desire for everyone to achieve is also evident in their behaviors.

Many athletes described empathizing, comforting, and renewing a teammate's confidence

after a poor performance. These behaviors and emotions can have a positive impact on

youth and the climate. Researchers, Rosenfeld and Richman (1997) outlined different

types of social support that build an effective team climate. Their research reveals that

emotional support (i.e., providing comfort and caring) is linked to enhanced team

cohesion and an enjoyable team climate. Furthermore, supporting one another in a

challenging task can stretch, motivate, and lead the recipient of support to greater

creativity, excitement, and involvement (Rosenfeld & Richman, 1997), which is apparent

in these athletes' statements. Consequently, supporting teammates emotionally,

particularly during a challenging task, is not only a part of athletes wanting their

teammates to achieve success but it is also key to creating a caring climate that nurtures

psychosocial assets.

Teammates also helped each other improve their skiing by giving instructions and

challenging each other to strive for mastery. To continue with Amanda's thoughts, she

gave a general perspective on learning:

> Yea they kinda feel that, if it like, kinda feel like, this is the last week of practice
> basically, or it was. So it's like, there's not as many people and you can kinda feel
> how, with more people it just contribute[s] to learning. About like, they did that
> really well, like, I need help with that, we just help each other learn stuff.

By the end of a ski race season, the number of athletes participating tends to decrease

because only the athletes who make it to the championship races continue to train.

Amanda reflected on how each athlete has an important role in helping other skiers learn

during the regular ski race season. Amanda shed light on the importance of the entire

team providing feedback to improve technical skiing skills and provide support. Tina

echoed Amanda in that most athletes give their teammates feedback. But, she also

provided a more detailed example of technical instructions given to a teammate:

> Well, um, we'll be at the bottom watching someone's run and we'll be like, coach
> was mentioning this about your skiing. Or we're like, hey I noticed your on your
> inside ski or your arms were kind of boggled so maybe you can work on that on
> your next run. Well, and, um, if you took the run before them, then they come
> down and your just like hey I noticed this part of your run otherwise it was a

really good run. Like, there's this girl on her team and her weaknesses is her inside ski and we are always like…get off your inside ski and get close to the gates and you will ski so much faster. And she's like ok…ok…ok And she goes back up and does and she is so proud. Not every day [teammates give feedback], but you will hear it. I think its some kids…not everyone is doing it…but it's a good portion of the kids.

Athletes' giving instructive feedback supports their teammates learning and success. This signifies athletes are actively involved in helping their teammates in skiing achievements. In addition, the athletes feel they are providing a supportive service, in turn, they share in their teammate's accomplishment. This example is supported when Tina said her teammate was 'so proud' after mastering a skiing technique. Leah also offered some explanation of her important role in helping her teammates learn. Leah reflected on this point:

> Uh, the, they're like, their special position on the team it could be, you say, "Oh, maybe I'm not the best on the team, but you know that you're good, you're like a, you're purpose, not your purpose, how can that be used, and like I can be, no, I can help other people learn and say, oh you might be tipping in, you might want to watch out, because that's kinda what I got sucked into and now I'm working my way out and it's pretty stuff. So they'll be able to say Oh, I'm not technically that bad of a skier but from learning from my mistakes I can help like help others that way.

In addition to helping teammates learn, Leah added that she could provide assistance to her teammates by processing the causes of her technical skiing errors. This intellectual reflection provides an approach to overcome her mistakes as well as offer guiding strategies to help her teammates conquer their weaknesses. Therefore, Leah feels a responsibility to make a difference to help her teammates improve their skiing.

Providing teammates with instructional feedback for improving skiing skills is another aspect that teammates want others to achieve. Several of the athletes commented

on how athletes automatically ask for technical feedback from their teammates. For

instance, Matt noted:

> Um, sometimes we [teammates] ask…I ask how did I look when I get to the
> bottom of the hill and they [teammates] say you did this and you did this, but it
> was pretty good. And so you kinda help each out because we all know what we
> need to work on and they help each other figure it out.

Athletes provided reflection and emotional support to help teammates improve. Thus,

athletes recognize how to individualize technical feedback to enhance their teammate's

skill development. In turn, teammates value and trust the feedback given by their ski

mates, which nurtures the desire for each athlete to achieve. Focusing on improvement,

engaging in cooperative learning, and expressing the notion that mistakes are part of the

learning process represent elements of a task-involving climate (Ames, 1992; Elliot,

2005; Newton, Duda, Yin, 2000; Nicholls, 1989). Improving skiing technique is viewed

as a meaningful and challenging task among these athletes. Providing opportunities that

enable athletes to provide technical instructions and supportive, motivating feedback to

fellow teammates are key contextual elements.

Although providing technical feedback is important to performance excellence

and helping teammates feel successful, Mika and Jewels mentioned how challenging each

other to try hard and be patient with learning skills is an important part of achievement.

Mika mentioned how teammates impacted him:

> Um, other athletes, I don't know sometimes it's mostly like. When I know is
> when I'm skiing with them. And I'm doing good and or they're doing good and
> we kinda feed off each other. And like I do good one round and they didn't want
> to do better [they had not wanted to do better], and so they do better and we just
> keep building off of it. If you are having fun, you do better. You don't want to see
> your friend down. If they're happy, then you're happy. Then you ski well. Then
> um, your friend skis well. It's also more fun when you are better. Knowing that
> you're a better skier than everyone not a racer…but have to have a challenge. If
> it's a piece of cake then you get bored after awhile.

Mika's statement captures the synergy of optimal achievement when athletes

work together to improve. Fun and optimal performance are equated with being

challenged by his teammates. Jewels captured a similar sentiment, although slightly more

tinged with the notion of encouragement by saying, "Like everyone's pushed to their,

like, best. And, trying to push them into higher places, so ah, ya." Later, she elaborated

further,

> Oh, well. Like I said earlier, like everyone's always, you know, pushing each
> other. So if they're helping you then like its like karma like, it just like goes
> around, what goes around comes around so. Um, well if someone's like "Oh, I
> just had such a bad run, training or something" like "Ah I'm doing so bad," like
> "Why is this all happening right now?" right before a race, its like, "Well, we still
> have- you still have a couple days of training, just like "keep trying, keep going,"
> it'll get there. It takes time so. I think we're always trying to like push each other
> even outside the training, the race course. Like we're all like "Oh ya go off that
> cliff, like do it, like try something new, and try to this run non-stop, its fun, like
> it'll get your legs burning but its all worth it."

Jewels felt that teammates encouraged each other by challenging each other to give their

best effort and providing an optimistic viewpoint that skill development takes persistence.

Additionally, she alludes to idea of the generalizability of skills by saying "outside the

training." It is possible that youth who learn the value of effort and persistence in skiing

are able (or at least considering) to transfer these skills to domains outside of skiing.

To recap, Leah best summarized the overarching theme of nurturance and

support:

> So, uh I mean, for girls a lot of the times, cause, the girls I think- well the boys are
> pretty tight too, but I don't know as well in that case cause but um I know that
> we're all best best friends, and uh, so If I matter of comforting each other, its also-
> because a lot of us have had that day where its really bad and everything feels
> terrible, and then, I know for me, I was having, before I came into this year I was
> having, like, the last two years before that were terrible, and I'm finally starting to
> do a lot better and really steadily, and a friend of mine, is sort of on a down crease
> and you know I keep on telling her, "it's going to change, its- your eventually

going to go up again, I know, I've been through it, um, and it's going to come."
Um, and then sometimes, so you know they're so hurt you kinda have to let them-
you kinda have to let them sit and think of it for themselves and give them all the
comfort- support you can and say "Hey, it's going to be OK, there's always going
to be more races, this isn't like it's your last chance" and also, just sorta, like,
reminding them things like, "Oh I didn't make it, make it to the J0s, I'm so
stressed" and you could say, Ted Ligety never made it to the JO's and look at
where he is now. So it doesn't- I mean also it's not a fact- It doesn't matter at this
point, and just have fun with it.

Friends and family relations. Team members being nice to each other,

encouraging of one another, and pushing each other to achieve success in skiing were

strongly supported by having supportive relationships. These relationships were cited as

having a considerable impact on athletes' nurturance and support. Making friends and

feeling as if the team acted like a family was mentioned by all of the athletes as a key

component of the climate. For example, Tina expressed, "They are like my best friends. I

would consider them better friends than the kids from school." Mika further elaborated

on the importance of his friends in skiing. He stated, "We are all friends. Like yesterday

kids say that was totally beast, you were really fast. We feed of that. And, uh, I belong

because I'm fast. And also, um, the ski team is based on friends. Why would you do it if

you didn't want to be with your friends?" Mika mentioned the reasons he participated in

skiing were to do something he's good at and to be recognized as a fast skier. He also

talked about the entire team being friends and the foundational reason for his

participating in skiing is to have friendships. Samantha shared similar reasons:

> Well, last year was my first year so I haven't had much success, but for me the ski
> team is more hanging out with my friends and learning how to ski rather than
> winning. 'Cause I'm not really at the level to compete at a high level, so I am
> trying to learn how to ski better and improve as well as making good friends. I
> think I've made really good progress. Like, I feel like if I started earlier I could be
> at a more competitive level, but because everyone has been racing for so long it is
> hard to really be that good at racing so I'm not bad at skiing or racing. But I think

I don't ski race for the actual racing, but learning how to ski and being with friends.

She described how affiliation and skill development are important motives for participating in sport. Tina, Mika, and Samantha's statements are consistent with the findings from previous research behind the motivation for participation in sport. Boys and girls in both school and nonschool athletic programs report having fun as the number one reason for participating in youth sport (Ewing & Seefeldt, 1989). The other reasons included improve skills, doing something they're good at, and making new friends, which were the motives the athletes in this study provided for participating in skiing.

Amanda discussed the close bond between teammates and the introduction of a new athlete. Amanda stated, "At first they're [new athletes to the team] scared about how close we all are together, but after a couple practices they're like everybody else." This remark represents the close, interpersonal relationships that are created on the ski team as well as how the established members of the team welcome new teammates. A significant barrier that keeps adolescents from joining youth activities is whether they can belong to the group (Larson, 1994). Therefore, creating a sense of belonging by welcoming the athlete into a well-bonded group may be an effective contextual feature. Gambone and Arbreton (1997) concluded that settings that provide a sense of belonging to a group and allow for adolescents to be recognized and valued decreases the likelihood of high-risk behaviors and increases sense of responsibility and self-competence. This welcoming environment may be linked to coaches exhibiting friendly behaviors.

Friendships were also evident between the youth and coach. Amanda noted that her coaches were her friends, "Ya their kinda, I don't know how to explain them, but their just like, their not just our coaches, there like kinda friends, maybe is the word, like,

they don't just wanna be your coach, they wanna be your friend too, and help you and like laugh and joke and hang out." Then, she discussed what she appreciated about her coaches and teammates:

> I think that they're all just really supportive about everything, they don't just kinda like, blow you off and like, forget about you or whatever, they just, they wanna, like, just, they wanna just be with you cause you're popular or whatever, they just like, everybody just wants to be friends with everybody. And its just like, its just a really fun place to be.

Amanda appreciated that being friends meant supporting one another and also treating each other equally in the sport setting. She also linked support and respect to creating a fun environment.

The relations among team members were described as more than being friends. All the girl athletes talked about the ski team acting like a family. Jewels commented that the ski team is a family because of the members shared interest in the activity. She stated, "Ah well, we're all like, kinda related so we all like to ski, so." Amanda described teammates as siblings:

> I dunno, well were kinda like family, but I kinda already mentioned that. Well all the guys, they're kinda like, kinda brotherly but joking around but nice and supportive and stuff, like, not like other guys that like I know, cause you're so close with them, and with them all the time, so you kinda have to be. Um, the girls like, we're all really close, and like, and they're kinda like sisters, 'cause we all kinda fight sometimes like, but its not big, and we're all just really close and, yeah.

Tina articulated a similar thought, "Um, I don't know because you spend so much time with them, it's like there like almost your brother or sister." Both Amanda and Tina mentioned time as a factor in contributing to teammates possessing sibling-like characteristics. Because of the amount of time spent training and traveling to away races, the athletes' interactions shape a bond similar to a connection with a sibling.

During the first stages of each interview, athletes were asked to describe what it's

like to be on their ski team. Leah enthusiastically responded:

> Um, what I love about our ski team, is that it's extremely intimate and we really
> are like, one giant family. And we've got fantastic relations among each other, I
> mean, sometimes, 'cause, I, there are some people that get left out, but hardly,
> because I know there's ah, but its not like a bunch of like, different people going,
> "Oh, I don't like so and so, I'm not going to hang out with her anymore." But
> there's some people in particular, that can be really annoying sometimes, and then
> after a while it just gets on people's nerves, so they sometimes get more
> victimized. But, that's only like, two people though, so um, and they don't I
> mean, it doesn't seem, at least one of them, it doesn't seem to bother them, that
> much, but um, other than that though, we are a super super tight team, and
> everyone knows each other really well, and we all get along really well and we
> have, just, we have so many laughs together and uh, just 'cause we have so many
> different personalities. I mean you can have someone that might be a little bit
> clumsy, or someone who's like a complete comedian, and all theses mixtures of
> different people that really really makes it fun.

Passionately stated, Leah cherished her connection to the team. Although Leah

mentioned that some of her teammates were mistreated, overall team members are

accepting of each other. Moreover, the different personalities among team members

contributed to the strong bonds and making the environment fun. Tina also described that

a fun, supportive environment was related to a family-like bond:

> I don't know. It's just a fun environment. Everything we do…the coaches are
> second parents I guess. We trust them a lot and it's just fun to be there because
> they make everything fun. I don't know, they just so serious about everything.
> They check your grades. They have passwords to your school grades to make sure
> your doing well. You have to keep a certain grade point average to stay with the
> team. So they make sure you are working hard at school and on the ski team. And,
> they're just like making things fun…I don't know, they just care about you.

Tina stated she received parental-like support from coaches. She even goes so far as to

say she feels cared for and trusts the coaches. Tina's interview was conducted at her

home. During this part of interview, Tina's mom came home from work and added that

yesterday one of her coach's, who could not attend the race the day before, called to see

how she performed in the race. This was another example of how athletes perceive the

coaches as parents. Leah also noted that coaches resembled a caring, parent-like adult:

> Because like, they might- they're not necessary as uptight as parents, but, they really care about you, and what you think and what you feel, and its not like…they don't act like, "Oh it's just my job," to say what they have to do, they feel like, they want to be friends with you. And um, they want to know you for who you are and they, they care like, what does she think, what is she like, who is she, what does she believe in um, what does she dislike. They want to know you, and um, it's just a thing, um, "I'm, I'm not paid to see you do this."

Leah discussed that her coaches care for athletes by providing attention and concern for

their entire well-being. She feels a sense of belonging when her thoughts and feelings are

valued. The behaviors described by the athletes represent a caring climate. According to

Noddings (1984), adults who exhibit caring behaviors tend to be more responsive to

others' needs and provide opportunities to care. It is evident that when coaches display

caring behaviors the athletes can intuitively sense their deep concern and genuine

support.

Some of the athletes stated that coaches are like parents, but as Leah expressed,

coaches provide a unique form of affiliation that parents might not provide. Jewels

expressed another important aspect that coaches offer:

> Um, hm, I really like that they're [coaches] always ah, they're kinda like another one of the kids, they're like, kinda like, not like a sibling but some sorta, relatively close person to you, so like I don't know, they're not like your parents like if you screw up, they're not going to be like "Oh its fine," like "keep going" [coaches are] like "OK you need to fix this and don't do it again," so its not like parents, but its not siblings either, its like a between thing kind of. Hard to explain.

Guidance in other life domains. Friend and family bonds between all team

members provided a foundational connection for helping teammates in other life

domains. Samantha talked about the feeling of trust among teammates. She stated,

"People talk to you about other things outside of skiing that makes you feel that they trust you and that makes you feel important to." Leah discussed how bonding in skiing lead to deeper friendships:

> There's five of us. My mom came up with some crazy name, which somehow stuck, and uh, we're the spud squad, and um, and, it's just, I dunno, something clicked, I mean, spending all this time together, oh, this is- she's really nice, I'm going to hang out with her more and she what she's like. And um, I sort of like that idea of, uh Like I'm going to spend more time with her. Maybe I should invite her over after ski team and see what she's like. And uh, and eventually we- and three of them were already really tight friends, and um, and then, uh, one girl was sort of a friend to them and I was sort of a friend to them and we all just sort of bonded together. Cause- also our parents became friends, so they started saying "Oh, do you want to come over for dinner" and then, um, we were all together all the time and, I mean, from person to person, it's like night and day. But uh, and we definitely have our fights, but we, we, we are so unbelievably close, I mean we could- we're practically sisters. I mean we help each other with food and everything, like one night you might have trouble with homework, can you help me with this. Or you have, news like, oh, oh my grandmother just died, and they'll be there for you they'll cry with you. Um, we're like, after I figured out I was going to Saint Anton, because it was suppose to be a surprise but my mom, couldn't really, hold it out. I called all 5 of them at the same time, and it was just like screaming, screaming, and they were screaming too, like, "Oh my gosh, this is going to be amazing.

Leah pleasingly articulated the growth of her friendships. Their friendship started with skiing, progressed to spending time together outside of skiing, and grew to sharing each others emotions, whether happy or sad. Her friendships were shaped into a companionship of expressing deep concerns for one another. Tina also spoke about emotional support, "Um, a couple of my friends on my team, if they ever have an issue they are like can you help me out…or something and we are like 'we'll do what we can' We are always there to help each other." Tina expressed an unconditional help and guidance she experienced from teammates. She further remarked how teammates and coaches assist in other life domains:

> We have some really smart [academics] kids on the team …for the learning thing.. and there's other kids that will struggle and they are like hey this person has a question can you help them. Or they will go up to the kid and be like hey I know some of the kids on our team are really smart. You may want to go ask them I'm sure they will be willing. There is one time we had a really big break between sessions and some of us had our homework and we were just doing it our homework. And our coach, he's actually a math teacher so he helps out a lot too.

Researchers have discovered that friendships and nonfamilial adult relations have important effects on young people. The statements in this study support the research. For example, Weiss et al. (1996) reported similar results to the findings in the current study. Weiss et al. (1996) qualitatively examined youth sport participants' view of friendship in sport. Athletes' 13- to 16-years old mentioned intimacy, the mutual feelings of close relationships, and personal bonds as the most important component of friends in sport. Similar to this study, Weiss et al. (1996) also reported girls were more apt than boys to identify emotional support as a positive feature of friendship in sport. In addition, the research suggests peer relationships are linked to the young person's sense of acceptance, self-esteem, and motivation (Weinberg & Gould, 2011). Thus, peer relationships are an important aspect of development.

Personal-assistance support, which refers to providing services or helping another teammate, is an important social support concept in building an effective team environment (Rosenfeld & Richman, 1997). Thus, belonging, connectedness, or friendships are an important contextual feature that can improve developmental outcomes. Providing time for athletes to make friends by incorporating periods of time before or during practice is a strategy to meet the needs of young athletes.

The athletes in this study also appreciate their nonparental adult relationships. As Grossman and Rhodes (2002) suggest, a shared interest between an adult and youth

creates an immediate bond because of their passion for an activity. This shared interest is one of the few factors that predicted a positive mentoring relationship for the young person. Consequently, sharing a passion for skiing may be an influential feature to the development of a healthy relationship. Youth benefit from healthy adult-youth relationships because they value advice from adult figures (Steinberg, 2007), learn to trust themselves, and become skilled at social interacts (Rhodes, 2004). With 25 years of research, leading youth developmental sport psychologists Smith and Smoll (1979, 2001) identified creating supportive relationships with athletes as critical in facilitating connectedness and giving quality instructive feedback. Consequently, the athletes reported that creating a caring climate was having coaches direct their attention and energy to understanding their needs and desires, spending time with them, and providing help and guidance outside of skiing. These behaviors provide the athletes with a positive mentoring relationship, which may give them the resources to effectively socially interact and connect to their peers. In Vygotsky's (1978) theoretical view the attentive, caring, and wise voice of supportive adults gets internalized and becomes part of the youth's own voice.

Teamworks

The third overarching theme that emerged from the qualitative interviews was characterized by the team's ability to work together. Teamworks refer to teambuilding exercises and the necessary logistical tasks that are part of ski racing. Six of the seven athletes described how either a teambuilding exercise or the logistics in ski racing impacted them.

<u>Teambuilding activities</u>. Matt and Tina gave examples of the teambuilding exercises they experienced at the beginning of the ski race season. Matt recalled:

> Ah, we do teambuilding exercises. We went on a trip in the Fall that was fun 'cause it gets you to work together and competition. And like competitiveness will still be there. We all had little teams that just had competitions for each team and we would win and stuff like that…because we have events that we all would have to work together for something. And we would have events that we had to do separately as a team.

Matt discussed cooperation and competition were key ingredients for teamwork. Although there are various potential negative responses to competition (e.g., cheating, fighting), competition can lead to positive outcomes (e.g., increased motivation, confidence, having fun) (Kohn, 1992). Matt described that teambuilding activities required athletes to work together to reach a common goal. When competition requires cooperation, sport psychology consultant and researcher Terry Orlick (1978) states athletes can realize their unique potential in sport and physical activity. In addition, cooperative activities create open communication, trust, friendship, and enhance performance (see Weinberg & Gould, 2011).

Since teambuilding activities influence competitive and cooperative behaviors, coaches must understand how to structure these exercises. Coaches can influence the development of the athlete by intentionally creating cooperative activities that place emphasis on positive achievement motivation (e.g., prosocial expectations, trying hard). For example, Treasure and Roberts (1994) created both a task-involving and ego-involving climate in a youth soccer physical education class and found after 10 classes, youth in the task-involving climate (i.e., cooperation, trying hard) focused more on effort, preferred more challenging tasks, and were more satisfied than the their classmates who participated in ego-involving climate. In essence, the quality of adult guidance is critical

in positively affecting the participants (Treasure & Roberts, 1994; Weinberg & Gould, 2011). Although Matt did not provide a detailed description of the teambuilding exercises, Tina discussed her experiences of a team activity that promoted team bonding. She stated:

> Beginning of the year, the first years will come in and make sure you feel comfortable with them. They try to do relationship bonding and stuff like that. In some of the dry land activities yeah they do that. Um, there's one they would be like…you had a make a circle…it's like someone you haven't talked to yet or you don't know as well you are going to go and they are going to be your partner for the rest of the day or something.

Tina described how coaches facilitated a team bonding activity by asking the athletes to partner with a teammate whom they were less familiar with. Although Tina does not explain how relationships bonding occurred, it can be inferred from her previous statements (i.e., her ski friends are her best friends and her friends fully support her) that this activity might have been the springboard to her friendships. Thus, practices that promote team bonding and teamwork is a contextual feature to help lay a foundation for athletes to build interpersonal relationship.

Aspects of the teambuilding activities correlate with the cohesion literature. For example, factors such as similar age and being in physical close proximity to each other with opportunities for interaction and communication increase cohesion because they foster group development (Carron & Spink, 1995;Weinberg & Gould, 2011). Leaders that facilitate safe peer group interactions may assist in decreased confrontational peer interactions and help peers construct skills in building supportive relationships, which assist in cohesion (Bloom, Stevens, & Wickwire, 2003). However, there is no one simple formula for effective teambuilding activities. Bloom, Stevens, and Wickwire (2003) interviewed a group of expert coaches on their perceptions of effective ways to create a

cohesive team. Teambuilding activities were one of the seven themes that emerged. The investigation suggested building team unity is dependent on the coaches' belief in their ability to gauge the atmosphere of the team. Thus, there are various potential factors contributing to the effectiveness of teambuilding activities and, therefore, affecting PYD through team building is a multifaceted and complex process. Thus, this warrants future research.

Research does show that the more cohesive a group the greater impact it has on the individual athlete to conform to the group's norm (Carron et al., 2002). If a task-involving, caring climate is present on a team, then team building activities might accentuate and reinforce those norms. Team building and team bonding experiences may then be an important element in developing healthy assets among young people.

Logistical tasks. Working together to perform logistical tasks represents a higher order category that emerged from the interviews. The logistical tasks associated with ski racing include the coordination and implementation of the operation of daily practices and attending races. The quotes in this section were largely in response to questions asked about the task-involving climate. Mainly, these quotes stemmed from the following two questions: "how teammates contribute to the team" and "describe how teammates have an important role." Surprisingly, several athletes responded by stating athletes contributed to the team by helping with logistical tasks. Matt expressed taking turns in doing ski chores, "We always volunteer to get skis and we don't make one person do it. We all do our turn unloading the skis off the van." Additionally, Tina mentioned how athletes contributed to the team through logistical tasks and performing well, "Um, I would say they [teammates] contribute by like how they are helping the team. If you are

doing good in races that is contributing. But it can also contribute by helping clean up the team room…or helping the coaches with something or pulling the course." Tina stated skiing well in races and cleaning the ski course and team room as behaviors that contributed to the team's success. These behaviors further reflect cohesion. Cohesion is associated with the extent to which team members are pleased with each others performance, behavior, and conformity to the norms of the team (Carron et al., 2002). Factors besides good performances, such as accomplishing logistical tasks, are rarely mentioned in the literature. But, in this study logistical tasks seem to contribute to the team's cohesion.

Tina reflected that cleaning the team room and the skiing course contributed to coordinating and accomplishing tasks that were important to the team's success. Amanda had a similar remark:

> Well like, during races, when you like strip down to your suit, like, people come up and like help each other like carry each other's clothes down and like you'll help each other pull gates and just kinda like you work together to do stuff you can do alone, but it'd be harder. Well like, carrying the clothes, usually, some of the, there's like four boys in our team and like, most of them are pretty good at coming up and carrying the clothes down for us, and we'll go up and do it for them. And then with the gates you just talk to each other like "hey if I'll pull if you'll carry." Just helping each other out and stuff.

Amanda pointed out the unique logistical characteristics in the ski setting. For instance, Amanda mentions carrying people's clothes. This means that directly before competing in a ski race at the top of the course her teammates remove all of their warm clothing until they are down to a thin race suit. Then, her teammate races the course and is at the bottom of the ski hill with no warm clothes. Thus, teammates ski down with the racers clothes so that he or she will have warm layers to ride the chair lift to the top of the mountain. Another logistical task is removing the gates and other ski equipment from the

hill after practice each day. Amanda reflected on how teammates learn to cooperate and communicate while working together to remove the ski gates. Additionally, she stated these logistical tasks are easier when teammates assist each other. Thus, logistical tasks create opportunities for cooperation.

Tuning skis is another unique logistical task in ski racing. Leah recalled one late night tuning skis and a boy teammate helped her clean the tuning room:

> But um, we [teammates] sort of just do it ourselves, because, getting to know each other, we all cause mostly, we're all really- we all know we're all really good people or really nice people and um, just to think, "oh, I mean- I don't want leave her here, taking care of all these benches all by herself because, I know that in the morning, she'll be really tired from this, and I know that if that was me, that would really stink and um," yeah.

Leah expressed gratitude toward her teammate in helping her clean the ski-tune room. Leah described that the bond among teammates helps to create a concern for others, which transpires into recognizing and helping each other with tasks. She further elaborated on the importance of teamwork on logistical tasks:

> Well they're [coaches] just, really- they're happy to see, that, how close we are, and they've seen this before, with all the J3 teams, they see that- them come in, and J3 is sort of that middle stage, but as you get older you just get, tighter and tighter and tighter. I mean I know the J1's and 2's, I mean, they are so so tight. They know each other inside and out. And um, and J3 year I think is a big part of that, because it's a step up for everyone. Because, know you're traveling as a team, you're expected to do your own skis, and you're so much more independent. And then, towards the beginning of the year you're all like sort of fighting like every person for themselves. And then you sort of say "wouldn't this be a lot easier if we all worked on this together." And then the coaches sort of, they don't- they encourage it but they also sort of- how does, they kind of sit back for in order to say "Lets see where this goes and see if they'll learn for themselves. How to do this, and how to be a team. Like they encourage it but –Um, they, like the encouragement is saying "Oh um, so and so, why don't you help this person" and they'll be like, "oh OK," but then they'll realize like, "well this actually made this go by a lot quicker" and so just like little things where they're sort of like, pushing it into this outline, but we fill it in. We've pretty much learned that on our own.

Leah talked about the changes in the logistics as a J3 athlete. She also realized the importance of cooperation to achieve a common goal. What is also interesting is how coaches provided guidance, but allowed for autonomy and teamwork. This is important to note because it provides youth the opportunity for increased autonomy and decision-making, which are contextual features critical to fostering the developmental needs of early adolescents. Additionally, she mentioned that the coaches expressed happiness when the team embraced cohesion. Similar to the literature, a coach's positive reaction and feedback coupled with allowing athletes to participate in decision-making and providing a lot of technical instruction are preferred coaching behaviors by early and late adolescent athletes (Martin, Jackson, Richardson, & Weiller, 1999).

Other logistical components of ski racing include traveling to races and riding the chair lift together. Samantha stated the amount of time spent together during races enhances their connectedness, "Yeah, and I think we bond at races. As a team we have to be together…watch a movie, um, hang out…be together as a team." Amanda's experience related to Samantha's:

> I think we trained so much together, and the races together, and the van, and we stay in the same rooms or condos or whatever. And I've been racing with the same people for a really long time, and our team is small, so sometimes they'll be a new kid, but like usually its just the same people. Well all the traveling together in the vans and all the like eating together at restaurants and trips and like living in the condo or hotel together and all the training and full day Saturday skiing and Sunday training and like, we go to Colorado camp for a week in October I think, and we all like live in the same condo pretty much so we all get to know each other really well then too.

As stated earlier, Amanda also related her team to being a "family," "really supportive about everything," and "everyone just wants to be friends with everybody." Therefore, Amanda's and Samantha's statements suggest the amount of time teammates spend

together and the size of the team influences their level of connectedness. Becoming connected to a group usually entails adopting the group's social norms, behaviors and values. As the group's connection becomes stronger and more long-lived, the young person is likely to internalize these values and norms. It is this internalization of values and norms that is likely to underlie the impact of social group membership on specific behaviors (Deci & Ryan, 1985). Participating in the logistical tasks associated with sport may be an undervalued and underappreciated part of participation that indirectly fosters PYD. Early adolescence is a time of life associated with the most dramatic increases in problematic behaviors (e.g., decreases in school engagement, family conflict) and negative peer influence (see Eccles & Gootman, 2002). Participating in the often mundane tasks of cleaning and setting up and taking down might allow youth to adsorb positive norms, learn how to communicate and cooperate, and internalize the values associated with PYD.

These athletes' accounts parallel the cohesion research. Teams that stay together longer and teams that have a smaller number of athletes tend to be more cohesive (Carron & Spink, 1995). These logistical or environmental factors, which are the linked to the normative forces holding a group together, play an important role in the development of cohesion. Although cohesion is multidimensional, researchers have found two main factors that relate to why a group bonds together. These include task cohesion and social cohesion. Task cohesion refers to team members working together to achieve a common goal, such as winning or the team's coordinated effort. Social cohesion is enjoying each others company or having interpersonal attraction among teammates (Weinberg & Gould 2011). Cohesion is highlighted here because it is positively related to important

outcomes, such as receiving social support (Rees & Hardy, 2000; Westre & Weiss, 1991) and creating an environment that assists positive interactions among team members (Caroon et al., 2002). Cohesion is also related to performance. Greater team success enhances cohesion and cohesion leads to success.

Consequently, logistical tasks are a naturally occurring teambuilding activity that can provide cohesion and build developmental skills, such as communication, connectedness, decision-making, risk management, task-completion, and critical thinking and reasoning, among youth athletes. However, logistical activities can have negative impacts. Mika was the only athlete who expressed a dispirited remark:

> Like if everybody is mad you can just think, "ya, um I can do it but" usually, mostly all the time, it doesn't work. [he he], because I'm always riding with somebody on the chair lift, and the chairlift is longer than the run because its [name of resort] mountain. Uh, so, and then your with a person and they're like, "uhh I hate skiing, I just want to go to my house" and you're like, "oh, OK." I'll just try to do it on my own, I'm not in a wolf pack, I'm by myself. I feel like I'm alone kinda, but it hasn't been like that most the time this year, so, it's been better. Cause we got a new director, and it's been, a lot better. Like this have been.

Teammates riding the chair lift together is another ski-specific logistical task. The athletes typically ride the chair lift without coaches. Therefore, this is a distinct time where athletes are consistently in proximity to one another. This togetherness can increase cohesion (Carron et al., 2002). But in the case of Mika, it dampened his mood and made him feel remote from his teammates. Therefore, the logistical nature of sport can either foster or in some cases diminish cohesion.

Logistics in ski racing also extends to coaches being planned and organized. Mika briefly mentioned how a new director improved the ski racing environment. He also remembered a stressful experience from last year:

Um, our old director, who was a nice guy and all, but he just didn't really plan everything. And it was last minute, and my parents were always always stressed, and that made all the kids stressed because the parents were yelling everywhere, and stuff. They're all mad, and things wouldn't be as nice as they were if they were all planned, it was all winging it, and stuff. [This year] Everything's more quality, and more planned. And were getting, instead of, like, we also got a lot of new coaches this year. I think just everything's been improved, to where you're learning more, like last year you'd just go out and train, train, train, you wouldn't really. It'd take a long time to bounce back from something. And this year it takes like, one run.

Mika expressed how the overall structure of the program impacted him. When logistics were disorderly, Mika experienced stress and anxiety. However, when logistics were organized he expressed more learning occurred. Interestingly, how coaches are performing logistical tasks, such as planning and organizing, are being assessed and internalized by the athletes. Tina observed her coach dealing with logistical issues:

Well, something needs to be taken care of, he [coach] makes sure that it's done. Like training schedule needs to be changed…he goes around he runs around to each room…OK, this needs to be done…da da da da…and we are just like out there skiing he'll be joking around with the kids and have fun. So he's serious one minute and the next he's like having fun.

Tina's watched her coach change behaviors depending on the task. When asked in the interview if it bothered her that her coach adjusted his mood and style during practice, she replied, "No."

Tina's and Mika's experiences are supported by the literature. Bloom, Stevens, and Wickwire (2003) examined expert coaches' perceptions of understanding a team. A theme that emerged was the importance of organization and planning because coaches provide consistency and stability for the athletes. The coaches felt that organization contributed to a more positive environment and, as a result, more team building could take place. Cognitive theorist Piaget (1964) stressed the need for a structured environment so children and young people can experiment and understand their cognitive

structures. Csikszentmihalyi (1975, 1990) found structure and predictability as a prerequisite to engagement or flow in activities. Thus, consistency and stability are critical features to the climate that help promote PYD.

Across settings, an important element in creating structure is monitoring and enforcement of rules and expectations (see Eccles & Gootman). In this study, when athletes were asked if coaches had rules, rather surprisingly, all of their responses were "no." Samantha further stated "Well, no boys in the girl's room and stuff like that, but no real rules." Although evidence indicates that structure is a necessary condition for adolescents to manage their own behavior and facilitate PYD, it is important to note that structure must be age-appropriate. For example, early adolescents need more structure than late adolescents. Older adolescents may withdrawal from activities if the leadership is too rigid or controlling. However, participation increases when older adolescents are given a more active role in setting rules and being a leader (Mclaughlin, 2000, Merry, 2000). With regard to age, adolescents mature at different rates. Therefore, the 13- to 14-year old athletes (i.e., early adolescence) in this study may be able to create their own structure and to demonstrate adequate self-control over their behavior. As a result, the coach's may not have provided formal rules. Additionally, since team members have participated in the sport for many years, the athletes may already understand the rules. Because the exact extent to which coach's structure practice is not known, it warrants further investigation to understand the intricacies of an appropriately structured environment to support positive behavior and development in early adolescent athletes. In summary, the statements from these athletes reiterate the importance of coaches being organized and providing structure as an important contextual feature.

Coaching Style

Because the athletes in the qualitative phase of this study were chosen based on having high scores on a task-involving climate and a caring climate as well as having low scores on an ego-involving climate, it is not surprising that coaching style emerged as an overarching theme. Coaching style refers to the practices, behaviors, and attitudes coaches' exhibit. Thus, coaches are the adult leaders who shape the sport climate and, in turn, observe and model these behaviors and team norms and values.

Athlete's comments about the style of their coach appeared in the other overarching themes (fun environment, atmosphere of nurturance and support, and teamworks). However, while analyzing the narratives of the skiers it became apparent that coaching style was itself a major finding of the study. Coaching style comprises three higher order categories: (a) coach instructions; (b) techniques and strategies; and (c) emphasize and facilitate rigorous training, and seven lower order categories.

Coach's individualized instructions. All participants mentioned that their coaches gave individualized instructions. Jewels statement represents the overall meaning of this category. She said:

> So, like, it, ya, but its pretty much individual for most things. Um, cause like, like when you hear other people stuff, when they're working on. Well everyone has different ability levels first of all, so you can tell from that, and, in video when you hear coaches feedback, you can tell it's not exactly the same as yours. Some people are pretty like close, in their skiing, like their style and everything, but they're not necessarily the same. So, there's like, if we…I don't know, there always seems a way to like, push aside your weaknesses like, to just erase them, by doing one other thing. Like, when you're, like technically, like skiing so.

Jewels expressed that the coach's instructions were tailored to each individual's skiing ability level. Additionally, she described her coach's uncanny ability to improve the skiing of each team member. Mika had a related experience. He commented:

Um, I guess it's kinda different, from other teams cause its more like. I don't know what other teams are like, but I guess it's more open, and, it's more like, kinda too what a coaches think is best for you, kinda thing. Like, drills that work for a specific person. They just know what works if you're having a problem. Ah, just doing something, and you think it's because of your technique and it might be because of something else, that's causing it. It could be anything. And they would make us schedule for each kid kinda thing. Like I was falling a lot so they told me to, like, rest for a week instead of skiing, and then when I came back I was good, it's kinda weird, how they have all this, they just know.

In addition to the coaches' instinctual sense and technical instructions, Mika stated that

coaches individualized instructions by creating a training schedule for each athlete.

Amanda also stated that her coaches' ability to observe helped to individualize training.

Amanda noted:

They'll tell you how to do better and they might go on a run with you, to help you get what you need to get done. Well like, after like the first couple of races that aren't qualifiers they kinda get to know each person, and like, you kinda know what you need, and you can talk to them about it and they'll help you. They like, with video and just, trying to, everything, like if they see you're doing something wrong, they try to fix it, before it gets to be like a bad habit. But they try to catch stuff early and hope you fix it so that you can do well.

She further noted:

They try to give you a drill to work on that or something to think about they just don't ignore it. They try to help you work on it and they're always, like one might be standing at the top of the course like talking to you before you go or on the radio or something like, they just talk to you about it and they're is like midseason evaluations that they send out that like, they tell you what you could be working on.

Similar to Amanda, Samantha articulated:

Well, I know that…you come at the bottom of the race hill when you are training and they give you specific feedback and that is showing that you want each individual to improve. And if we are in a group, you need to do this and you need to do that and its not like an overall thing and they are only going to help the kids that are going to do better.

Comments from these athletes specifically mention how coaches provide individualized

feedback. The athletes expressed that the coach's instructions were almost magical

because their skiing was greatly enhanced when their coach gave them a simple tip. Additionally, the athletes felt receiving individualized instructions from coaches meant coaches expressed aspirations for them to master the skill of skiing and to perform well. For instance, Amanda described that after only two races her coaches were capable of providing proficient technical advice to each athlete on the team. More specifically, coaches individualized instructions by taking the time to go on a ski run with an athlete and providing a detailed midseason evaluation that addressed each athlete's goals and how to improve technique. This supports the literature stating that it is critical for coaches to focus on individual improvements and then connect these behaviors to the athlete's individual goals (Biddle et al., 2001; Horn, 1987).

In addition to coaches providing individual instruction and attention to athletes, all the athletes felt they were treated equally. Tina stated "They [coaches] give attention to everyone equally." Jewels stated how coaches encourage everyone to try their hardest:

> Ah, well equally, pretty much I guess. Ah, well its not like the attentions all on one person, its pretty even, and they don't, its not like they go around think that like "this persons like better than that" like maybe I should give them more attention. Like everyone's pushed to their, like, best.

Samantha added coaches' encouragement and their ability to treat people the same regardless of the skier's ability level. She said, "They [coaches] are always encouraging you. Its not like…I'm not at that level yet and neither are a few of the other kids and they never act as if we are at that level. They act like we are equal to other people."

Amanda and Matt also describe that regardless of skill level the coaches provide the same attention to everyone. Amanda mentioned, "They [coaches] don't just pick like, one person and be like, focus on them and ignore the rest of us. Like, if there is a really good person, they'll work with them the same amount they work with everybody else."

Amanda talked about how she notices that coaches refrain from coaching only the top

athletes and that no one is overlooked. Matt had a similar statement:

> Um, they….ah….they…you just…everybody has the same amount of attention
> and you joke around so it makes you feel like you are apart of something like you
> are a part of the team. And, all the coaches help with that out. Um, everybody is
> pretty much the same. We are all treated as ski racers. No one is really different.
> We are all treated the same no matter our skill level.

Matt believed that similar treatment helped to bond the team. Leah provided a more

sophisticated reason of the importance of being treated equally. She further elaborated

that:

> The coaches, again, 'cause they're so supportive of you is a big thing. And um,
> cause they don't choose favorites. They're not the coaches that'll choose favorites
> and that sort of makes you feel sort of like "I have a role in this." Um, cause they
> won't just take, say like, "Oh these are the best skiers we're going to make them
> special" and um, just the fact that they treat each individual evenly. And that
> makes you feel more like you have a role on the team. Just, because, they won't
> single someone out, and just like, and they'll not…where, everyone will go down
> and like "Oh, you need to work on this, you need to work on this, you need to
> work on this, so and so that was fantastic," they all say, oh, that was good, but you
> can do this also you can do this" and um, treating you evenly that way. And they
> also spend, like, and they end up spending time with you getting to know you, like
> one day they might hold a conversation with this person. I mean it's not like
> divided up necessarily like that, but uh, maybe like, you'll go on for lunch on a
> weekend, and they'll come in and sit with someone else everyday or something.
> And it's not like, necessarily, like they have it categorized "Oh, I'm going to sit
> with so and so today, I'm going to sit with them the next day." It's just sort of
> something like "Oh, I guess I'm going to be sitting with her."

Similar to the other statements, Leah stated that coaches did not have a favorite athlete,

but being treated equally made her feel as if she had a role on her team. Leah thought that

coaches treated each individual equally through individualizing technical feedback as

well as by naturally spending time with each athlete. Leah believed these behaviors

created a supportive environment because coaches spent time genuinely learning more

about them. These sentiments underscore the important benefits youth receive by

experiencing a task-involving climate (i.e., having an important role) and the de-emphasis of an ego-climate (i.e., coaches favor the top athletes).

Individualized coaching is not always easy to accomplish. Although difficult, it is an important component of structuring a sport environment. That is, each athlete has his or her unique motives for participation and effective coaches must provide an environment to meet these diverse needs. Structuring the environment to meet the needs of the participation increases motivation (Ryan & Deci, 2000) and is a critical feature of effective PYD settings (Eccles & Gootman, 2002).

Coaches can directly structure the environment to meet the needs of youth sport participants. In this study, the two main ways were providing instructions to each athlete and treating them equally. These athletes articulated specific tactics coaches' used to meet their needs: (a) individualized training schedule; (b) skiing one-on-one; (c) midseason evaluation; (d) eating lunch with the team; and (e) more generally, giving technical feedback while in a team situations. Thus, these are practical suggestions to meet the needs of youth sport participants.

Positive, informative feedback. In the previous category a few athletes commented on their coach's seemingly instinctual ability to provide a simple technical instruction that helped them master a skill. This phenomenon can be linked to coaches providing instructional feedback. Instructional feedback refers to information provided to a person completing a skill by an outside source. In addition, the individual completing the task cannot evaluate the skill by his or her own senses (Magill, 2007). Often effective feedback involves breaking down a skill into understandable components and providing simple targeted feedback. Although the athletes did not provide a detailed description of

coach's instructional feedback, several athletes discussed the importance of general

positive, informative feedback offered by their coach. Most of these statements are in

response to the questions "how do coaches make sure all skiers improve" and "when you

make a mistake, what do people on your team (coaches and teammates) do or say to

you." Matt stated his coaches took a positive approach:

> They don't really tell you like the run sucked. They tell you like do the best you
> can and you need to work on this and you need to work on that. They don't say
> that was a bad run. It's positive reinforcement. And they support you. Like
> congratulating you. Tell you what you need to work on. They like show you how
> you made your mistake and what you can do to prevent it next time.

Matt talked about how coaches were supportive through the use of praise,

encouragement, and providing instructive feedback to correct mistakes. Samantha

discussed what she liked about positive, informative feedback:

> I think that the coaches try and focus on the mistakes more than the success
> almost. Even though they point out the success, that is what you're trying to work
> on is the mistakes you have. Even though you weren't leaning in, but carving,
> they'll say that was really nice carving, but you need to do this and this and this. I
> like it when the coaches tell you something you did good and then something you
> did bad because it's like you did something good, but you also need to work on
> something else. Makes you feel that you are doing something right when you're
> doing good and when they tell you something bad it wasn't perfect so it didn't
> feel perfect. And sometimes when you have a run and it feels like you're doing
> everything that you've worked on sometimes coaches say go around and get
> another one. It depends on how you ski it.

Samantha articulated that when coaches told her she skied well that it evoked a positive

emotion because it reinforced that she was skiing correctly. When her skiing was poor,

she added how skiing didn't feel right. She also appreciated that her coaches first pointed

out the correct aspect in her skiing, which was followed by what she could improve on.

Coaches can respond in a positive or a negative way. The positive approach is to

provide encouragement and constructive ways to improve. Similar to Matt and

Samantha's responses, research shows that athletes who are taught using a positive-approach like their teammates and coaches better, enjoy their athletic experience more, and experience greater team cohesion (Smith & Smoll, 1997). Youth development researchers Smoll and Smith (1980, 2001) developed leadership guidelines for positive-oriented coaching in youth sports. They emphasize giving instructions or feedback selectively so that it is meaningful. Smith and Smoll (2001) also advise coaches to provide corrective instructions, demonstrate the skill whenever possible, and react to misbehaviors with control. A positive approach typically motivates athletes to exhibit the behaviors that are being reinforced through positive feedback, thus increasing the likelihood of the desirable response to occur in the future (Smoll & Smith, 2001). Consequently, positive encouragement relative to personal improvement helps athletes persist when challenged, exhibit higher self-esteem, and reduce the fear of failure, thereby influencing psychological development in a positive way (Smoll & Smith, 2001).

A negative approach involves punishing or criticizing an athlete in an attempt to eliminate unwanted behaviors. Although the athletes in this study did not state that their coaches gave them negative feedback, many of them mentioned the lack of such methods. For example, Leah described how coaches respected them when a mistake occurred:

> OK, um they're respect is sort of a thing, uh, it's like with the coaches, um, they'll say, they'll say like, so and so, um, they're respect. Like, if you do something bad, you'll get, I mean there's consequences but they're also, they're really kinda on, uh, mistakes happen. Um, and that's a respect factor, not just "You did something wrong, you're going to get punished!" It's also an idea of just look, it's not OK, you don't ever do that, but, not as much like, "Oh, you're in trouble and you're going to get punished for it, believe that at that, and they say like, the respect is that they want them to know what they did wrong. And I sort of think that's a respect in the fact that, um, if you just, tell them that they did something wrong, they might just do it again, because they might not be sure whatcha mean, and it's

sorta definitely a respect factor because um, like it's respectful to tell it like- to- not to- like to, let them know what they did wrong and let them know it's not good to do that, but also say like, just to be able to give them some specifics, and also kind of like, it encourages the kid more because it also reminds them of a parent. Whereas like, if it was just like "Oh you did this wrong, you're getting punished" it would remind them more of a teacher who they're more distant with.

Similar to Matt and Samantha, Leah discussed how coaches provide instruction when a mistake was made in order to help prevent it from happening again. In contrast, Leah's example was not related to skiing. Instead, coaches were providing informative feedback regarding positive social norms. Interestingly, Leah related how her coach's feedback was different than her experiences with her teacher. Her teacher may punish students for unwanted behaviors. The teacher's negative reaction may contribute to Leah's view of her teacher-student relationship as more distant. However, her coach's positive, informative feedback for moral behaviors seems to foster athletes with an attachment to prosocial norms as well as healthy relationships to an adult, both of which are essential social developmental outcomes in the NRCIM's framework. This underscores the importance of the unique opportunity sport can have in developing young athletes' psychosocial assets when they are provided with positive, informative feedback.

Techniques and Strategies

For the majority of the athletes, the coaches' specific techniques and strategies contributed to developmental outcomes, such as enjoyment, mastering a skill, autonomy, and leadership skills. Techniques and strategies manifested in five lower order categories: (a) drills and analogies; (b) rewards; (c) modeling other skiers; (d) skiers participate in practice methods; and (e) mental skills training.

Drills and analogies. Four of the seven athletes mentioned either a drill or an analogy that made skiing fun and improved skiing technique. Tina mentioned drills that are either fun or develops technique, "Um….I think falling leaf is where you can see the fall line is in the hill. And whirly bird I think is just for fun." Jewels described another drill to help with technique:

> Ah, well like, physically? A lot of drills and stuff like that you know. If you're having hand problems. Like the other day [after I] tried to carry a pole through the slalom course to help keep her hands up so she had to like, cross walk everything like, there's no going back because you have to like, hold onto that pole. But like um, verbally I guess, they just, I don't- its kinda hard to explain.

Samantha mentioned, "I think sometimes skiing without a pole or a ski or boots unbuckled. At the beginning of the season we get out of our comfort zone and he'll [coach] say lean in or rotate your hips as much as you can."

These girls described the commitment, challenge, and enjoyment in these drills. These statements emphasize that when matching the athletes' skills and abilities or creating a slightly more challenging activity creates a fun way to learn as well as facilitates achievement motivation and effort (Csikszentmihalyi, 1975, Weiss & Wien-Bjornstal, 2009). Consequently, the use of drills to promote sport skill mastery and facilitate fun emphasizes that sport can be a viable medium to support healthy developmental assets.

Furthermore, coaches used analogies to create a fun learning environment. Amanda recalled:

> Um ya, like we do drills sometimes, and sometimes if you really need your hands up, pretend they're magnets or whatever, drawing you down the hill. They don't make it just like..[gesture of putting hands up]. Ya, they make it fun. They just, they make it not just like don't make your hip drop, like, they make it like, pretend your hip has a balloon on it or something, like lifting you, or, they make it, to make you think of it easier.

Without probing about analogies, Leah remembered, "Oh, yeah, our coaches like to use analogies a lot" in which she provided a couple of imaginative examples and how they helped her skiing technique. Coach's creativity in having athletes use their imagination to improve technique appears to be an effective coaching strategy to promote fun and learning.

Rewards through praise. When asked about receiving rewards for trying hard, all of the athletes stated a form of praise was the reward. Matt replied, "You get rewarded by 'good job'. But, it's not like 'You did so well today.'" Jewels stated, "I don't know, just like, uh, 'Nice job' and stuff, I mean, it's not like a big deal or anything." Leah responded, "Not like a reward, but there is praise to it and saying 'Oh, you did a great job.'" Sarah remarked, "On the J3 team you get kudos. [Coaches say] 'It looks like you were trying really hard.'" Tina mentioned a tangible reward:

> Yeah, we have stickers that have J3 on it and whenever you do a good job that day or good in a race you get a sticker to put on the ear of your helmet. At the end of the year whoever gets the most stickers gets a prize so we are always trying to do our best. Um, if you make the podium then you get a sticker. If you get a good training run they say that your 2nd run has to be better than your first run and then you get a sticker. [You receive a sticker] at practice and sometime its on race day, but not a lot. Its pretty much working hard and helping your teammates. That is how you get a sticker. [Or], if someone isn't there and it was their day to clean up if you volunteer to help you get a sticker.

Tina stated stickers were rewarded to athletes for performing well and trying hard. Trying hard on skiing skills and helping others were a more prominent way to earn a sticker. The stickers may act as a method for coaches to communicate to their athletes the types of individual behaviors that are valued. Stressing individual task goals, such as self-improvement and effort, can enhance motivation, self-esteem, and positive affect (Ferrer-

Caja & Weiss, 2002; Hellison & Templin, 1991; Koka & Hein, 2002, Mitchell, 1996;

Standage, Duda, & Pensgaard, 2005; Wentzel, 1997; Wigfield & Eccles, 1992).

In general, coaches did not place an emphasis on rewards. Rewards primarily

consisted of giving athletes praise for their effort in skiing as well as helping their

teammates. Coaches' use of praise can enhance the athletes' perceptions of competence

and control (Weiss, 1993). The perceptions of competence and control that young athletes

have are significant determinants of whether they will strive toward achievement and the

perception of achievement being within their own control (Weiss, 1993). Therefore,

praise is one way the coach can foster psychological assets.

Although enhancing perceived competence and control should be a primary goal

of coaches, it is important to note that this is optimized when praise is intentional (i.e.,

focusing on individual improvement and effort) and can be a more powerful reinforcer

when accompanied with a specific behavior. In addition, rewards should coincide with

the likes and dislikes of each athlete because how recipients perceive a reward is

influential in determining if the reward increases or decreases intrinsic motivation (Ryan

& Deci, 2000). Typically, if rewards are perceived as informational, noncontrolling, and

provide positive feedback about competence, then the reward will increase intrinsic

motivation (Ryan & Deci, 2000). Consequently, the athletes in this study articulated that

a social reinforcer reward (i.e., coach's praise, publicity, or enthusiasm) met their needs

for achievement. Achievement behaviors can also be more effective when used in

conjunction with other strategies.

Modeling other skiers. Another strategy to promote achievement behaviors is

modeling other skiers. Three athletes mentioned coaches' use of modeling to help skiers

learn technical skills. For example, seeing a teammate completing a difficult ski run can help the athlete accomplish a task. Samantha described following her teammate's turns:

> For instance, yesterday, I wasn't doing very well in slalom, but I was riding up with [skiers name] and they [coaches] said I should just follow in her turns on the way down and just try get into that where she is because she made it to JO's. I think seeing other people…good skiers…seeing them race makes you want to go to that level…you can follow behind them and follow their turns and try to get to that level. I think that we are always encouraging each other and support in races.

When asked further if coaches made sure each kid improves, she replied:

> For sure, and even though the kids that are good they are always saying that everyone needs improvement like we watch videos from Breezy and Bella who usually get 1st and 2nd and they can pick out things that they can do better. Even though you win doesn't mean you can't improve.

Samantha stated that coaches encouraged modeling athletes as a form of learning and improving skills. Modeling occurred through watching teammates at practice and examining the top J3 athletes. She also mentioned these vicarious experiences promoted trying harder to master a certain skill. Studies have found that athletes watching skilled models who were similar to the observers themselves experiences enhanced self-efficacy and performance (Feltz, Short, & Sullivan, 2008; Gould, Weiss, & Weinberg, 1981). Therefore, coaches' use of modeling to support and encourage athletes learning of skills can be an important source of building competence in early adolescent athletes. Matt provided how his coaches demonstrated modeling:

> Um….we do group video or video analysis. It helps you because the coaches tell everyone else what they need to work on so it kinda helps you like oh if your doing that then I need to do this and…uh…Um, they tell you like what part of your technique and your like your turn shape you need to work on. And then like analyze other people's video. Sometimes we look at world cup video. And, I think that people who are worse get more time because they have more stuff to work on.

Matt described watching video as an example of modeling. Watching video helped him learn how to improve his own technique. Watching a teammate's video also assisted Matt in learning his technique. When further probed if teammates were accepting if the lower skilled athletes received more attention, Matt replied, "Yeah [teammates are okay with it], because they know that the people who are worse they need more time to work on things." This is another example of a caring and compassionate behavior. Matt wanted his teammates to be successful.

Matt also stated that coaches used world cup skiers as effective models. The ability to respectively attend to a model depends on admiration for the person observed, interest in the activity, and how well learning occurs through seeing and hearing (Bandura, 1977, Weinberg & Gould, 2011). These three characteristics describe how modeling is used with the skiers in this study. First, because world cup skiers are the best in the world, the athletes in this study respect them. Second, several athletes previously stated their intrinsic interest to ski. Third, while knowing the athletes learning style is unknown, it is possible that the three athletes making these comments are auditory and visual learners. While it was not fully articulated how coaches incorporate modeling, these athletes generally describe that coaches apply modeling as a technique to teach skills as well as facilitate psychosocial assets such as self-efficacy, compassion, and mastery motivation.

What is known from the literature is that good coaches promote learning through modeling by demonstrating it several times, focusing on a few key points, and clearly articulating what to look for (Weinberg & Gould, 2011). In addition to learning effectively from modeling, the concept of retention is important (Bandura, 1977).

Techniques of attaining retention include using analogies, mentally practicing the technique, and having athletes verbally repeat the main points aloud (Weinberg & Gould, 2011).

The athletes in this study supported these retention techniques. Using analogies was previously described as a fun and effective way to develop technique. Mentally practicing the technique was supported by Amanda's statement. She stated, "And then sometimes we watch world cup and they'll be like, see how they're doing this [motion]. And, see how they're doing this, I want you to try to do this or like visualize them doing it while you're doing this." Imaging themselves or others effectively demonstrating a skill is another source of self-efficacy because it helps to visualize the mastery of a skill. During this statement Amanda kinesthetically (i.e., physically) demonstrated and described the imagery. According to Callow and Waters (2005) kinesthetic imagery improves self-efficacy in sport. In addition, videotaping can provide a long lasting memory and be an effective strategy for learning (Tkachuk, Leslie-Toogood, & Martin, 2003). Therefore, mentally practicing a technique kinesthetically and cognitively is an important element in creating an environment to promote self-efficacy and skill development.

The last factor in retention is having athletes verbally repeat the main points aloud. This is best represented in the next section: skiers participate in practice methods.

Skiers participate in practice methods. Many athletes provided ways in which they participated in making decisions during practice. Specifically, they mentioned two pedagogical methods that their coaches used. First, they were given the opportunity to be the coach by evaluating and providing feedback about their teammates skiing. Second, they were given the choice of how to conduct practice.

Two of the athletes, Amanda and Leah, mentioned how they were given the opportunity to participate in practice methods by acting like the coach. Amanda provided her outlook:

> Well sometimes we just do free ski days at practice, where we just do drill. Sometimes we have it where the athletes is kinda like the coach and they try to, they pick the drill and help and they say like "hey you could do this better" and we just kinda help each other with that, so like we pick out something they could work on and try to help them work. Um, usually its just the one person who's playing like coach. Ya, and they also, they're like, they choose another drill to do for that person. Ya, its kinda fun. Because if you get to work with your friends, and just kinda see what they're doing wrong, and you can see like if you're doing the same thing, that they are, like wrong, or if they're doing something right that you're not, you can learn from that.

Amanda described how coaches give athletes the opportunity to observe and provide instructional feedback to their teammates. Basically, young athletes are coaching. These athletes are carefully watching their teammates skiing technique, deciding on proper and improper technique, and verbally offering advice on how their teammate can improve their technique. Amanda expressed enjoyment playing the coach and satisfaction working with friends. She is also reflecting on how to improve her skiing while concurrently helping others. Thus, this technique may facilitate several healthy developmental outcomes.

By playing coach, athletes are also learning effective modeling through retention. Athletes accomplish retention by communicating the main points to their fellow teammates. Therefore, athletes given the opportunity to coach their teammates, are acquiring developmental outcomes, such as technical skiing, communication, decision-making, leadership, and cooperation, as well as enhancing self-efficacy. Leah added another dimension to playing coach. She stated:

Um, sometimes the coaches will have us, rather than- like, sometimes we'll free ski and then the coaches will say "Oh, you need to go work on this" and you'll be in groups and you go one at a time. And instead the coaches will say "OK, whoever ran it before you, I want you to watch them, and then tell them, what do you think?" and eventually, they do that enough that we just learn to do that anyway. And um, so someone might say, "oh did you see my run," was I tipping in or like, "I hit some bump in the snow, and I got way more out of control than I should of by it. Do you think- Did you see why that might of happened? Was I tipping in, was my inside ski leading, things like that" and at this point, you've had so much experience you know what to point out. And uh, we've learn to just, help each other out and say "Oh you looked really good, but you need to do this." Or like my friend, my friend [friends name] and the beginning of the year she tipped in a lot and um, and she just, she's just improved so much, and she was working on a drill, where she pushed her him into the hill and then she pushed [this hand forward] and this direction so her shoulders were level and square to the hill. And um, and she would forget to do that and then someone would say, oh [friends name] why don't you do the shouppy drill in warm up, and she'll be like "Oh yeah." And um, now at the end of the year, she's been skiing really well.

Leah suggests that through enough repetition of playing coach that she and her teammates learn to observe proper skiing technique and offer suggestions to teammates on how to improve. Eventually, teammates trust each other's feedback and automatically ask their teammates for guidance in mastering a skill. This type of coaching style is supported in the literature. Leading scholars in achievement motivation in sports and physical education, Treasure and Roberts (1995), argue that a task-involving climate promotes intrinsic motivation and confidence. Therefore, the researchers developed strategies to promote a task-involving climate. One strategy was to have coaches' focus on learning and task involvement by down playing competition or social comparison and center on learning new skills. Thereby, coaches who provide effective techniques to execute skills and aid in achievement behaviors are more likely to instill self-efficacy in their athletes (Feltz, Short, & Sullivan, 2008).

Similarly, autonomous coaching styles that facilitate athletes' perception of control are more likely to support self-efficacy. Amanda, Matt, and Mika recalled specific techniques coaches used to create autonomy. Amanda stated:

> Um sometimes we do, like, they're pretty good at like, we'll ask something and they'll try to help us do it, if it's reasonable. So they just try to make it really fun like, and for like, "hey we [athletes] should go up this lift today, they'll [coaches] be like OK lets do that and then we can do this." And it's fun.

Matt acknowledged how coaches use a democratic decision-making style:

> Ya, most the time, and we also, like, will, instead of like, them just going, OK we're doing this today. They'll like, "well what do you guys, kinda wanna do, like, what do you feel like you need to do" and then they take what everybody thinks as a group, and then they combine what they think and they make like a kinda, they compromise kinda thing. Most the time they do that 'cause its perfect with a set.

Mika believed coaches provided autonomy that helped build their confidence:

> Um, usually, like before a race. So like, if, like on the snow conditions, what race, what we're going to race, first up the race and then they're like, "do you guys feel your confident in this and that or what do you guys feel like you need to work on?" but uh.

These three athletes described their coaches' leadership style as democratic. A democratic leadership style allows athletes to participate in decisions about the group's goals and practice methods. More specifically, the coaches in this study consulted the athletes as a group and then made a decision based on their input. This is known as a consultative-individual style, which is one of five styles of decision-making used in sport (Chelladurai & Haggerty, 1978; Chelladurai & Trail, 2001). The most effective decision style depends on the coach and the situation. However, these athletes' statements support the literature. For example, one way to build confidence in athletes is to give them responsibility and decision-making capabilities and support them in their attempts (Chelladurai & Trail, 2001). Also, allowing athletes to participate in decision-making is a

preferred coaching style, which may be the reason fun was associated with participating in decision-making (Martin, Jackson, Richardson, & Weiller, 1999). From these statements it is evident that coaches can help structure the climate to maximize the athletes' feelings of enjoyment and confidence in sport by providing choice in practice as well as assessing their needs.

According to the theories of self-determination and self-efficacy, enjoyment and confidence affect one's choice of activities, level of effort, and persistence (Bandura, 1977; Deci & Ryan, 2000). Additionally, Treasure and Roberts (1995) advocate that an environment that allows athletes to participate in decision-making fosters intrinsic motivation and self-confidence. Coaches who integrate choice and autonomy can increase athletes' feelings of intrinsic motivation and efficacy in sport, which leads to other healthy developmental outcomes. This is important to note because the PYD literature recommends that it is critical for programs to take into account adolescents' developmental needs. One suggestion is for programs to provide the opportunity for increasing autonomy, participation in program decision-making, leadership, and exposure to intellectually challenging material. With intentional guidance, coaches providing an opportunity for athletes to evaluate and give technical instructions to their fellow teammates coupled with a democratic leadership style are a contextual feature to foster healthy development.

Mental skills training. Mental skills training refers to systematic and consistent practice of mental skills with the main purposes of enhancing performance, increasing enjoyment, or achieving greater sport and physical activity self-satisfaction (Weinberg & Gould, 2011). The four traditional mental skills include arousal regulation, imagery, goal

setting, and concentration. Mental skills training is an individualized approach that requires techniques to be tailored to the needs of the athletes in order to optimize psychological performance (Weinberg & Gould, 2011). Similar to physical skills, mental skills need to be regularly practiced and refined through repetitions. Additionally, mental skills are not innate. For example, staying calm when under pressure or maintaining focus while distracted is not inherently instinctive skills. Therefore, mental skills are qualities that can be learned and developed depending on the experiences encountered (Weinberg & Gould, 2011). These interviews inquired about the athletes' experiences in ski racing. Without any question directed toward the mental aspect of their sport, five of the seven athletes stated how coaches integrated mental skills training with physical skills. During the interview, Mika mentioned several times of the importance of mental skills training. He described:

> Most of ski racing isn't physical, I think its like 40% physical, and 60% mind game, because your mind controls what your body's doing. If your mind is not in the right place, your 40% of your physical isn't there, so you're not going 100%, you can't. Your brain, this year its just been like, mind training. Like if I have a bad run, I found out, I like, used to just do dwell on it, like the years before I'd just be like, ugh I fell every race last year, but it was because of the first race. I dwelled on it, and the next race I fell again cause I was like [hand gesture], and I got into the routine "ah, I'll probably just crash this one." And I had a really bad what I was thinking last year, I dunno, this year's just been better.

Mika recalled dwelling on bad races last year and this self-fulfilling prophecy led him to believe he would not perform well. However, using mental skills changed the way he processed things. He learned a coping strategy to keep focused on the task rather than dwelling on mistakes, which is a suggested objective in developing psychological skills in young athletes (Gould, 1983). Furthermore, Mika articulated how coaches help in mental skills training. Here's one example Mika provided:

> She'll [coach] be like "You know, one of my best races was, it was really bumpy, it was snowing, there was like, 2 inches powder on the course for each racer, it was super g so it was really, like we were going really fast." She's like "You know, its not going to feel good, but just put that out of your mind, and just keep attacking" and just, like, you kinda tell your mind what to do, like, they know, what you're going to think, what you're going to get in the course. And they tell you to not think that, or think that. If its good, they're like, ya do you, whatever the course feels like, its great, just go with it cause the course is going to make you think that its awesome, and if the course is bad think that its awesome, or just put that out of your mind, just keep going and just, she's like your the main key even if its bad, its going to be bad for everybody else, so just try to make it down the hill, when you get down you'll be surprised how well you did. I had some pretty, like I thought I had a bad run yesterday but that was my fastest run. Its kinda, like, it messes with your mind a little. Ya, but your mind is like "keep going," but just doesn't, your body doesn't work.

Mika described how his coach provided mental skills strategies for him to put forth maximal effort. He also talked about how his brain might lie to his body and vice versa. Although confusing, Mika's ability to identify a problem, determine that change is possible and desirable, and taking responsibility for its solution is an example of the psychological assets obtained in being aware of the mental aspect of sport.

> Tina described how her coaches emphasized using a positive mental attitude:

> When you're working on something they don't let you say …like…if you have a problem with your arms like keeping your arms in control…like its um…they don't let you say negative things. Like they wont let you say 'I'm trying not to wave my arms around' You have to say 'I'm trying to keep my arms in control' You can't put not in there. You have to change so it's always like some positive part to it. They are like "Try that sentence again." Um, apparently when you say something like not keeping my arms from failing, then your thinking about not doing it so your doing it. But if you are thinking about something else like keeping your arms in control then you are going to keep your arms in control.

Tina's coaches incorporated mental skills training by not allowing negative statements. Her coaches reinforced this idea by making the athletes change "I can't" statements to "I can." Furthermore, coaches explained the detrimental reasons behind negative statements,

thus facilitating skills that focus on growth and change to help athletes gain control of their performance.

Leah described her experiences with working on her weaknesses, which led to mental skills training. She stated:

> Um, it's [weaknesses] generally what they [coaches] focus on the most [their weaknesses], is uh. A lot of times um, if you, if you want to do well, you should work on this or you should work on that. A lot of the J3 years is learning on what to do mentally, and they'll say, this is what worked for me, but it works different for everybody. And just, experiment, when you get into the start gate, this is your first year, um, you have nothing to lose, just, see what you can do and experiment with different things and see how they work with you." Like my friend, um, she does really really well training, and she goes to the races and she just looks really static, and they're like, you get too pumped up in the gate. You get way too excited, try being calm and pretending it's training, and she's been doing better since then, um. So they improve you to work on your weaknesses also mentally. And um, they give you what worked for them, but it's all the up top because, as far as physically goes, you sort of have the lines, cut out for you, you just need to do it, but mentally, everything- something different works for everybody, um. And uh, so they just say, "well, give this a shot, don't just step into the gate and say 'oh I'm going to go down the hill', you have to have something and just experiment around with it," so.

Leah's coaches recognize the importance of individualized systematic use of a variety of mental techniques to optimize athletic performance. Coaches encouraged athletes to learn, practice, and refine mental skills. Coaches emphasized experimenting with different methods while encouraging their efforts during their investigative trials. Thus, coaches were assisting in teaching athletes coping skills, such as viewing mistakes and failures as necessary to the learning process. By allowing athletes to experiment with mental skills, coaches encouraged athletes to take risks while simultaneously providing support.

The NRCIM stress "young people need continued exposure to positive experiences, settings, and people as well as abundant opportunities to gain and refine

their life skills in order to support the acquisition and growth of these assets" (Eccles &

Gootman, 2002, p. 85). Coaches assisting with mental skills training may be a contextual

feature, but there is minimal body of evidence supporting this declaration. Vealey (1988)

emphasized that understanding the physical and mental processes influencing

performance will foster psychological skills when a well-rounded mental skills program

is implemented. A comprehensive mental skills training program can facilitate skills for

performance enhancement and personal growth. Performance enhancement skills include

finding optimal attention, arousal regulation, and the use of a precompetition routine.

Programs can also build the foundational skills for personal growth, such as self-

awareness and self-confidence. Jewels described her experiences of learning both

performance and personal skills through her coaches' mental advice. She stated:

> OK, well like, um our coaches like verbally, I think they just, remind us at the
> start and uh, at the bottom, like when we're done with our run, like what we need
> to focus on and they're always telling us on race day like have your plan, like stick
> to it. Have a lot of a lot of confidence, like you can do this, like that kind of stuff.
> And um, but they also like, its not all serious. We do have a lot of fun, like there's
> like joking around and it's just like tons of fun when you go up everyday. You're
> just.

With the support and guidance from coaches, Jewels is learning how to design

and commit to a race plan. Coaches are also trying to instill a personal attribute, namely

confidence, by educating athletes on the importance of having a plan. According to

Weinberg and Gould (2011), a plan gives athletes confidence because they have a plan of

attack, which requires that you have at least a general idea of what needs to be

accomplished. In addition, athletes are more likely to feel confident about performing a

certain skill if they consistently execute it. When, coaches exhort their athletes to 'stick'

with the plan, they are encouraging an effective approach to competing and practicing

which is likely to enhance confidence (Weinberg & Gould, 2011). Incorporating mental skills training may be an effective tool for fostering skiing self-efficacy.

As a result of using their mental skills training programs, athletes should be able to self-regulate their mental functioning. Thus, the ultimate goal of mental skills training is to have athletes effectively function on their own (Weinberg & Gould, 2011). Jewels described how she effectively monitored and managed her thoughts, feelings, and behaviors:

> Well I, I had like two weeks of training, where nothing changed I was just going like flat was my progress. I was like, "Hey I need to do something, I can't just stand there and go, you know, go down the course, I have to like, race it and try and everything." So I tried to like, every time I got up to the run, or like the start or whatever I just like completely block everyone else out, so I could just like concentrate on being me and like doing what I have to do in the course, and that helped a lot and then I just came out of the course into my like everything.

These accounts show how the integration of mental skills training can foster psychological assets. In this study, examples included coaches using strategies of having athletes refrain from negative statements, encouraging athletes to experiment with mental techniques, supporting athletes' mistakes by expressing that failures are part of the learning process, and stressing the importance of creating and committing to a plan. Mental skills are techniques that apply to sport as well as other life domains and, therefore, can lay the foundation for PYD assets. However, research examining the link between the use of mental skills in sport and PYD assets is very limited and warrants further investigation.

Emphasize and Facilitate Rigorous Training

All of the athletes emphasized that their coaches emphasized and facilitated

rigorous training. Rigorous training was not viewed as negative, instead athletes

perceived it as a way to improve their performance. For example, during the interview

when Tina was asked the final question, "Is there something that I [the interviewer]

didn't ask you that you want to share," Tina replied:

> Hmm. Probably just all the training sessions and how good we are becoming because we are training so much. And get certain days off and they are really short so we have time to ah, rest. And then make sure we get home and we eat well and we condition all throughout the week and year. So we are just a strong team.

Tina expressed an excitement about her commitment and effort to the sport of skiing. Her

commitment to skiing was extended to learning other healthy skills such as the

importance of nutrition and sleep to keep in good physical shape. Jewels was one of

several athletes who learned that to improve performance you must give your best effort.

She stated:

> Well like off the hill a lot of the time when you're in the gym and you're just going to this crazy workout and you're just like, you just wanna sit down and leave. They're just like, keep going, it will reflect so much on the hill, this this is so- everything you're do is worth it. Like, just keep trying. You're one day going to be as strong as her or him, like, They were once like you when they were J3's. Just like a little scrawny kid, walking into a gym no idea what they're doing. Uh, well, I mean it depends on your state like your condition, like if you're injured, then you don't go all out, but otherwise, I think, I think that's just a thing for all of us that just comes naturally, like, we don't really, I don't, I don't really know of anyone who holds back too much. But our coaches are always like, um telling us, give it your all. Maybe not like straight to you, but, I don't know, I can kinda tell when they're telling me what to work on, I can tell like, ah well, I can't just like "try" I have to "really try." I have to try to get this down and move on. They kinda, uh, they kinda told us at the beginning of the season and then. Like, everyday you need to like, maximize your training session, like, like, make the most of it, you know. No matter the conditions or whatever. Um, well, because, level training is going to reflect on your racing, so.

Additionally, many athletes learned to take responsibility for their actions. Matt

commented:

> I mean you are going to be as strong as you make yourself be. Um, basically by
> saying like you are only as good as they work you put into it. Um, they [coaches]
> don't really tell you that you didn't do a good job. They know that you didn't try
> your hardest. Um, sometimes they come up to you and say you have to try harder.
> And then…I don't know…you feel kinda disappointed I guess. And then, [you]
> try to improve [shrug shoulders gesture].

Samantha said, "It's [giving maximal effort] expected of use because you want to

improve, you want to get better. If you don't put in the effort it's not really the coaches

fault." Mika expressed his feelings of not giving his maximal effort, "Umm [I did the best

by], either race results or just feeling of the run. So I'm like, you did what you needed to

do. Everything you could've done. Like I hate coming after a race and be like "oh, I

could of done something else." Mika also provided a unique tactic that his coach used to

encourage maximal effort. He excitingly recalled:

> Um, I've got a good one for that [encourage maximal effort], [coach name] again,
> our coach. We usually haven't had that, before, she's like, "look you guys, we're
> only going to be here for two hours, two hours for my day. 40 seconds down the
> course is all the time, out of the whole day you need me, so just give it your all for
> forty seconds, that's all I'm asking out of you. That's all I'm asking of you. To just
> go for it for forty seconds and the five minutes up the chair, its yours, its your
> time, but once your back on the course, forty seconds of my time, you go for it, its
> only forty seconds of your life, just think of it that way not like, 'oh its going to be
> bad, its going to be forever' think of at just, its only forty seconds, its like, you
> know like, you only have to run a mile instead of a marathon, but do the mile as
> fast as you can, like sprints you know.

This tactic motivated Mika to give a focused effort. Leah explained her feelings and

observations toward coaches after mastering a task:

> And they'll [coaches] tell you that, and that's sort of the way they'll, uh, and say
> it's like "We've seen this so many times, we know, we can tell you that this is all
> going to pay off at some point. It might not be tomorrow but that's OK, I mean
> it's- just know that every little minute that you work you're going to- it's going to
> show in the future." And it's one of those things where, um, our coach [coach's

name] was like "I knew she could do this, and I was just counting down the days until it- until I knew that sometime she was going to have her breakthrough and she was going to do this." And, just sort of the fact that they get excited for you as well. Like, they'll say "Oh that's fantastic, that's great I'm so excited for you, I'm so happy." And just to like, sit there and watch them and see, wow, they're really happy right now.

Leah observed her coach's genuine excitement and caring about mastering skiing. Overall, coaches' attitudes and behaviors toward giving maximal effort was a common statement among the athletes. Athletes learned psychological developmental outcomes such as positive achievement motivation (e.g., try hard, commitment) and taking responsibility for the self and their learning of skills.

In addition, persistence is another psychological asset mentioned by the skiers. This is depicted by Mika's statement of making every minute count. Additionally, many of the other athletes described how coaches repeatedly emphasized repetition to master a task. For example, Matt said, "They try to drill it into your head." Jewels commented, "Well in video it was just the same thing over and over again, 'Hey do this and do that' and the next day the same thing. I was like, 'Hey, I need to change, like, this isn't working.'" Similarly Tina said, "Um, they just keep telling them and telling them and telling them so its like ok I'm getting tired of hearing this [interviewer giggle] I gotta get this over with and you start to like figure it out and move on." Mika stated a parallel sentiment:

> [Coach's name] typical is 'ah, two guys shouldn't, you can't lean in,' I usually lean in so, 'you can't lean in, you gotta work on those hands all the time' like, they will, always, in the start, they'll always just tell me and after they'll just be like 'you just need to work on those hands, everything else is working perfectly except for the hands', and just stick it in your mind like, time after time after time, to where even if you didn't want to listen, you probably end up listening in the end because there's just so much they tell you, the same thing, like kinda almost gets annoying to where you just want to do it right so they don't tell you anymore. You're like, I'm going to do this so they don't tell me again, like.

Some of the athletes expressed irritation from repetitively hearing the same advice. However, coaches repeatedly emphasizing repetition helped them to master a task. In addition, coaches making consistent and repeated use of their efforts are necessary to promote achievement motivation strategies (Weinberg & Gould, 2011). According to Chelladurai (1993), a leading researcher in sport leadership, a coach's emphasis on rigorous training is related to optimal athlete performance. This study suggests that rigorous training through coaches' support and encouragement for trying hard and persisting is linked toward skill mastery, effort, and a sense of personal responsibility for learning. Athletes in this study believed that their behavior in training directly affects their performance. They are the masters of their destiny. This type of belief system is key to an optimal life (DeCharms, 1979, Ryan & Deci, 2000), suggesting that fully investing oneself in the task at end may instill the assets for youth to become happy, healthy, and productive adults.

CHAPTER 5

FINDINGS, CONCLUSIONS, PRACTICAL IMPLICATIONS, AND

DIRECTIONS FOR FUTURE RESEARCH

The purpose of this study was to examine the relative contributions of the social

psychological climate toward positive psychosocial assets in competitive, early

adolescent alpine ski race athletes. An explanatory mixed methods design was used to

investigate the link between the climate and PYD from both a quantitative and qualitative

perspective. In this chapter, the quantitative results are presented initially, followed by

the findings of the qualitative phase. Next, the conclusions of the study are addressed.

This is followed by a presentation of practical implications as well as future directions for

the examination of PYD in sport.

Findings

Quantitatively, the hypotheses that perceptions of a task-involving climate and a

caring climate would positively predict personal and social assets in early adolescent

skiers and perceptions of an ego-involving climate would negatively predict psychosocial

assets were partially supported. Descriptive, correlation, and regression analyses resulted

in the following:

1. Early adolescent competitive ski racers reported a high task-involving climate, a high caring climate, and a low ego-involving climate. Thus, the athletes tended to perceive the climate on their ski team focused on cooperation, effort, respect, and feelings of safety and comfort. Also, they tended not to experience punishment for their mistakes, intra-team rivalry, or unequal recognition.

2. The sport participants responded positively on all the PYD variables (intrinsic motivation, fun, connectedness, skiing self-efficacy, and general self-efficacy). In general, the athletes enjoyed skiing, bonded with teammates, felt confident in skiing, and experienced certainty in their belief about their capabilities in other life domains.

3. Small to moderate positive correlations between a task-involving climate, a caring climate, and each of the PYD variables emerged, whereas perceptions of an ego-involving climate demonstrated moderate negative relationships with the PYD variables. Thus, optimization of personal and social assets tended to be greater when athletes experienced a climate of effort and support and psychosocial assets tended to be minimized when they perceived the climate focused on differences in abilities.

4. Athletes' perceptions of a task-involving climate positively predicted intrinsic motivation. Therefore, when coaches and teammates emphasized skill development and learning, athletes were actively engaged in skiing.

5. Athletes' perceptions of a caring climate positively predicted connectedness and skiing self-efficacy. Perceptions of a caring climate were also positively linked to general self-efficacy, but minimally and to a lesser extent than selected

demographic variables (i.e., number of years skiing and number of years ski racing). Consequently, a climate centered on respecting and appreciating team members while simultaneously creating a safe, comfortable place where team members feel welcomed everyday, was associated with peer bonding, confidence in skiing and greater belief in the ability to respond to obstacles in life.

6. Athletes' perception of an ego-involving climate negatively predicted fun, but was not significantly associated with the other psychosocial assets investigated in this study. Thus, a climate focused on outdoing others was linked with a lack of fun.

Qualitatively, semistructured interviews with early adolescent alpine ski racers experiencing a high task-involving, a high caring, and a low ego-involving climate revealed the following:

1. All of the athletes viewed the ski racing environment as fun. The personal factors that contributed to a fun environment included voluntarily participating in skiing and sharing an interest or passion for skiing with teammates and coaches. This enjoyment for skiing created an opportunity to find peers and adults who shared a similar interest and, in turn, this developed strong peer and adult-youth relationships and satisfied their need to belong.

2. The situational factors that fostered a fun environment were playful behaviors. All athletes in this study described being playful as joking around, using humor, and having the opportunity to freeski. More specifically, when coaches structured practices to incorporate time to hang out, joke around, and learn other nonracing skiing skills (i.e., backcountry skiing, powder skiing, and cliff jumping), the ratio

of play to skill development were balanced, which contributed to a fun atmosphere. Thus, these situational factors are underlying elements to foster a fun environment.

3. All of the athletes expressed how team members provided nurturance and support for one another. The elements of nurturance and support included the following behaviors exhibited by team members:

    a. greeting each other daily,

    b. inquiring about each others' day,

    c. welcoming new teammates,

    d. regulating disrespectful behaviors by making comments that respected the rights and feelings of others,

    e. providing continuous verbal and nonverbal positive encouragement regardless of skill-level, sex, or performance outcome,

    f. renewing an athlete's confidence after a poor performance,

    g. offering supportive, motivational, and instructional feedback to help teammates perform optimally,

    h. bonding as friends and family, and

    i. providing guidance in life obstacles outside of skiing.

Collectively, athletes and coaches exhibited supportive and caring behaviors, which influenced skiers' belief in themselves and their teammates.

4. Nearly all of the athletes viewed the team's ability to work together contributed to a task-involving, caring climate. The experience of teambuilding activities (i.e., preseason camping, icebreaker activities) and completing logistical tasks (i.e.,

cleaning the team room, setting up and taking down the race course) benefited the athletes by creating opportunities to develop personal and social competencies through interacting with their peers and coaches.

5. Athletes were more likely to experience positive developmental outcomes when the coaching style was aligned with features that represented a task-involving, caring climate. Thus, coaching style emerged as a major finding for several reasons. First, coaches' use of individualizing instructions and providing positive, informative feedback was related to the athletes experiencing a supportive environment because athletes felt coaches were authentically interested in their individual development. In addition, athletes appreciated coaches' individualized attention and instructive feedback because it accentuated mastering skiing skills and emphasized that each skier was an important member of the team. Second, the rewards that coaches gave athletes consisted of praising effort and the willingness to help a teammate. But rewards on the ski team were not emphasized and punishment for mistakes was obsolete. Therefore the use of rewards was minimal, but helped athletes to focus on improving and feeling good when they tried their best at skiing or assisted a teammate. Third, coaches provided athletes an opportunity to evaluate and give technical instructions to their fellow teammates. The athletes expressed enjoyment in interacting with peers and coaches as well as learning and correcting technical skiing skills. Last, coaches' attitudes and behaviors toward giving maximal effort was a common statement among athletes and, therefore, the athletes believed that they were the cause of their success.

6. Interestingly, of the twelve athletes that met the inclusion criteria for the qualitative portion of this study, half of them were from one team. After investigating all the head coaches' demographic information, the head coach from this team did not differ from the other coaches in age, sex, ethnicity/race, having USSA coaching education in adolescent development, or number of total years ski race coaching and coaching J3s. In contrast, this head coach reported the most training in adolescent development (i.e., bachelors in anthropology with segments of adolescent development and child psychology). This finding might provide some insight to the importance of how a strong education in adolescent development contributes to adults creating appropriate PYD programs and positively influencing healthy development in young people.

Conclusion

The following conclusions were drawn from the findings:

1. The social psychological climate that envelopes PYD in sport are complex. Two critical features of the climate for instilling key developmental outcomes in early adolescent athletes are the creation of a task-involving climate and a caring climate. Interestingly, both the coach and the athletes played integral roles in shaping an optimal setting for youth development.

2. A PYD approach in sport should emphasize a task-involving climate, in which successful participation is defined, recognized, and evaluated in self-referenced terms (i.e., learning, improving) because it is associated with greater intrinsic motivation. The coaches as well as the skiers created a task-involving climate.

The athletes in this study described a task-involving climate as coaches

emphasizing repetition as a necessary component to task mastery articulating that

commitment and effort led to improvement, offering encouraging, instructional

feedback to build confidence, treating everyone equally to create friendships,

integrating opportunities to make decisions about practices, and providing

intentional guidance to engage youth in evaluating and teaching skills to peers.

Additionally, athletes described how they challenged each other to excel in skiing,

provided motivating, technical feedback to help each other master skiing, and

stressed to their teammates that trying hard and perseverance was critical in

learning skills. These are the contextual features that create cooperative learning,

improvement of skills, and athletes feeling that they contribute in an important

way to foster healthy development among youth sport participants.

3. Youth experiencing a caring climate where they felt valued and respected was

   associated with feelings of competence and social acceptance. Thus, a caring

   climate is important because it offers youth an appropriate setting to maximize

   psychosocial assets. Athletes in this study made several comments about caring

   for one another. For example, athletes mentioned encouraging behaviors such as

   cheering, hugging, and high-fiving. They also provided each other with support

   on challenging tasks and expressed a desire to support others, and they wanted

   their teammates to perform well. These encouraging behaviors created a safe,

   supportive environment important in building confidence and bonding with

   teammates. Additionally, a key source of caring was creating close, interpersonal

   relationships. Greeting each other and inquiring about someone's day were

elements that athletes stated as influential in shaping close bonds. These respectful behaviors coupled with the encouraging behaviors were foundational to creating a sense of concern for one another. This transitioned into recognizing and helping each other with physical, social, and emotional guidance in and out of ski racing. Thus, athletes learned to be sensitive and responsive to their teammates needs. These features offer a useful way to organize sport settings to create an inviting atmosphere where athletes feel valued and respected.

4. When sport is coupled with age-appropriate contextual features it becomes a fertile ground to foster positive outcomes within adolescent athletes. For example, athletes appreciated when coaches asked for their input about practices, were given choices, were provided guidance while coaching their peers, and were allowed leisure time. These developmentally appropriate strategies provided early adolescent skiers the opportunities to fulfill their needs of autonomy, responsibility, affiliation, leadership, decision-making, and balancing physical skill development with having fun. In addition, athletes expressed the importance of an organized and structured environment that helped to create a more positive atmosphere. However, all of the athletes also stated coaches did not set many rules. Thus, structure in a sport setting must be age-appropriate and conducive to the desires of the youth sport participants. Ultimately when conditions of the context satisfies the needs of youth, young people are provided the space and the boundaries to learn physical, intellectual, psychological, emotional, and social skills.

5. Even though athletes play a role, coaches ultimately create the sport climate and influence athlete development. Athletes remarked that their coaches' created a climate built around positive interactions. These interactions were then modeled by the athletes, which resulted in positive team norms that influenced favorable developmental outcomes.

6. The mixed methods design deepens our understanding of the impact of the sport climate and psychosocial assets in competitive, early adolescent alpine ski race athletes. This approach allows researchers to address issues related to the breadth (i.e., what elements of the climate are related to PYD) and depth (i.e., how does the climate influence PYD). By doing so the findings from a mixed method approach can have great theoretical and practical significance.

7. Overall, PYD through sport is unique in its capacity to target physical, psychological, social, and emotional outcomes. When youth are involved in an intrinsically motivated activity where they are exposed to and learn from caring adults as well as share a passion with a positive peer group, then youth learn personal and social skills that impact healthy development.

<div align="center">Practical Implications</div>

From an applied perspective, the findings from this study have practical implications for anyone who works with early adolescent athletes. The results support the idea that PYD occurs in sports. Sport is a meaningful context among early adolescents and, consequently, can provide young people with a unique opportunity to acquire healthy assets. However, developmental outcomes in youth sport participants do not

occur automatically, but only in developmentally appropriate contexts. This study illustrated the key elements in the climate that promote PYD. Thus, the results of this study could be used to inform coaches, sport program administrators, or other programs with the aim to optimize the sport experiences of early adolescent girls and boys.

Coaches need to understand the important role they play in creating an optimal climate for youth sport participants. Athletes in this study thrived when their coach supported their beliefs in their abilities, competence, and work ethic in skiing. Coaches overtly expressed excitement in their athletes' successes, encouraged perseverance in the face of disappointment or new challenges, and taught the skills of skiing using proper progressions. In turn, athletes experienced a sense of competence and satisfaction in their skiing skills. Additionally, coaches used age-appropriate strategies, such as listening to youth's voices in structuring practices or teaching their skiers how to recognize and teach their teammates how to improve their skiing. Thus coaches provided tangible experiences that facilitated autonomy, decision-making, and leadership to optimally challenge and build confidence in their athletes. These opportunities allowed youth to recognize and embrace their skill development, which eventually led to athletes helping each other. For example, athletes supported and encouraged each other in skiing, provided positive, informative technical feedback in skiing skills, and acknowledged teammates accomplishments. Thus, coaches who provide a task-involving climate and engage in autonomy-supportive behaviors help to optimize conditions in which youth can thrive.

Athletes in this study also described other coaching behaviors that positively impacted them. Coaches created a respectful, caring community by treating everyone equally, spending time to learn more about each athlete, structuring practices to seek

input from athletes, using and requiring courteous behaviors, and integrating elements of fun (i.e., freeskiing, jokes, giving nicknames, creative drills). These elements helped athletes feel valued and connected to the team, which facilitated warm, sustainable relationships with coaches and peers both on and off the ski hill. Thus, emphasizing coaches who create positive social relationships and a caring, supportive climate provides an avenue for young people to build social competencies.

It would be advantageous for coaches to reflect on the type of climate they are creating. Incorporating a socially supportive environment where personal improvement, cooperation, and respecting the rights and feelings of others are emphasized is likely to positively influence young athletes. However, in most organized sports athlete development is based on a competition where outperforming others and winning is valued, top performers are rewarded, and concern for others is seen as a weakness. Given the philosophy of competitive sport participation, integrating a task-involving, caring climate into an overall philosophy in youth sport settings requires a major, but necessary, paradigm shift.

Coaches can take small steps in creating a more task-involving, caring climate. For example, coaches commonly use task-involving elements of emphasizing effort and persistence as tactics to improve skills. A step toward creating a more task-involving climate is coaches assessing the extent to which they are evaluating their athletes based on self-referenced perceptions of competence (i.e., satisfaction from trying hard) in comparison to endorsing other-referenced perceptions (i.e., winning is what matters). After this reflection, coaches can start intentionally providing self-referenced feedback as well as encouraging their athletes to provide encouraging, supportive comments to

teammates. The latter suggestion is a strategy in creating a caring climate. In addition, another strategy that coaches commonly use that can facilitate a caring climate is team building activities. Coaches who intentionally structure team building activities that focus on building a safe and welcoming setting can help build a foundation for the athletes to learn more about the personal backgrounds and sport goals of their teammates. This may increase the bond between youth sport participants, thus enhancing their perception of being cared for and supported that ultimately contributes to optimizing personal and social assets for healthy development. This strategy might be particularly useful in early adolescent athletes as they are striving to connect to a peer group.

It is also important to remember the little things. For example, coaches can give each athlete a warm welcome on a regular basis, open communication lines by taking lunch breaks with the athletes, or provide a hug when athletes experience difficulties and challenges. These approaches create a welcoming environment in which coaches and athletes can share their experiences, which creates a perception of being supported and understood. In addition, these may also help to form trusting relationships where youth feel emotionally, psychologically, and physically safe, which is the foundation for fostering healthy assets in youth.

The results of this study indicate that sport settings are a viable context for promoting and achieving PYD. Structuring the environment to optimize PYD is key. Sport programs that seek to cultivate a task-involving, caring climate can promote healthy outcomes in their participants. Thus, PYD is maximized under the intentionally structured conditions of providing opportunities and support that focus on cooperative

learning, being treated fairly, feeling safe and comfortable, being a contributing member of the team, and importance of trying ones best.

Directions for Future Research

Because a scant amount of research has been conducted on early adolescent athletes and developmental outcomes, several recommendations are made for future research.

1. Given the current findings, future research needs to retest and extend the NRCIM's model. For example, the contextual features examined in this study can be used as a starting point to begin testing other personal and social developmental outcomes in early adolescent athletes. In addition, perhaps research can reexamine the contextual features and psychosocial outcomes in this study to other sports, such as team sports, and at various levels of competition.

2. An interesting and important avenue for future research would be to examine the extent to which the social psychological climate is pertinent to predicting other personal and social assets in achievement-based programs (i.e., band, debate) and other physical activity domains.

3. Future studies could focus on a longitudinal design. Specifically, longitudinal designs should be employed to demonstrate the changes in developmental outcomes in relation to perceptions of the climate across the duration of the sport season.

4. It appears that the caring climate contributed to many developmental outcomes. Future research is needed to gain a better understanding of the specific behaviors

and attitudes of a caring, supportive climate that influence healthy development among young people.

5. It might also be useful to conduct qualitative investigations with coaches in order to discover how they developed and integrated their coaching philosophies and beliefs regarding the type of athletic environment that facilitates PYD.

6. Fun is an essential ingredient for activity engagement in young people. Therefore, different contextual features need to be investigated in order to understand how fun can be maximized in youth participants.

Summary

Although researchers in PYD have been interested in the contextual features that facilitate personal and social assets, no research has focused on the relationship of the social psychological climate to PYD in sport. This study focused on ski racers, 13- to 14-year olds, in the Western United States using an explanatory mixed methods design to determine the relationship between the social psychological climate (i.e., task-involving climate, ego-involving climate, and caring climate) to developmentally appropriate psychosocial assets (i.e., skiing self-efficacy, general self-efficacy, intrinsic motivation, fun, and connectedness). Clear support was found for a task-involving, caring climate contributing positively to youth sport experiences and developmental outcomes. Perceiving an ego-involving climate was a significant negative predictor of having fun while participating on the ski team. In-depth interviews with youth from the sample who viewed their climate to be a high task-involving, a high caring, and a low ego-involving suggested that a fun environment, providing nurturance and support, teamwork, and

appropriate coaching styles were critical strategies to optimizing healthy developmental assets. This study provided empirical evidence for a subset of contextual features in predicting key psychosocial markers for positive development as well as giving insight into how youth view a task-involving and caring climate. This is particularly relevant because this knowledge can help researchers and policy makers better understand the characteristics that are most conducive to optimizing PYD. Additionally, this study supplies coaches with specific strategies to nurture positive development among early adolescent athletes.

APPENDIX A

COACH DEMOGRAPHIC INFORMATION

Ski Team: _____

Sex: Male / Female

Age: _____

Race/Ethnicity: _____

Former ski race athlete: Yes / No

Number of years ski race coaching   _____ years

Number of years ski race coaching with this team   _____ years

Do you have any formal education or training in adolescent development?   Yes / No
          If Yes, please explain

| |
| |

APPENDIX B

ATHLETES CONTACT INFORMATION

First Name: _____

Last Name: _____

Phone Number: _____

Email: _____

Current School: _____

Birthday: Month _____ Year _____

VOLUNTEER TO PARTICIPATE IN AN INTERVIEW
If you are interested in also participating in an interview to discuss your experiences in
ski racing, please complete the following sections. Christina, the primary researcher in
this study, will contact you to explain the details of the interview.

_____
Printed Name

_____   _____
Sign your name on this line   Date

APPENDIX C

ATHLETES DEMOGRAPHIC INFORMATION

Last 4 Digits of your telephone number: _____

Current School: _____

Birthday: Month _____ Year _____

Age: _____

Sex: Girl / Boy

Race/Ethnicity: _____

How many years have you been skiing? _____ year(s)

Number of season(s) participating in ski racing (including 2010-2011)? ___ season(s)

Number of season(s) skiing on this current ski team (including 2010-2011)? __season(s)

How well did you know your teammates before the start of the 2010-2011 ski season (Circle One)?

1	2	3	4	5
Not at all	Hardly	Moderately	Mostly	A Lot

APPENDIX D

PERCIEVED MOTIVATIONAL CLIMATE IN SPORT

QUESTIONNAIRE-2

(PMCSQ-2; Newton, Duda, & Yin, 2000; used with permission)

Directions: Please read each of the statements below and respond to each in terms of how you view your <u>ski team</u>. Please respond as honestly as possible and recall that there are no right or wrong answers.

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

1. On this team, coaches want us to try new skills.

                    1   2   3   4   5

2. On the team, coaches get mad when a skier makes a mistake.

                    1   2   3   4   5

3. On this team, coaches give most of their attention to the stars.

                    1   2   3   4   5

4. On this team, each skier contributes in some important way.

                    1   2   3   4   5

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

5. On this team, coaches believe that all of us are crucial to the success of the team.

                                              1   2   3   4   5

6. On this team, coaches praise skiers only when they out ski team-mates.

    1   2   3   4   5

7. On this team, coaches think only the best skiers contribute to the success of the team.

    1   2   3   4   5

8. On this team, skiers feel good when they try their best.

    1   2   3   4   5

9. On this team, skiers are taken off the ski hill for mistakes.

    1   2   3   4   5

10. On this team, skiers at all skill levels have an important role on the team.

    1   2   3   4   5

11. On this team, skiers help each other learn.

    1   2   3   4   5

12. On this team, skiers are encouraged to outplay other skiers.

    1   2   3   4   5

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

13. On this team, coaches have their own favorites.

                    1   2   3   4   5

14. On this team, coaches make sure skiers improve skills they're not good at.

                    1   2   3   4   5

15. On this team, coaches yell at skiers for messing up.

                    1   2   3   4   5

16. On this team, skiers feel successful when they improve.

                    1   2   3   4   5

17. On this team, only the skiers with the best race times get praise.

                    1   2   3   4   5

18. On this team, skiers are punished when they make a mistake.

                    1   2   3   4   5

19. On this team, each skier has an important role.

                    1   2   3   4   5

20. On this team, trying hard is rewarded.

                    1   2   3   4   5

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

21. On this team, coaches encourage skiers to help each other.

        1   2   3   4   5

22. On this team, coaches make it clear who they think are the best skiers.

        1   2   3   4   5

23. On this team, skiers are 'psyched' when they do better than their team-mates in a race.

        1   2   3   4   5

24. On this team, if you want to ski in a race you must be one of the best skiers.

        1   2   3   4   5

25. On this team, coaches emphasize always trying your best.

        1   2   3   4   5

26. On this team, only the top skiers 'get noticed' by coaches.

        1   2   3   4   5

27. On this team, skiers are afraid to make mistakes.

        1   2   3   4   5

28. On this team, skiers are encouraged to work on their weaknesses.

        1   2   3   4   5

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

29. On this team, coaches favor some skiers more than others.

       1   2   3   4   5

30. On this team, the focus is to improve each race/practice.

       1   2   3   4   5

31. On this team, the skiers really 'work together' as a team.

       1   2   3   4   5

32. On this team, each skier feels as if they are an important team member.

       1   2   3   4   5

33. On this team, skiers help each other to get better and excel.

       1   2   3   4   5

Subscales:

Task-Involving:
  Cooperative Learning: 11, 21, 31, 33
  Important Role: 4, 5, 10, 19, 32
  Effort/Improvement: 1, 8, 14, 16, 20, 25, 28, 30

Ego-Involving:
  Punishment for Mistakes: 2, 7, 9, 15, 18, 27
  Unequal Recognition: 3, 13, 17, 22, 24, 26, 29
  Intra-Team Rivalry: 6, 12, 23

APPENDIX E

CARING CLIMATE SCALE

(CCS; Newton et al., 2007; used with permission)

Directions: Think about what <u>your team and coaches</u> are usually like. Reach each question and circle the number that is closest to how you feel.

	On this ski team…	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1.	…team members are treated with respect.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
2.	…the coaches respect team members.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
3.	…the coaches are kind to team members.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
4.	…the coaches care about team members.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
5.	…team members feel that they are treated fairly.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
6.	…the coaches try to help team members.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
7.	…the coaches want to get to know all the team members.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
8.	…everyone likes team members for who they are.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
9.	…the coaches listen to team members.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
10.	…the coaches accept team members for who they are.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
11.	…team members feel safe.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
12.	…team members feel comfortable.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
13.	…team members feel welcomed every day.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree

APPENDIX F

INTRINSIC MOTIVATION INVENTORY

(IMI; McAuley, Duncan, & Tammen, 1987; used with permission)

Directions: The following sentences describe thoughts and feelings you may have had on your <u>ski team</u>. For each of the following statement please indicate how true it is for you, using the following scale as a guide:

1	2	3	4	5	6	7
not at all true			somewhat true			very true

1. I enjoy skiing very much.   ___

2. Skiing is fun to do.   ___

3. Skiing is a boring activity.   ___

4. Skiing does not hold my attention at all.   ___

5. I would describe skiing as very interesting.   ___

6. I think skiing is quite enjoyable.   ___

7. While skiing, I think about how much I enjoyed it.   ___

*Reverse Items: 3,4

APPENDIX G

SELF-EFFICACY-SKIING PRACTICE (#1) & SELF-

EFFICACY-SKIING COMPETITION (#2)

(Heilman, 2010)

Directions: This questionnaire concerns your confidence in <u>ski practices and ski races</u>. For each item, please indicate how confident you are using the 0 – 100% scale given below.

0%	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100%**

No confidence   **Complete confidence**

1. I am confident in my ability during ski practices   _____

2. I am confident in my ability during ski competitions   _____

APPENDIX H

GENERALIZED SELF-EFFICACY SCALE

(GSE; Schwarzer & Jerusalem, 1995; used with permission)

Directions: Below are **general beliefs** in your ability to respond to new or difficult situations and to deal with any obstacles or setback in your life. Please circle only one response.

		Not at all True 1	Hardly True 2	Moderately True 3	Exactly True 4
1.	I can always manage to solve difficult problems if I try hard enough..	1	2	3	4
2.	If someone opposes me, I can find the means and ways to get what I want.	1	2	3	4
3.	I am certain that I can accomplish my goals.	1	2	3	4
4.	I am confident that I could deal efficiently with unexpected events.	1	2	3	4
5.	Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4
6.	I can solve most problems if I invest the necessary effort	1	2	3	4
7.	I can remain calm when facing difficulties because I can rely on my coping abilities..	1	2	3	4
8.	When I am confronted with a problem, I can usually find several solutions.	1	2	3	4
9.	If I am in trouble, I can think of a good solution.	1	2	3	4
10.	I can handle whatever comes my way.	1	2	3	4

FUNOMETER

(Ellis, 2010; used with permission)

Directions: This diagram measures the amount of fun that you feel you had in participating on the ski team. Please darken the thermometer to the level (1-10) that best describes your level of fun as it relates to the ski team this season.

APPENDIX J

ACCEPTANCE SUBSCALE OF THE NEED FOR RELATEDNESS SCALE

(Standage, Duda, & Ntoumanis, 2005; used with permission)

Directions: Here is a list of statements about what you may feel towards your <u>teammates</u>. Please indicate to what extent you agree with each of the following items.

With the other athletes on this ski team, I feel…

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
Supported	1	2	3	4	5	6	7
Understood	1	2	3	4	5	6	7
Listened to	1	2	3	4	5	6	7
Valued	1	2	3	4	5	6	7
Safe	1	2	3	4	5	6	7

APPENDIX K

INTERVIEW GUIDE

Project: Youth Development Through Sport
        Perceive the climate as high task-involving, high caring, and low ego-involving

Time of Interview: _____

Date: _____

Interview Site: _____

Interviewee Name: _____

Interviewee Contact Info: _____

Interview Duration: _____

Interview Summary:

1. What were the main issues or themes that stood out during this interview?

2. What did you do well as an interviewer?

3. What could you improve upon for next time?

<u>Warm-up Questions:</u>
- How's the ski season going?

- How long have you been skiing? Ski racing?

<u>Study Summary</u>
In sport, we have different situations that all athletes experience. The purpose of this interview is to explore your experiences over this past ski racing season. Based on your responses on the questionnaire, it appears that you like skiing and enjoy the skiing environment. Therefore, I want you to think about your ski racing experiences over this past season. Then, I am going to ask you about how your coaches and your teammates contribute to these experiences. Do you have any questions?

<u>Main Questions</u>
General Questions:
- Can you describe to me what it's like being on your ski team (practices or races)?
  - Probe:
  - What's the environment like?

- How are people (i.e., coaches and athletes) treated on the ski team?

Caring Questions:
- How is the ski environment supportive?
  - Probe:
  - What do coaches do or say to make everyone feel welcomed, valued and respected?

  - What do your teammates say or do to make you feel supported or cared about?

- Are there times when people on the team feel disrespected or uncomfortable? Can you give me an example?

Task-Involving Questions:

Cooperation:
- How do skiers/teammates work together as a team?
  - Probe:
  - How do coaches encourage skiers to help each other?

  - How do your teammates help people each other learn (get better and excel at skiing)?

Important Role:
- How are skiers shown that they are important on this team?
    - Probe:
    - Can you describe to me why skiers feel they contribute in some important way?

- Do skiers at all skill levels have an important role on the team? Why?
    - Probe:
    - Describe how coaches (do or say) make each skier believe they are a crucial to the success of the team?

Effort:
- How do you know athletes are trying hard on your team?
    - Probe:
    - How do coaches encourage you to give maximum effort for both easy and difficult tasks
    - Is trying hard rewarded? How are athletes rewarded?

- How do coaches make sure all skiers improve (practice/race)?
    - Probe:
    - What do coaches do or say to encourage skiers to work on their weaknesses?

    - When you make mistakes, what do people on your team (coaches and teammates) do or say to you?

Closing Questions:
- If you could write a wish-list to your team and say "To make me be a better person [have fun, make friends, feel important], this is how my team should be"; what sort of things would go on that list?

Wrap Up: Summarize the interview and confirm this is an accurate summary
- Is there anything I didn't ask that you'd like to share?

- Do you have question for me?

Thank you

General Probes:
What/why/how did that happen?
Could you tell me more about that?
What do you mean by that?
Can you give me an example?
What are the reasons you feel like that?
Does this differ between practices and races?

APPENDIX L

AUDIT TRAIL

Early March
Selected participants for the interview by using the criterion the responses of the ego-involving climate being less than 1.75, the task-involving climate being greater than 4.5, and the caring climate being greater than 4.75. Meaning a perceived climate of low ego-involving climate and high task-involving, caring climate. This equated to 12 athletes from 6 teams, but only 9 of these athletes agreed to an interview.

March 12, 2011
Did my first interview. It was with a boy and it went well. I did recognize that my probe questions needed to be more open ended. I will work on this tomorrow.

March 13, 2011
Did my second interview with a girl. This interview went twice as long as the first (22 minutes versus 44 minutes). The interviews were similar, but the girl talked more about girls spaces (or how she gets along with her girl teammates).

March 14, 2011
Emailed another out of state participants. Finished transcribing the first two interviews.
To Do List:
1. Transcribe
2. Highlight Transcribed material
3. Condense raw data into a brief, summary format
    a. Send to participant for 1st participant check
4. Note words or phrases in the margins next to the data (actual words of participants or words in the research)
5. Transcribe next athletes---follow the same process
6. After 3rd athlete, begin creating major themes---then define these major themes
7. Write themes/codes on index cards
8. Place similar codes in an envelope---see other themes/codes emerge (3-8 themes total)
9. Do the rest of the interviews
    a. Themes must be in 70% of the interviewees
    b. Must confirm in participant check---email again

     c. In the literature

March 15, 2011
Completed my third interview. Again, this was a girl and lasted 43 minutes. There are interesting themes already emerging. For example, in the first question where I ask them to describe the environment, every participants response was 'its fun'. In addition, joking around, positive reinforcement, and everyone is treated equally have all been mentioned.

March 18, 2011
Finished transcription for the first three interviews. Sent interview 1 the interview summary and awaiting the participant check.

March 19, 2011
Sent 2nd interview and awaiting participant check. Also talked to two other skiers. A girl and a boy from separate teams.

March 20, 2011
Send 3rd interview and awaiting participant check. The average time to summarize the participant checks has been 5 hours. Although this time length was unexpected, I feel that initially spending this much time with each interview I am aware of emerging themes among the three interviews.

March 21, 2011
Spent the day reading and organizing the 3 interviews (1 boy and 2 girls, Caucasian, different teams). After many techniques, I decided to organize the material into an excel spreadsheet. The columns contain the athletes' comments and the rows are the current themes organized by caring (respect and supportive), task (work together, trying hard, improving, mistakes/weaknesses), wish list and additional information. Some of the themes are encouragement, support, repetition, athletes treated equally, joking around, connections (best friends, nicknames), team is welcoming (how's your day going, everyone says hi), technical instructions by coaches and teammates, and nothing negative (disrespect).

March 22, 2011
Sarah replied back and OK'd the participant check.

March 24, 2011
I met with Dr Newton today. We discussed how I organized the 3 interviews and how different themes are overlapping. Instead of separating the themes into caring and task, I will take the general inductive approach and create themes. There are really interesting themes emerging, such as logistical issues, that aren't discussed in the literature, but are important to a well-functioning team.

March 26, 2011
I finished two more interviews over the weekend: one in Ogden and the other in Jackson Hole.

March 28, 2011
Tan Leng and I met today. I started brainstorming some themes, so I discussed with her my process so far. She agreed in doing the general inductive approach. I also asked about taking 70% of what the kids say and using it as a theme. Her perspective is that even one person can say something valuable. By requiring 70% of the kids saying something, then that might loose a valuable piece of the puzzle. I agree. We are planning to meet in two weeks once I complete all the interviews.

March 29, 2011
After more than a week of sending the participant check I have not heard back from two interviewees. Therefore, I sent a reminder email. Additionally, I finished my 4th interview and sent the participant check to this person.

March 31, 2011
I received all four of my participant checks. With these four interviews I am finding many items of redundancy. For example, I am noticing themes such as encouragement, cheering, friends, family, and enjoying the sport of skiing. I will summarize the fifth interview in the next couple of days and send it out. I also have another interview with a Sun Valley girl this evening. I was hoping to get another boy. The two that are eligible have verbally agreed, but I have not been able to re-contact them.

April 6, 2011
I had two more interviews. The interviews were with 2 girls from the same team. This makes a total of seven interviews, 5 girls and 2 boys. I would have like to get more boys, but I was not able to reconnect with the only two boys that were eligible to do the interview. I have emailed the Jackson Hole summary and one of the Sun Valley summary's for a participant check. I have one more interview to transcribe and summarize. Then I will begin to start analyzing the data. Although from these two additional interviews it did not add any new information. However, the last interview was the longest and this girl was quite articultate with her words. Wow, I just realized that I conducted 7 interviews in a matter of 3 weeks. In under 4 weeks I have transcribed and summarized 6 of these interviews. This explains my exhaustion.

April 16, 2011
Yesterday I finished my last summary and I am waiting to hear back from the participant check. All other participant checks have been confirmed. Today I began reading the participant checks and organizing them into commonalities in a word document.

April 21, 2011
All the participant checks have been confirmed. I have about 70-pages of single spaced text that I have been reading and labeling with the participants words.
To do:
1. Repetitively read, line by line, and make marks in the text
2. Assign codes: central to the purpose of the study by using the participants actual words or themes from the literature

3. Document my questions & thoughts for peer qualitative team
4. Come up with 3-8 higher order themes.

April 24, 2011
I have created about 7 main themes with many subthemes. Some of the themes are difficult because they might fit into another category. I'll continue to read and organize o find similarities and differences. I'm also curious about the mental skills training because a few of the participants mentioned it, but I don't know if I influenced them by stating that I do mental skills training while administering the survey.

April 25, 2011
Tan Leng and I met today. We began discussing the themes and theme names. This is a very rough draft so she critiqued what and why of my decisions on themes.

May 2, 2011
The major themes are starting to emerge. I'm seeing 4 main themes to support what contextual features influence PYD assets. I'll continue to revise these and meet with Dr Newton and Tan Leng for clarification.

May 5, 2011
Today I met with Dr Newton and Tan Leng. They agreed with the themes I've created and provided insight and direction on how to label the themes. I will begin writing the results tomorrow and will meet with Tan Leng next week.

May 6, 2011
I began writing the results today. It's an overwhelming process to choose the athletes statement in an organized fashion that is representative of what they say.

May 10, 2011
I finished writing the results of first main theme, fun.
May 13, 2011
Wow, each category is taking me at least a full day to create and write the results. This is longer than I expected. As I write I wonder if some of these categories are overlapping. Additionally, I am providing a summary after the quote and then intergrating a discussion after each category. This may be the cause of why it's taking me so long to write. Although exhausting, I'm learning more about my data and also how complicated and comprehensive it is to find best practices for promoting PYD.

May 20, 2011
After 3 weeks of writing I finally finished my first draft of my qualitative results and discussion. I will send it off to Dr Newton for her reading pleasure.

May 30, 2011
Tan Leng emailed me today and briefly reviewed my final draft of the qualitative results and discussion. She stated that overall things looked good. She also commented I had many long quotes, but she didn't mind because in her opinion they tell deepen the story.

APPENDIX M

SKEWNESS AND KURTOSIS FOR THE TRANSFORMED VARIABLES

Table Appendix M
Skewness and Kurtosis for the Transformed Variables

Variable	Skewness Statistic	*z scale* Skewness / *SE*	Kurtosis Statistic	*z scale* Kurtosis / *SE*
Intrinsic Motivation	1.16	4.52	0.73	1.44
Fun	1.50	5.82	1.00	1.97
Connectedness	0.03	0.12	-0.33	-0.65
Self-Efficacy	-0.90	-3.51	0.39	0.76

Note. *SE* is standard error. Skewness *SE* =.257; Kurtosis *SE* = .508

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