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The purpose of this study was to examine the relationship between a coach's goal orientation and the motivational climate perceived by the players. The relationship between players' perceptions of the motivational climate and players' intrinsic motivation was also examined. This study was intended to provide evidence of how the coach's goal orientation affects the motivational climate perceived by players, and how perceived motivational climate influences intrinsic motivation. High school coaches and their players were contacted and participated in this study. Coaches (n = 18) and players (n = 187) filled out the Task and Ego in Sport Questionnaire and the Perceived Motivational Climate in Sport Questionnaire-2. In addition, players filled out the Intrinsic Motivation Inventory. It was hypothesized that coach goal orientation and perceived motivational climate would be related, but the correlations between coach task goal orientation and player mastery climate (r = .283, p > .05), and between coach ego goal orientation and player performance motivational climate (r = -.265, p > .05) were not significant. Player mastery motivational climate was correlated with interest (r = .419, p < .01), competence, (r = .165, p < .05), and effort (r = .439, p < .01) as hypothesized. Player performance motivational climate was correlated with interest (r = -.297, p < .01), effort (r = .167, p < .05), and pressure (r = .187, p < .05) as hypothesized. The results demonstrated that the goal orientation of the coach does not have as strong an effect on the player's perceptions of the motivational climate as was previously thought. However, perceptions of the motivational climate do have an influence on intrinsic motivation.

THE RELATIONSHIP BETWEEN A COACH'S GOAL ORIENTATION AND PERCEIVED MOTIVATIONAL CLIMATE

by

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Approved by

_____
Committee Chair

To…

my Parents

and

Rand, Rob, Tony, Marc, and Wendy

APPROVAL PAGE

This thesis has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

One of the key elements of any team sport setting is the relationship between the coach and his or her players. The coach and players are in constant interaction with one another, with the coach providing much of the direction in the relationship. It is inarguable that the coach can have a strong influence on his or her players. Coaches are leaders of their teams. A leader creates the environment for individuals, in this case players, to develop and succeed while striving to achieve team goals (Vealey, 2005). Specifically, the coach's goals and motivational orientation set the climate for interactions and likely influence player perceptions, motivations and behaviors. Given the influence of the coach on the players, it is extremely important to gain as full an understanding as possible of the coach's influence.

Within sport and exercise psychology, research on motivation and perceptions has focused on the goal orientations of the individuals involved and the motivational climate that is created within the setting. There are two types of goal orientations (task and ego). A task orientation is characterized by a person's intent to improve his or her skills and the belief that success is dependent upon effort and working together (Nicholls, 1992). Ego orientation is characterized by the person's need to demonstrate his or her superiority compared to other people in achievement tasks, which can be facilitated by succeeding while putting forth less effort than others (Nicholls, 1992). A person can certainly hold

both goal perspectives at the same time; however, one orientation is usually more prevalent than the other.

Closely related to goal orientation is the motivational climate. Motivational climates, like goal orientations, tend to be dichotomous in nature. However, climate is a characteristic of the situation or environment, rather than a personality disposition. Similar to the task goal orientation, a mastery-based motivational climate is characterized by an emphasis on developing new skills and improving existing skills, as well as self-evaluation relative to a set of internalized standards (Ames, 1992). A performance-based motivational climate is similar to an ego goal orientation and is characterized by a social comparison of performance (comparing one's own performance to the performance of others) and oppositional relationships with other people within the same setting (Ames, 1984). In other words, a performance-based motivational climate encourages players to outperform one another in competition, rather than work together to improve their skills.

Task and ego goal orientations and mastery and performance motivational climates have very different effects on the people involved. Research suggests that most of the effects of task goal orientations and mastery-based motivational climates are positive. It can be expected that a person who has a high task orientation and/or perceives a mastery-based motivational climate will exhibit increased motivation (Xiang, McBride, & Solmon, 2003), a greater likelihood to persist in the face of adversity (Xiang, McBride, Guan, & Solmon, 2003; Nicholls, 1984), greater intrinsic motivation and enjoyment (Duda, Chi, Newton, Walling, & Catley, 1995; Newton & Duda, 1999; Vazou, Ntoumanis, & Duda, 2006), increased effort (Sarrazin, Roberts, Cury, Biddle, & Famose,

2002), and more self-confidence and less anxiety (Newton & Duda, 1995). People who have a high ego orientation and/or perceive a performance-based motivational climate are likely to be extrinsically motivated (Duda, 1989), experience less enjoyment (Duda, Chi, Newton, Walling, & Catley, 1995), employ few coping strategies, when compared to task-oriented athletes (Pensgaard & Roberts, 2003), display strong negative affect after failure (Ames, Ames, & Felker, 1977), feel more pressure and tension (Newton & Duda, 1999), and display an increased avoidance of work (Standage, Duda, & Ntoumanis, 2003). It becomes clear rather quickly how differently a person can think and behave in sport situations depending upon the goal structure of the setting and how the motivational climate of the setting is perceived. Task-oriented mastery climates appear to facilitate the development of adaptive thoughts and behaviors in the people who are in those environments. It appears that ego-oriented performance climates, on the other hand, promote more negative, maladaptive thoughts and behaviors in people.

One of the major driving forces in creating the environment is the coach. A coach is responsible for motivating his or her players and thus creating the motivational climate the players perceive. Coaches can nurture motivation in athletes when they create a competitive environment where athletes are properly challenged to achieve the goals they have set (Vealey, 2005). Thus, goal orientation is likely to have a strong influence on the beliefs and behaviors of that particular coach. It has been shown that players (or students) are quite able to accurately perceive the beliefs and meanings behind the behaviors of a coach (or teacher) (Solmon & Carter, 1995). Therefore, the goal orientation a coach possesses is very likely to be accurately perceived by the players he

or she coaches. It would follow that the players' perceptions of the goal orientation are likely to be a strong influence on their perceptions of the motivational climate.

Statement of the Problem

Given what we know about the effects of goal orientations and motivational climates on players in sport settings, and taking into account the influence a coach can have on the motivational climate and player behaviors, it is imperative that the coach-player relationship in team sport settings be examined. Coaches are one of the primary agents for creating the motivational climate that players perceive, and that motivational climate is inevitably linked to the goal orientation a coach possesses. Although substantial work has been done on the relationship between goal orientations and motivational climates, few, if any, inquiries have included coach orientations or coach-player relationships. Therefore, the purpose of this study is to examine how the goal orientation of a coach affects the motivational climate players perceive. The goal of this study is to attempt to gain a better understanding of how coaches' goal orientations influence their players' perceptions of the motivational climate and intrinsic motivation. The relationship of task and ego goal orientations to mastery and performance-based motivational climates will be examined. Specifically, the goal orientation of the coach will be compared to the motivational climate the players perceive. Secondarily, the influence of this perceived climate on the players' level of intrinsic motivation will also be examined. This study is intended to provide some preliminary evidence of how the motivational climate players perceive is affected by the goal orientation of the coach, and how perceived climate influences intrinsic motivation.

Hypotheses

Two primary relationships are examined in this study. First, the relationship of the goal orientation of the coach with the motivational climate that the coach's players perceive will be examined. Goal orientation refers to the degree to which the coach is task-oriented and ego-oriented. A coach can be high or low in each orientation or both at the same time. It is expected that coaches create the motivational climate in accordance with their goal orientations. Secondarily, the relationship between player intrinsic motivation and player perceived motivational climate will be examined. The following two hypotheses are related to the first relationship.

1) Coaches' task orientation will be positively related to player perceived mastery-based motivational climate.

2) Coaches' ego orientation will be positively related to player perceived performance-based motivational climate.

Specific hypotheses for the second relationship are as follows.

3) Players' perceived mastery-based motivational climate will be positively related to intrinsic motivation.

4) Players' perceived performance-based mastery climate will be negatively related to intrinsic motivation.

In addition to the primary relationships and hypotheses, the following relationships will be examined: a) player goal orientation and player perceived climate, b) coach goal orientation and coach perceived climate, and c) coach perceived climate and player perceived climate. From the information gathered in this study, future

research can be developed to further examine this relationship with respect to resulting player performance, feelings of enjoyment, anxiety, and other outcomes. This study is intended to be a stepping-stone for further investigation of the coach-player relationship regarding the goal orientation of a coach and the perceived motivational climate, as well as the resulting effects on the players in a team sport setting.

CHAPTER II

LITERATURE REVIEW

The relationship between coach and player is very important in a team sport setting. Without this relationship, team sports would not exist. The coach is responsible for instructing the players, helping them improve their skills, and preparing them for competition, as well as a host of other issues. The players perceive everything the coach says and does in one way or another. Because the relationship between the coach and the players is vital to team sports, it is certainly important to understand how the participants in this relationship interact and influence each other. With a better understanding of how the players perceive coaching behaviors and how those perceptions influence the players' thoughts and actions, it may be possible to develop a more productive and efficient relationship between coach and player.

A prominent psychological issue in team sports is the use of goals as a means of directing the things the team does. In general, coaches and players have goal orientations that influence how they feel about playing sports and what they believe is important within the team setting. The influence of a person's goal orientation cannot be overstated. The goal orientation influences nearly every facet of a person's cognitions and behaviors. Understanding the influence of goal orientations is just as important as understanding how coaches and players influence each other. One specific dimension of the team sport setting that is influenced by goal orientations is the motivational climate. The motivational climate is closely related to a person's goal orientation, and has a strong

influence on a person's cognitions and behaviors. Given the importance of the coach-player relationship and the effects of both goal orientations and the motivational climate, it is important to understand the relationship of these issues within a team sport setting. In order to gain a clearer understanding of this relationship, it is important to discuss goal orientations first, because goal orientation influences both the people involved on the team and the motivational climate that is created.

Goal Orientation

The goal orientation a person has is based primarily on one thing, the person's self-concept of ability. Self-concept of ability is a rather simple construct. It refers to a person's conception of how much ability they believe they have for performing a task (Nicholls, 1992). Ability to perform a task is something on which every person judges himself or herself. There are two basic conceptions of ability that a person can develop. The undifferentiated conception is found primarily in younger kids (Nicholls, 1984). The differentiated conception of ability develops as a child grows older, and can be seen in the adolescent years (Nicholls, 1984). A differentiated conception of ability refers to the point at which a person has distinguished between the concepts of effort and ability with regard to performing any task. For children who are developing the different conceptions of ability and effort, ability is thought of as a person's capacity for doing something in a social context Nicholls, 1984). High ability is created by learning to do tasks that they previously were not able to do, or what is essentially the act of learning (Nicholls, 1984). No social comparisons are made when a person's motivation is to learn, thus the person has adopted the undifferentiated conception of ability. Effort and ability are believed to

go hand in hand and are essentially the same thing. However, when attempting to evaluate our capacity for performing a task, the differentiated conception of ability is developed (Nicholls, 1984). Effort and ability are now believed to be two different things and the influence of the way a person thinks about effort as opposed to ability can have strong influences on the goal orientation a person adopts. In fact, a person's goal orientation comes directly from their conception of ability. A task-involved goal orientation is most prominent when our goal is simply to develop our ability in an undifferentiated sense (Nicholls, 1984). The other goal orientation, the ego-involved orientation, is more prominent when a person is concerned with demonstrating high ability and avoiding demonstrating low ability in comparison to other people (Nicholls, 1984). The ego orientation thus illustrates a differentiated conception of ability. A person's level of ability is compared and differentiated from the level of ability of other people.

Although it may sound somewhat complex, the concepts of task and ego goal orientations are actually quite simple. A task orientation is marked by intent to improve a person's skills and the belief that success is dependent upon interest, effort, and collaboration with other people (Nicholls, 1992). Task-involved people strive to develop their abilities to the fullest and do not compare the amount of ability with other people. The task-involved person may compare his or her level of ability to where it was at an earlier time to evaluate his or her own ability. An ego-involved person, on the other hand, evaluates his or her ability in relation to other people. An ego-orientation is marked by the need to establish one's superiority over other people and the belief that

success is primarily dependent upon already possessing more ability than others (Nicholls, 1992). The goal for an ego-involved person is essentially to show that he or she possesses more ability than others and requires less effort to perform the same task. Also, ego-involved people do not value collaboration with other people, while task-involved people value collaborative effort as being instrumental to success (Nicholls, 1992). It is plain to see that the two goal orientations have some stark differences that can lead to very different ways of thinking about and behaving in performance situations.

Most of the previous research regarding goal orientation has essentially focused on one of two settings. One setting is the educational setting, primarily focused on performance in academic and physical activity classrooms, and the other is a true sport setting. The effect a goal orientation has on the individual has been a topic of interest in educational research for some time. Solmon and colleagues have performed several studies to examine the different effects goal orientations have on students in physical education classes. Xiang, McBride, and Solmon (2003) conducted a study to determine what type of motivational climate physical education teachers tend to employ and how those climates affect the students. Xiang, et al. (2003) found that physical education teachers most often created a mastery-focused climate. This study also shed some light on the importance of the perception of control in the teacher-student or coach-player relationship. Within the mastery-focused climate, teachers give the students different choices about how to approach learning in a physical activity class (Xiang, McBride, & Solmon, 2003). The act of giving kids choices in how they approach learning is important because it gives them a sense of control and ownership of learning (Xiang,

McBride, & Solmon, 2003). Thus the kids will be more motivated to learn, and have a more positive approach toward learning, some of the hallmarks of a mastery-oriented setting. A positive approach to learning and performance is important because children "who have positive ability beliefs and approach achievement tasks with a high expectancy for success, consistently demonstrate high levels of persistence and performance on achievement tasks" (Xiang, McBride, Guan, & Solmon, 2003, p. 26). It was shown that those teachers who create a mastery-focused climate by giving students choices in how they approach learning were more likely to have students who were more motivated to learn and demonstrated greater persistence for learning.

Persistence is one characteristic of a task-involved individual. When task-involved, we work to improve our chances to learn and increase our ability through persistence (Nicholls, 1984). Persistence is another positive effect of a task goal orientation and a mastery climate. It was shown that children who did not expect to do well in their physical education classes were less likely to choose physical activities in the future; in other words, these children were less likely to persist (Xiang, McBride, Guan, & Solmon, 2003).

Because the teacher is very influential in determining the expectations of his or her students (by communicating his or her own expectations) the importance of a positive task goal orientation becomes even clearer. Positive expectations tend to lead to more persistent behavior in the members of a class or a team. Students, or players, perceive the expectations of their leader, and internalize those expectations to guide their thoughts and behaviors. The influence of a teacher or coach's goal orientation on the students or

players begins to make itself apparent. Taking into account that it has been shown that kids can accurately perceive things an adult is trying to get across, it is important for coaches and teachers to truly understand the influence they have on the people they are leading. Solmon and Carter (1995) showed that students can accurately perceive what the teacher intends to be communicated and that a teacher could clearly communicate concepts about a particular content area "when instruction is designed with that intent" (p. 364).

The effects of task and ego goal orientations have been popular subjects of study in the research pertaining to the sport setting. Numerous studies have been performed to examine the effects of the different goal orientations on cognitive and behavioral constructs associated with achievement and performance in sport. It was noted in Duda's (1989) study of high school athletes that task orientation is related to "positive achievement behaviors" and an increased likelihood that the person would be competent in their abilities, while maladaptive behaviors tend to present themselves when a person adopts an ego orientation. This study shed some light on the different type of beliefs and behaviors that can be expected when a person adopts a certain goal orientation. It was demonstrated that when an athlete is more task oriented, the person tends to believe that it is important for sport to place value on an athlete trying his or her best, cooperating with teammates and coaches, and being "honest, respectful, and concerned citizens in society at large" (Duda, 1989, p. 330). Conversely, it was shown that an ego orientation leads people to believe that extrinsic benefits and personal gains are what determine the meaning of sport, and also believe that bending the rules in order to succeed was

acceptable (Duda, 1989). Intrinsic motivation, or being motivated internally by the feelings and beliefs a person possesses rather than by external forces, is frequently harmed by an ego orientation and fostered by a task orientation. It was shown that students who were task-oriented tended to experience greater enjoyment and interest in their classes, as compared to ego oriented students (Duda, Chi, Newton, Walling, & Catley, 1995). Also, ego-oriented students did not enjoy their classes to the same degree as task-oriented students and showed more concern for demonstrating their superiority over others, which runs counter to some of the key aspects of intrinsic motivation (Duda, Chi, Newton, Walling, & Catley, 1995). Simply put, the more desirable intrinsic motivation tends to present itself when people are task goal oriented and not so much when they are motivated to show their superior abilities as compared to others.

A person's tendency to persist in the face of adversity is another facet of sport performance that is strongly influenced by a person's goal orientation. A study conducted on the premise that emphasizing mastery goals enhances both an athlete's overall performance and their level of persistence while focusing on ego-involving goals tends to erode these aspects demonstrated that this was indeed the case with bowlers who were told that the idea was to improve their skills and have fun (Newton & Duda, 1993). Even though this study did not include a category of the overall goal being to win, it was shown that greater enjoyment and less worry about performance was related to a task goal orientation (Newton & Duda, 1993). Responses that indicated an ego orientation, in light of the intended task orientation, resulted in lower levels of strategy formation in the participants (Newton & Duda, 1993). Here the task orientation led to increased

performance in the participants. In a separate study, Newton and Duda (1995) demonstrated that individuals who exhibit higher levels of task orientation and lower levels of ego orientation experienced a higher state of self-confidence during tennis matches. On the flipside, those individuals who placed a great importance on beating their opponent and had low expectations for the match were prone to greater feelings of cognitive anxiety (Newton & Duda, 1995). This study clearly demonstrated that people tend to be less anxious and more confident when they are task goal oriented.

Coping strategies are vital tools for an athlete to be able to use. A study performed by Pensgaard and Roberts (2003) examined the use of active coping strategies and social support in elite winter athletes and found that athletes who were highly task oriented and low ego oriented employed greater, more effective use of both active coping strategies and social support.

These studies demonstrate apparent it is that task goal oriented people tend to develop and employ more adaptive behaviors and generally experience decreased anxiety, increased performance, and increased enjoyment in both sport and academic settings. While the connection between the goal orientations and the motivational climates have been briefly touched on, it is important to examine this relationship further to gain a better understanding of how this information can be applied to any sport or academic situation.

Perceived Motivational Climate

As previously stated, there is a strong link between goal orientations and the perceived motivational climate of a given situation. While there are task and ego goal

orientations, there are also mastery and performance based motivational climates. As expected, task goal orientations are related to mastery motivational climates and ego goal orientations are related to performance based motivational climates. In a mastery-oriented climate, people are "focused on developing new skills, improving their own level of competence or skill, or attaining a sense of mastery based on an internalized set of standards" (Ames, 1992, p. 162). The resulting motivational pattern involves value being placed on giving effort and the basic process of learning a task (Ames, 1992). On the other hand, the resulting motivational pattern of a performance-based motivational climate is much different. A competitive reward structure, one of the components of a performance-based motivational climate, results in a negative relationship between the members of a group of people (Ames, 1984). In other words, the focus is on comparing one's own performance to the performance of others (a sort of social comparison). In a mastery climate, performance is compared internally with past performances and is not judged with the performance of others. Rewards for people in a performance-based climate are wholly dependent upon the comparison of one person's performance with the performance of others. Thus when one person is successful, the likelihood for other people to get rewards is negatively affected (Ames, 1984). In a mastery climate, rewards tend to be earned without reference to others. It should be noted that the *perceptions* of the players are extremely important in this relationship. A person's perception of the behaviors of others is more strongly connected to that person's thoughts than the actual behaviors of those same people (Ebbeck & Becker, 1994). Thus, in many instances a person substitutes their own perceptions for reality. This act could be considered

problematic in certain situations; however that fact should not diminish the importance of a person's perceptions. Perceptions are the pathways through which the environment interacts with the individual differences of each person to determine behavior.

When examining the motivational climate, it becomes apparent just how important and influential the environment can be. Ames and Archer (1988) conducted a study that examined children in a classroom setting to determine how different perceptions of the environment, specifically perceptions of an emphasis on mastery or performance, affect the students. They were able to show that the environment and the perceived ability of the students determined how they approached and performed in learning situations. "When students perceived an emphasis on mastery goals, they reported using more learning strategies, preferred tasks that offered challenge, and had a more positive attitude toward their class" (Ames & Archer, 1988, p. 263). The general relationship between goal orientations and the perceived motivational climate emerged as well. The perceived setting that placed an emphasis on mastery goals is a direct link to the task goal orientation. This relationship has been demonstrated in other instances as well. Ebbeck and Becker (1994) found that a perceived mastery climate was closely linked with a task goal orientation, while a perceived performance climate was strongly related to an ego goal orientation. The effects of the motivational climate are quite similar to the effects that the goal orientations have, as would be expected. Thus, the students that perceived a performance based motivational climate in Ames and Archer's (1988) study did not use learning strategies or seek challenges, and even showed a small negative relationship to student's attitudes and their self-perceptions of ability. Further

illustrating the importance of the environment, the work of Ebbeck and Becker demonstrated that the player's perceptions of the environment around them, including parent goal orientations and motivational climate were related to goal orientations of the players (1994).

One important effect of the motivational climate is on the stress level that the players experience in a given situation. Sport experiences can be among the most stressful experiences a person might have. The effects of stress on a person's performance are well known. But it is important to understand how a player's stress levels might be affected by the motivational climate created by the coach. According to Seifriz, Duda, and Chi (1992) players who perceived a more performance oriented climate also perceived a higher degree of tension while playing basketball. Under a performance oriented climate the members of a basketball team experienced "team competition, negative repercussions for mistakes, and limited reinforcement" (Seifriz, Duda, & Chi, 1992, p. 388). In contrast to these findings, Walling, Duda, and Chi (1993) showed that players who perceive a task-involving (mastery) climate did not experience the same amount of performance anxiety as compared to the players in the performance climate. Players experiencing the mastery climate also expressed more satisfaction with the experience and put forth more effort (Walling, Duda, & Chi, 1993). In a study involving the effort put forth on climbing tasks by boys in either a task- or ego- involved situation, it was shown that those who were placed in the task-oriented condition put forth more effort and were more successful than the boys who were in the ego-oriented condition (Sarrazin, Roberts, Cury, Biddle, & Famose, 2002).

The effects of the motivational climate are not limited simply to the specific situation the person is in. The results of Ames and Archer's study suggest that the positive effects of a mastery climate might demonstrate themselves over a period of time. They suggest "a mastery goal orientation may foster a way of thinking that is necessary to sustain student involvement in learning as well as increase the likelihood that students will pursue tasks that foster increments of learning" (Ames & Archer, 1988, p. 264). Thus it appears that given the proper environment, a person is more likely to develop adaptive habits that will be beneficial in the future, as well as being beneficial to the situation at hand.

Numerous studies have been performed to determine the effects of performing in one motivational climate versus the other. Ames (1981) performed a study to determine the effects of the two different reward structures that are present in either a competitive (ego) climate or cooperative (mastery) climate. Enhanced social comparison and ego-driven motives have been commonly associated with a competitive climate, while cooperative climates tend to promote more achievement, higher levels of self-esteem, and positive attitudes toward other people. The results of this study illustrate the importance of winning or losing in each setting. Winning in a competitive setting appeared to enhance the feelings of outperforming other people while those in a cooperative structure tended to have the same evaluations of one another regardless of the outcome. It was shown that in performance-based climates, social comparisons are at the heart of the matter. If a person is successful, positive results in affect can occur, however, if the person fails in a competitive setting, feelings of inferiority are likely to result. In a

mastery climate, the effect is not so drastic when success is not met. It was shown that even though children differed in performance in a cooperative setting, their evaluations of each other tend to converge. In a similar study, it was shown that the "presence of a team relationship in cooperative structures may contribute to a perception of similarity, creating a norm for more equality in reward allocation" (Ames & Felker, 1979, p. 419). In other words, when a strong team relationship is felt, differential treatment among players is less likely. Reward or punishment is not dependent on whether or not the child completed the task. It appears that the resulting performance evaluation in a cooperative setting is much more likely to be positive, or at least not as differential as in the competitive setting. The evaluation of a person's performance in a competitive setting is much more differential than in a cooperative setting, depending on the outcome of the task. Strong negative affect and self-punitive evaluations have been shown to result from failure in a competitive setting, while success in a performance-based climate led to more feelings of satisfaction (Ames, Ames, & Felker, 1977). Ames, Ames, and Felker (1977) were able to show that when children in a competitive setting fail, negative thoughts and evaluations of their performance are likely to result, whereas noncompetitive individuals did not exhibit such negative evaluations. It is certainly possible that a performance-based climate can result in greater feelings of self-worth and positive affect, however, there is a much higher risk of negative consequences in a competitive setting rather than a cooperative setting. People in a cooperative setting tend to work together more and evaluate each other more equally than in a performance-based climate.

Motivational climate has also been linked to differences in intrinsic motivation in sport participants. Newton and Duda (1999) looked at how performance is affected when a person who is either high task or ego oriented is placed in a mastery or performance-based motivational climate. Coaches reinforcing improvement and hard work created the mastery climate that was described as working together, while a performance-based climate was described as a setting where punishment for failure could be expected and competition between players on the team was encouraged (Newton & Duda, 1999). It was shown that the motivational climate does have an effect on the intrinsic motivation of a player. A positive relationship was found between feelings of enjoyment and interest and the task-involved mastery climate while a positive relationship between pressure and tension and a performance-based climate was demonstrated (Newton & Duda, 1999). In other words, it appears that intrinsic motivation is enhanced in mastery climates, while intrinsic motivation is disregarded in performance-based climates. Less enjoyment and satisfaction seem to result from being a part of a performance-based motivational climate.

It is also important to understand how peers, not just coaches or adults, affect the perceived motivational climate of children. Vazou, Ntoumanis, and Duda (2006) wanted to examine the effect that peer-created motivational climates have on children, given that children who perceive a coach-created mastery climate had more feelings of self-esteem and self-worth than children who perceived a performance-based climate. Their results demonstrate that greater enjoyment can be achieved when both the coach-created and peer-created climate are task-oriented. Greater feelings of self-worth, higher levels of enjoyment and increased effort were all associated with a mastery climate, while elevated

levels of anxiety were associated with an ego-involved, performance-based climate. Peer-created climates tended to have a stronger effect on feelings of self-worth and more strongly predicted enjoyment than coach-created climates, while the coach-created climate was a stronger predictor of anxiety levels. Here the relationship between mastery climate and the use of social support associated with the task goal orientation is shown. Children tend to enjoy mastery climates more because they are not pitted against each other and they are not as anxious about performing because they are supportive of one another.

Other studies have provided information regarding the effect of motivational climate on a variety of aspects of sport performance. Standage, Duda, and Ntoumanis (2003) demonstrated that kids who were task-oriented were more likely to view physical education classes as important, while ego-oriented children tended to demonstrate a propensity for work avoidance. It has also been shown that an environment that has few controlling features placed on children is conducive to greater feelings of personal causation and perceptions of control over behavior (Reinboth, Duda, & Ntoumanis, 2004). Coaches who were mastery-focused tended to have players that felt more competent, more in control of their performance, and stronger feelings of connection to the team (Reinboth, Duda, & Ntoumanis, 2004). These resultant positive feelings tend to increase the amount of intrinsic motivation in an individual player.

In recent years researchers have begun to look at the topics of goal orientation and motivational climate in relationship to one another in an effort to better understand the relationship between the two, and ultimately the coach-player relationship. Recent

studies have focused on more specific nuances of the relationship between goal orientation and motivational climate. One recent study has looked at how the skill level of an athlete affects the motivational climate of the athletes. Halliburton and Weiss (2002) conducted a study partly designed to determine how gymnasts of different skill levels perceived the motivational climates. Their results suggested an interesting relationship. They found that gymnasts at all skill levels perceive both a mastery and a performance oriented motivational climate rather than the orientations being exclusive of one another as Nicholls (1989) suggested. It was also shown that all skill levels believed that task oriented behaviors were very important (Halliburton & Weiss, 2002). Results such as these suggest that athletes are naturally inclined to adopt a task orientation, as opposed to a performance orientation. It is important to note, however, that these athletes did not perceive a task orientation exclusively. The athletes were able to perceive a combination of mastery and performance at the same time. Given that athletes are able to perceive both mastery and performance climates, it becomes that much more important to understand the relationship between the two.

The relationship between goal orientations and the perceived motivational climate was the main focus of the work done by Gano-Overway and Ewing (2004). They demonstrated that the motivational climate did indeed have a shaping effect on the goal orientations of female students. The reciprocal relationship between goal orientation and motivational climate was also demonstrated. "One's goal orientation seems to determine the impact the motivational climate will have on the goal orientation" (Gano-Overway & Ewing, 2004, p. 322). When a person is task-oriented, for example, and the person is in a

mastery oriented motivational climate, then the person's goal orientation is not likely to change over time. However, "when there was incompatibility between the goal orientation and the perception of climate, the individuals experienced a change in their orientation" (Gano-Overway & Ewing, 2004, p. 323). While the interaction between goal orientation and motivational climate is presented here, the importance of perceptions is also illustrated, as in the work of Ebbeck and Becker (1994). It was found that even though the students entered with a particular orientation, their perceptions of the motivational climate appeared to change the orientations of the students over time (Gano-Overway & Ewing, 2004).

Other work has examined the role that gender plays in the relationship between goal orientation and perceived motivational climate. Petherick and Weigand (2002) showed that male swimmers tended to be more extrinsically motivated than female swimmers and "a perceived performance climate was found to be positively and significantly related to indices of extrinsic motivation and amotivation" for both males and females (p. 231). They also found that both males and females who perceived a mastery climate scored higher on indices of intrinsic motivation (Petherick & Weigand, 2002). It is widely held that the most desirable form of motivation is intrinsic motivation, which appears to be fostered by a mastery-oriented motivational climate.

Another dimension that has recently been added to the research regarding the relationship between goal orientation and motivational climate is the effect that the coaches have on this relationship. Miller, Roberts, and Ommundsen (2005) focused their study on how the perceived motivational climate affects the moral judgment of the

players, while including the effects of the perceptions of coaches in the analysis. To be specific, they found that when players perceived their coaches to equate winning with success, the level of sport morality in the players dropped (Miller, Roberts, & Ommundsen, 2005). Also, when coaches were perceived to emphasize success and failure over improvement, a possible decline in moral functioning was likely, as well as unsportsmanlike attitudes and behaviors (Miller, Roberts, & Ommundsen, 2005). Here we are beginning to see the role coaches play in the relationship between goal orientation and motivational climate in the research. It could be generalized from the previous study that a coach who is performance oriented might be creating a motivational climate that is not fulfilling and healthy for the players. Another study illustrated how the coaches can affect peer relations. "When the climate is perceived as applauding players who strive to be better than other team members, players may come to perceive each other as competitors within the team, and try to obtain individual success at the expense of social investment needed for team success" (Ommundsen, Roberts, Lemyre, & Miller, 2005, p. 985). Recent studies such as these indicate that the coach does indeed have an important role in the relationship between goal orientation and perceived motivational climate.

It is certainly clear that the coach plays an important role in shaping the motivational climate and how the players respond to that climate. A study conducted by Horn (1985) demonstrated that a significant amount of the variance in a player's perceptions of his or her level of competence was explained by his or her level of ability and the feedback the coaches gave of their ability. Feedback provided by the coach is one of the primary ways a coach conveys his or her goal orientation. Thus, it is important

to understand that the things coaches say and do immediately convey their goal orientations. The effects of goal orientations and motivational climates in both academic and sport settings have been discussed at some length. It is clear that task goal orientations and mastery-based motivational climates have desirable effects on players and students. However, there is always room for more inquiry into the relationship between the two in a sport setting and their effects on the participants. Given what we know about the potential positive and negative effects of goal orientations and motivational climates, further study of the relationship of the two concepts in a sport setting is needed. The coach-player relationship is at the heart of the team sport setting. Thus the relationship between a coach's goal orientation and the motivational climate the coach creates should be examined further.

CHAPTER III

METHODS

The primary research questions and hypotheses involve the relationship between coach goal orientation and motivational climate and between motivational climate and intrinsic motivation in the team sport setting. Questionnaires were used to gather data on both coach and player goal orientations, perceived motivational climate, and player intrinsic motivation. These data were analyzed with descriptive and correlation analyses to determine the strength of relationships.

Participants

This study involves two different types of participants: the coach and the players on that coach's team. Although very few teams have only one coach, the head coach is the focus of this investigation, and no assistant coaches were included. The head coach is responsible for establishing the motivational climate of the team, and the data associated with the head coach provides the information needed to examine the relationship between a coach's goal orientation and the motivational climate perceived by his or her players.

The other group of participants, the players, includes all players on the teams of the coaches who are included in this investigation. The area of focus for this investigation is on team sports, or interactive sports that are played as a team during competition, rather than individually. In this study, teams from four different sports were recruited, including baseball, softball, and boys' and girls' basketball. The teams are all from rural, midwestern high schools ranging from 1A to 4A class sizes. Eighteen

coaches and their teams were recruited. Three boys' basketball teams, four girls' basketball teams, six baseball teams and five softball teams participated. A total of 22 boys' basketball players, 38 girls' basketball players, 60 baseball players, and 67 softball players agreed to participate.

Instruments

The primary method of gathering data on both the coaches and the players was the questionnaire. Both the coach and player questionnaires included the primary measures of goal orientation and motivational climate as well as a demographic section. The player questionnaire also included an intrinsic motivation measure.

Demographic information for the coach included sport, age, gender, total number of years coaching, and number of years coaching the current team (Appendix A). Player demographic information included sport, age, gender, class year, and number of years on the team (Appendix B).

Goal Orientation

To assess goal orientation, the Task and Ego Orientation in Sport Questionnaire, (TEOSQ), as adapted by Duda and Nicholls (1992) was used. The TEOSQ is a 13-item questionnaire that is used to determine the extent to which a person is task goal oriented and ego goal oriented. Results of confirmatory factor analyses have suggested that the TEOSQ has strong internal validity on each of the task (α=.88) and ego (α=.86) subscales (Li, et al., 1998). In this study the reliability for the task subscale was (α=.81) and for the ego subscale was (α=.87). The TEOSQ is framed around the simple statement of "I feel most successful when…". The participants respond to 13 items on a

five-point Likert scale indicating degree of agreement or disagreement with the statement. The TEOSQ yields two scores, a task orientation score and an ego orientation score. Both range from 1-5 reflecting the average of the items on that scale.

Perceived Climate

The questionnaire used to assess perceived climate is similar to the TEOSQ. The Perceived Motivational Climate in Sport Questionnaire-2 (PMCSQ-2) was initially developed by Seifriz, Duda, and Chi (1992) and adapted by Newton, Duda, and Yin (2000). The PMCSQ-2 is a 33-item questionnaire designed to determine a player's perception of both mastery and performance climate. Confirmatory factor analysis on the PMCSQ suggested that this measure has strong internal validity for both the task-involved (mastery) climate (α=.88) and the ego-involved (performance) climate (α=.87) subscales (Newton, Duda, & Yin, 2000). In this study the reliability for the mastery subscale was (α=.91) and for the performance subscale was (α=.91). The participants respond to the PMCSQ-2 on the same five-point Likert scale used in the TEOSQ. Each item on the PMCSQ-2 begins with the phrase "On this team…", and the items are designed to gain information about the perceived motivational climate. The players' PMCSQ2 scores are the primary data for the research questions and hypotheses, but the coaches also completed a version of the PMCSQ-2 to determine the coach's perceived motivational climate. Some of the items were slightly modified to fit the coach's point of view. For example, the item "the coach wants us to try new skills" has been changed to "I want us to try new skills" in order to eliminate confusion for the coach while completing the questionnaire. The average of the players' perceived climate scores for

each team were used to compare motivational climate perceived by coaches and players, as well as to determine the relationship between coach goal orientations and the player (team) perceived motivational climate.

Intrinsic Motivation

The questionnaire used to assess player intrinsic motivation, the Intrinsic Motivation Inventory (IMI), was developed by Ryan (1982). The IMI assesses the participant's level of intrinsic motivation on four different subscales: interest/enjoyment, perceived competence, effort/importance, and pressure/tension. On the IMI, players indicate how true the statements in the IMI are about themselves, with each response on a seven-point Likert scale ranging from not true at all to very true. Confirmatory factor analysis suggested that the IMI has strong internal validity for each subscale. McAuley, Duncan, and Tammen (1987) found acceptable alpha values of α=.78 for interest/enjoyment, α=.80 for perceived competence, α=.84 for effort/importance, and α=.68 for pressure/tension. McAuley, Duncan, and Tammen found that deleting items from the questionnaire increased the reliability. Deleting the item "While playing this basketball game, I was thinking about how much I enjoyed it" increased the validity of the interest/enjoyment subscale from .78 to .80 and deleting the item "I am satisfied with my performance at this game" increased the validity of the perceived competence subscale from .80 to .87. Subsequently, these two items were removed from the version used with this project. The alpha values for the four scales in this study were: α=.89 for interest/enjoyment, α=.79 for perceived competence, α=.83 for effort/importance, and

α=.42 for pressure/tension. Given the low internal consistency for the pressure/tension scale, analyses and results with these data must be viewed with caution.

Procedures

The first step was to get the consent of the coaches for their participation and the participation of their players in the study. If the coach agreed to be a part of the study and provided informed consent by signing and returning the Consent to Act as a Human Participant form (Appendix C), then those who play for that coach were given both Parental Consent to Act as a Human Participant forms (Appendix D) and Children's Assent to Participate forms (Appendix E). The consent forms ensured that no personally identifying information would be gathered, that all responses and information provided would be kept confidential, and that no one other than the experimenters would have access to the information provided. After coach's consent, player's assent and parental consent were obtained, a time was set to meet with and administer the questionnaires to both the coach and his or her players. Meetings usually took place during a scheduled practice for each team. At that meeting, the study was described to the participants and any questions they had at that time were answered. A time was then set up for a return trip to collect the consent forms and administer the questionnaires. Coaches were then given a consent form to read, sign, and return, while players were given player assent and parental consent forms to take home, read, sign, and return. The coach's consent form and the players' assent and consent forms were returned and collected at the beginning of the second meeting. Questionnaires were then administered to the coach and the players who returned with their signed forms. Coaches were given a packet including the

TEOSQ and PMCSQ-2. Players were given a packet including the TEOSQ, PMCSQ-2, and the IMI. All items included in coach and player packets were labeled with an identification number to keep all results for each participant in order. The primary researcher was present each time coaches and players were filling out questionnaires to answer questions and supervised the process. Coach and players then returned the questionnaires in a sealed envelope when they were completed. The questionnaires required approximately 15 minutes to complete for both the coaches and the players. A brief summary of the results was provided to participants at the completion of the study. Questionnaire data were entered into the computer spreadsheet for statistical analyses.

Analyses

Descriptive analyses of coach, player and team (average player) goal orientation and motivational climate scores were conducted initially, and Pearson-bivariate correlations were computed for all measures. Then correlation analyses were used to examine the relationships among goal orientations, motivational climates, and intrinsic motivation levels, and to test the hypotheses as follows.

Hypothesis 1 stated that coaches' task orientation will be positively related to player perceived mastery-based motivational climate. Hypothesis 2 stated that coaches' ego orientation will be positively related to player perceived performance-based motivational climate. Coach TEOSQ scores were correlated with team (average player) PMCSQ-2 scores to test hypotheses 1 and 2. Coach task goal orientation was correlated with his or her players' average team mastery motivational climate score (hypothesis 1), and coach ego goal orientation was correlated with the team performance motivational

climate score (hypothesis 2). These analyses determine the relationship between a coach's goal orientation and the motivational climate that the coach's players perceive.

Hypothesis 3 stated that players' perceived mastery-based motivational climate will be positively related to intrinsic motivation. Hypothesis 4 stated that players' perceived performance-based mastery climate will be negatively related to intrinsic motivation. Player PMCSQ-2 scores were correlated with player IMI scores to test hypotheses 3 and 4. Players' mastery motivational climate was correlated with each subscale of the IMI (interest/enjoyment, perceived competence, effort/importance, and pressure/tension) and players' performance motivational climate was correlated with each IMI subscale using Pearson-bivariate correlations. These analyses determine the relationship between the perceived motivational climate and the player's level of intrinsic motivation.

In addition to the analyses that test the hypotheses, the following relationships were examined. Player TEOSQ scores were correlated with player PMSCQ-2 scores. Specifically, player task goal orientation was correlated with player mastery motivational climate score and player ego goal orientation was correlated with player performance motivational climate score. These analyses determine the strength of relationship between players' goal orientation and the motivational climate perceived by the players.

Team PMCSQ-2 scores (average team mastery motivational climate, average team performance motivational climate) were correlated with coach PMCSQ-2 scores to determine the strength of relationship between the motivational climate perceived by the players and the motivational climate perceived by the coach.

Coach task and ego TEOSQ scores were correlated with coach mastery and performance PMCSQ-2 scores to determine the relationship between the coach goal orientation and perceived motivational climate.

Expected Outcomes and Future Directions

It is expected that coach goal orientation scores and player perceived motivational climate scores will be strongly related. Specifically, coach task goal orientation will be positively correlated with perceived mastery climate, whereas ego goal orientation will be positively correlated with perceived performance climate. These results would indicate that the motivational climate that the coach creates and the players perceive is related to the coach's goal orientation, and would support hypotheses 1 and 2.

It is expected that perceiving a mastery motivational climate is related to intrinsic motivation. In other words mastery motivational climate will be correlated with higher scores on the interest/enjoyment, perceived competence, and effort/importance subscales and lower scores on the pressure/tension subscale. Conversely, perceiving a performance motivational climate will show the reverse; performance motivational climate will correlate negatively with interest/enjoyment, perceived competence, and effort/importance subscales and positively with pressure/tension. These results would indicate that the players' perceived motivational climate is related to intrinsic motivation, supporting hypotheses 3 and 4.

Also, player TEOSQ scores are expected to correlate with player PMCSQ-2 scores indicating that a player's own goal orientation has a strong effect on his or her perceptions of the motivational climate.

It is also expected that coach and team PMSCQ-2 scores will be correlated. That is, team mastery climate will be correlated with coach mastery climate, and performance climate will be correlated with coach performance climate indicating that both coaches and players perceive the same type of motivational climate.

Finally, it is expected that coach TEOSQ scores will be correlated with coach PMCSQ-2 scores suggesting that the coach's goal orientation is related to their perceived motivational climate.

Examining these relationships should shed some light on the relationship between a coach's goal orientation and the motivational climate that coach's players perceive. More importantly, the results should provide preliminary information on the coach-player relationship, and how coaches influence their players. Future research can then be directed to determining how the coach effectively creates the intended motivational climate, or what behaviors the coach exhibits that lead to players differing perceptions of the motivational climate. Eventually links between player performance and the influence of the relationship between a coach's goal orientation and the perceived motivational climate can be investigated.

CHAPTER IV

RESULTS

After the data were compiled, descriptive statistics for both coach and player were caclulated. The sample for this study included a total of 18 coaches (3 boys' basketball, 4 girls' basketball, 6 baseball, and 5 softball); 15 coaches were male and 3 female. The complete demographic profile of the coaches' data is presented in Table 1, Appendix F. A total of 187 players participated, including 22 boys' basketball players, 38 girls' basketball players, 60 baseball players, and 67 softball players. The players included 82 males and 105 females, with 46 freshmen, 46 sophomores, 46 juniors, and 37 seniors. Player age ranged from 14 to 19 years old at the time the questionnaires were filled out, and 57 players were in their first year on the team, 49 in their second year, 43 in their third year, and 26 were in their fourth year on the team. Complete player demographics are presented in Table 2, Appendix G. Some totals are less than 187 because some players did not complete the demographic information sheet that was a part of the questionnaire packet.

Descriptive Results

Frequency and descriptive statistics for each questionnaire the coaches and players filled out were calculated. The TEOSQ consists of two subscales, task and ego. As shown in Table 3, Appendix H, coaches' task scores (M = 4.39) were higher than ego scores (M = 2.62). Similarly mastery climate scores (M = 4.43) were higher than performance scores (M = 2.32).

Players also filled out both of the TEOSQ and PMCSQ-2 questionnaires. As Table 4, Appendix M shows, players had higher scores on task (M = 4.21) than ego (M = 2.33) orientation. Players also perceived a higher mastery climate (M = 4.24) than performance climate (2.74). Players also filled out the Intrinsic Motivation Inventory with four subscales, interest/enjoyment, perceived competence, effort/importance, and pressure/tension. The complete descriptive data for these three questionnaires are presented in Table 4, Appendix I.

Results for Research Questions

Coach Goal Orientation and Player Perceived Climate. In order to test hypotheses 1 and 2, correlations between coach TEOSQ scores and average player PMCSQ-2 scores were conducted. For hypothesis 1, coach task goal orientation was correlated with player mastery motivational climate, but the correlation, $r = .283$, $p > .05$, was not significant. For hypothesis 2, coach ego goal orientation was correlated with player performance motivational climate, and again the correlation, $r = -.265$, $p > .05$, was not significant. Neither hypothesis 1 or 2 was supported by the results of these correlations, although there is a weak relationship between a coach's goal orientation and motivational climate perceived by the players. Complete results of the correlations between coach and player scores are presented in Table 5, Appendix J.

Player Perceived Climate and Intrinsic Motivation. Hypotheses 3 and 4 were tested by correlating player PMCSQ-2 scores with player IMI scores. For hypothesis 3, player mastery motivational climate was correlated with each of the four IMI subscales (interest/enjoyment, perceived competence, effort/importance, and pressure/tension).

Mastery motivational climate was positively correlated with interest/enjoyment, $r = .419$, $p < .01$, with perceived competence, $r = .165$, $p < .05$, and with effort/importance, $r = .439$, $p < .01$. Finally, the correlation between mastery motivational climate and pressure/tension, $r = .043$, $p > .05$, was weak and not significant. For hypothesis 4, player performance climate was also correlated with each of the 4 IMI subscales. Player performance climate was negatively correlated with interest/enjoyment, $r = -.297$, $p < .01$, and with effort/importance, $r = -.167$, $p < .05$, but not correlated with perceived competence, $r = -.060$, $p > .05$. Lastly, player performance climate was correlated with pressure/tension, $r = .187$, $p < .05$. Complete results of the correlation between player scores are presented in Table 6, Appendix K.

Additional Results

After the primary hypotheses were tested, several secondary relationships were examined using correlations. One relationship that was looked at was the relationship between player TEOSQ scores and player PMCSQ-2 scores. Player task goal orientation was positively correlated with player mastery motivational climate, $r = .469$, $p < .01$, and player ego goal orientation was correlated with player performance motivational climate, $r = .295$, $p < .01$.

The relationship between coach TEOSQ scores and coach PMCSQ-2 scores was also examined. Coach task goal orientation was positively correlated with coach mastery motivational climate, $r = .529$, $p < .05$, but coach ego goal orientation was not significantly correlated with coach performance motivational climate, $r = .268$, $p > .05$.

The last relationship that was examined was the relationship between player PMCSQ-2 scores and coach PMCSQ-2 scores. Average player mastery motivational climate was not significantly correlated with coach mastery motivational climate, r = .096, p > .05 and neither was average player performance motivational climate correlated with coach performance motivational climate r = .199, p > .05.

Summary of Results

The analyses of the data for this study yielded some interesting results. Some of the characteristic information of both coaches and players was certainly noteworthy. On the TEOSQ, both coaches and players were much more task oriented than ego oriented. Similarly, both coaches and players had much higher mastery climate scores than performance climate scores on the PMCSQ-2. In fact, the average subscale scores for coaches and players were very close to being the same. It was also shown that the coach goal orientation was not a predictor of the motivational climate perceived by the players, although strong relationships were hypothesized. However, player climate predicted player intrinsic motivational very well on a number of different levels, as was hypothesized. Also, player goal orientation was correlated with player motivational climate. The results indicated that a player's own goal orientation does have an effect on his or her perceptions of the motivational climate, as expected. A moderate to strong correlation between task goal orientation and mastery motivational climate was demonstrated, while a moderate, positive correlation between ego goal orientation and performance motivational climate was demonstrated. Coach goal orientation was correlated with coach motivational climate, as well. The results indicated that a coach's

goal orientation is partially related to his or her perceived motivational climate, as was expected. A strong correlation between task goal orientation and mastery motivational climate was demonstrated, whereas a moderate, but non-significant correlation between ego goal orientation and performance motivational climate was demonstrated. However player motivational climate scores and coach motivational climate scores were not related.

CHAPTER V

DISCUSSION

The purpose of this study was to examine the relationship between goal orientation of a coach and the motivational climate players perceive. Shedding light on this particular relationship may help us better understand the overall relationship between a coach and his or her players. Specifically, this study was designed to examine the relationships among the goal orientations of both coaches and players, coaches' and players' perceptions of the motivational climate, and players' intrinsic motivation. Questionnaires were used to gather data for each of the three main constructs (goal orientation, motivational climate, and intrinsic motivation) and correlation and regression analyses were used to test the hypotheses for this study.

The first two hypotheses of this study pertained to the relationship between a coach's goal orientation and the motivational climate perceived by the players. The first hypothesis was that coaches' task orientation would be related to perceived mastery-based motivational climate. Coach task subscale scores of the TEOSQ were correlated with player mastery subscale scores of the PMCSQ-2 resulting in a weak correlation that was not significant. The second hypothesis was that the coaches' ego orientation would be related to perceived performance climate. Coach ego subscale scores of the TEOSQ were correlated with player performance subscale scores of the PMCSQ-2, again resulting in a weak negative correlation that was not significant. Therefore, neither hypothesis 1 nor 2 were confirmed based on these data.

There are several reasons that the goal orientation of a coach was not significantly related to the motivational climate perceived by the players in this study. The reasons may be methodological or related to this specific study, or it may be that coaches' goal orientations simply are not related to players' perceived climate. This study included only 18 coaches and relationships were examined with average player scores from their teams. With a larger number of coaches, the relationships might have been significant. Measurement issues could also underlie some non-significant relationships. However, both the TEOSQ and PMCSQ-2 are widely used in sport and exercise psychology and have good psychometric properties. The reliabilities in this study were also high on each of the subscales, and it is unlikely that the participants reported false data.

A more plausible explanation for weak relationships between coaches' goal orientation and the motivational climate perceived by the players has to do with the nature of the relationship between the coach and player. For this particular group of participants, high school athletes, the coach only has a limited amount of contact and time for interaction with his or her players during the season. Coaches generally do not "coach" their players outside of the time allotted for the season during the school year. Players are with their coaches for three or four months out of the year, for about two hours a day during the season. Within this small amount of time a coach must work to improve the skills of each player, prepare the team for competition, and develop a good working relationship with his or her players. The goals a coach has indeed are important to this relationship, but the player's own personality, and specifically their own goal

orientations, are brought into the relationship independent of the coach's goal orientation. It is possible that the coach's goal orientation is not as influential as first thought.

As well as player individual orientation, other people influence the players' perceptions. Each player has a parent or parents in their lives while they are growing up. As a part of the child's development, parents teach their kids about competition, goals, rewards, and punishment from a very young age and continue to reinforce their teachings as the child grows older. The participants in this study were at least fourteen years old. They have been learning about goals and competition in some form from their parents, as well as their friends, for several years. Previous research has shown that children 8 to 9 years old rely on feedback from their parents and task outcomes to assess their competence in sport, while children 10 to 13 years old tend to rely on peer comparison and evaluation to assess their sport competence (Halliburton & Weiss, 2002). It has also been shown that children whose parents have performance goals are more likely to be dysfunctional perfectionists when compared to children whose parents adopt learning goals (Ommundsen, Roberts, Lemyre, & Miller, 2005). So, when a player enters into the sport-oriented relationship with his or her coach, that player is likely to have a developed goal system and view of competition in place. It would take a great amount of effort over a long period of time for a coach to change the player's views about goals and competition. Therefore, at a given time in the relationship, the coach's goals may not be very influential to the player and his or her perceptions of the motivational climate. A coach's goals likely influence the way a player perceives the motivational climate;

however the player's own goal orientations have a greater influence on the player's perceptions of the motivational climate.

The second relationship that was examined in this study was the relationship between a player's intrinsic motivation and the player's perceived motivational climate. It was hypothesizes that players' perceived mastery-based motivational climate would be related to intrinsic motivation. Player mastery subscale scores of the PMCSQ-2 were positively correlated with the interest/enjoyment, perceived competence, and effort/importance, subscales of the IMI. Only the relationship between mastery-based motivational climate and pressure/tension was not significant, which could be expected because one of the characteristics of a mastery-based motivational climate is that the people involved are more likely to feel less pressure than those in a performance climate.

The fourth hypothesis was that players' perceived performance-based motivational climate would be negatively related to intrinsic motivation. Significant, negative relationships between performance-based motivational climate and interest/enjoyment and effort/importance were demonstrated, along with a significant positive relationship between performance-based motivational climate and pressure/tension. This relationship could be expected as increased pressure and/or tension is a characteristic of a performance-based climate.

The results of the tests for hypotheses 3 and 4 indicated that perceived motivational climate and intrinsic motivation are indeed related to each other. These results indicate that those players who perceive a mastery-based motivational climate are likely to show more interest in the sport, feel more competent about playing, and put

forth more effort, as previously illustrated in research by Ames and Archer (1988), Walling, Duda, and Chi (1993), Sarrazin, Roberts, Cury, Biddle, and Famose (2002), and Newton and Duda (1999). Players who perceive a performance-based motivational climate are likely to show less interest in the sport, put forth less effort, and have heightened feelings of pressure when playing, as demonstrated by Seifriz, Duda, and Chi (1993), Sarrazin, Roberts, Cury, Biddle, and Famose (2002), and Ames, Ames, and Felker (1977). When examining these results, one must take into account the relationship between player goal orientations and the motivational climate perceived by the players. Player task goal orientation and player mastery motivational climate positively correlated, as were player ego goal orientation and player performance motivational climate. As discussed for the first two hypotheses, it is likely that the player's goal orientations have a stronger influence on player perceptions of the motivational climate than the coach's goal orientation. These particular correlations lend support to that claim. The correlations between player goal orientation and player motivational climate were stronger and significant, while the correlations between the coach goal orientation and the player motivational climate were weak. It appears that the player's own personality has a stronger influence on his or her perceptions than does the coach's personality.

Similar results were obtained when the relationship between the players' perceptions of the motivational climate and the coaches' perceptions of the motivational climate was examined. Both correlations were low and not significant. These results indicate that the coach and the player perceive the motivational climate in different ways. This relationship could be expected, given that the relationship between coach goal

orientation and player perceived motivational climate was weak at best. It appears that a player's perceptions of the motivational climate are influenced much more strongly by his or her own personality than by the other half of the coach-player relationship.

The players' goal orientation and the players' perceptions of the motivational climate were correlated, as well. Player task goal orientation was significantly correlated with player mastery climate, while player ego goal orientation was also significantly correlated with player performance climate. These results indicate that a player's goal orientation is related to his or her perceptions of the motivational climate.

The coaches' goal orientation and the coaches' perceptions of the motivational climate were also correlated. First, coach task goal orientation was correlated with coach mastery motivational climate. However, coach ego goal orientation was not significantly correlated with performance motivational climate. These results indicate that a coach's goal orientation is related to the coach's perceptions of the motivational climate. As with the players, the goal orientation of a person (coach or player) is a probable influence on that person's perceptions of the motivational climate.

It is interesting to note that when examining how goal orientation and perceived motivational climate are related within the coach-player relationship, the two concepts only seem to be related from player to player or coach to coach. In other words, coach goal orientation was correlated significantly with coach motivational climate, and player goal orientation was correlated significantly with player motivational climate, but the two were not correlated significantly when both coach and player were included in the correlation. Coach goal orientation was not related to player perceived motivational

climate. Also, coach perceived motivational climate was not related to player perceived motivational climate. It appears that there is a possible discrepancy in coaches' and/or the players' perceptions of the motivational climate. It is interesting that this would be the case, considering that it has been shown previously that players are able to accurately perceive the beliefs and meanings behind the behaviors of a coach (Solmon & Carter, 1995). Perhaps it is possible that the coach does not perceive the motivational climate accurately, while the players do perceive it accurately.

The general theme of this study was that the coach has a strong influence on his or her players. In particular, the coach's goal orientation was expected to have a strong impact on how the player perceives the motivational climate the coach has created. After examining the hypotheses and secondary relationships in this study, it appears that the stronger influence on a person's perceptions comes from his or her own personality, rather than from another person in the coach-player relationship. The coach undoubtedly has an influence on the player, however, that influence may not be as strong as previously thought, at least in regard to the influence of goal orientation on perceptions of the motivational climate. It was interesting, though, that both coaches and players alike had task and mastery scores that were much higher than ego and performance scores. It is certainly possible that there could be a relationship between coach goals and perceptions of the motivational climate and player goals and perceptions; however that relationship may be more indirect in nature. There was a weak relationship between coach task goal orientation and player perceived mastery motivational climate. Perhaps future testing with a greater number of coaches could strengthen the relationship between the two.

Future research could also be aimed at describing the more indirect relationships between coach goals and player perceptions. Also, further research should be conducted to further examine these and other relationships in order to more fully understand the coach-player relationship.

Future Directions

With regards to goal orientation and motivational climate within the coach-player relationship, there are several other aspects of that relationship that should be explored further, and by different means. In future studies it would be beneficial to look at this relationship over the course of the entire season of a given sport. The data gathered in this particular study were gathered at essentially a fixed point in time during the season. A longitudinal study that involves constructs similar to those used in this study regarding goal orientation and perceptions of motivational climate, noting changes over time, would be beneficial. There are different phases in a season, and a coach, as well as his or her players might be more task oriented and less ego oriented at the beginning of the season, when everyone is getting to know each other and learning is the primary focus rather than at the end of the season, where competition is likely to be the primary focus for a team. Preseason, midseason, and postseason data on each of the participants and on the same constructs would yield interesting information regarding how a coach or a player's perceptions and orientations might change throughout the season.

One other area that should be focused on in future research is the nature of the motivational climate. The motivational climate that is created from the coach-player relationship is *perceived* by each person. Perceptions are subjective by nature, and any

two people can have different perceptions of the same event. Therefore, perceived climate cannot be examined in a truly objective nature. Qualitative research regarding coaches' goal orientations and players' perceptions of the motivational climate the coach has created could yield a great amount of data and insight into the coach-.player relationship. Working with one or two teams over the course of an entire season from start to finish would be most beneficial to this line of research. Practices, team meetings, and games could be observed; and interviews with both coaches and players could be conducted. The data gathered could be compared with questionnaire data similar to the data gathered in this study to complement and confirm the qualitative information. A study encompassing the entire season would also provide the opportunity to observe events first hand, so that they could be analyzed and explained, and the flow of the coach-player relationship could be followed, rather than have a "snapshot" taken of the relationship. While this study has helped shed light on the coach-player relationship, many questions have been raised, and further research can and should be done to gain a better understanding of the coach-player relationship that is at the heart of all sports.

REFERENCES

Ames, C. (1981). Competitive versus cooperative reward structures: The influence of individual and group performance factors on achievement attributions and affect. *American Educational Research Journal, 18,* 273-287.

Ames, C. (1984). Competitive, cooperative, and individualistic goal structures: A cognitive-motivational analysis. In R. E. Ames & C. Ames (Eds.), *Research on motivation in education, volume 1: Student motivation* (pp. 177-207). Orlando: Academic Press.

Ames, C. (1992). Achievement goals, motivational climate, and the motivational processes. In G. C. Roberts (Ed.), *Motivation in sport and exercise* (pp. 161-176). Champaign: Human Kinetics Publishers.

Ames, C., Ames, R., & Felker, D. W. (1977). Effects of competitive reward structure and valence of outcomes on children's achievement attributions. *Journal of Educational Psychology, 69,* 1-8.

Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology, 80,* 260-267.

Ames, C., & Felker, D. W. (1979). An examination of children's attributions and achievement-related evaluations in competitive, cooperative, and individualistic reward structures. *Journal of Educational Psychology, 71,* 413-420.

Duda, J. L. (1989). Relationship between task and ego orientation and the perceived purpose of sport among high school athletes. *Journal of Sport & Exercise Psychology, 11*, 318-335.

Duda, J. L., Chi, L., Newton, M. L., Walling, M. D., & Catley, D. (1995). Task and ego orientation and intrinsic motivation in sport. *International Journal of Sport Psychology, 26*, 40-63.

Duda, J. L, & Nicholls, J. G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Education Psychology, 84*, 290-299.

Ebbeck, V. & Becker, S. L. (1994). Psychosocial predictors of goal orientations in youth soccer. *Research Quarterly for Exercise and Sport, 65*, 355-363.

Gano-Overway, L. A., & Ewing, M. E. (2004). A longitudinal perspective of the relationship between perceived motivational climate, goal orientations, and strategy use. *Research Quarterly for Exercise and Sport, 75*, 315-325.

Halliburton, A. L., & Weiss, M. R. (2002). Sources of competence information and perceived motivational climate among adolescent female gymnasts varying in skill level. *Journal of Sport & Exercise Psychology, 24*, 396-419.

Horn, T. S. (1985). Coaches' feedback and changes in children's perceptions of their physical competence. *Journal of Educational Psychology, 77*, 174-186.

Li, F., Harmer, P., Duncan, T. E., Duncan, S. C., Acock, A., & Yamamoto, T. (1998). Confirmatory factor analysis of the task and ego orientation questionnaire with cross-validation. *Research Quarterly for Exercise and Sport, 69*, 276-283.

McAuley, E., Duncan, T., & Tammen, V. V. (1987). Psychometric properties of the intrinsic motivation inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport, 60,* 48-58.

Miller, B. W., Roberts, G. C., & Ommundsen, Y. (2005). Effects of perceived motivational climate on moral functioning, team moral atmosphere perceptions, and the legitimacy of intentionally injurious acts among competitive youth football players. *Psychology of Sport and Exercise, 6,* 461-477.

Newton, M., & Duda, J. (1995). Relations of goal orientations and expectations on multidimensional state anxiety. *Perceptual and Motor Skills, 81,* 1107-1112.

Newton, M., & Duda, J. L. (1993). The relationship of task and ego orientation to performance-cognitive content, affect and attributions in bowling. *Journal of Sport Behavior, 16,* 209-221.

Newton, M., & Duda, J. L. (1999). The interaction of motivational climate, dispositional goal orientations, and perceived ability in predicting indices of motivation. *International Journal of Sport Psychology, 30,* 63-82.

Newton, M., Duda, J. L., & Yin, Z. (2000). Examination of the psychometric properties of the perceived motivational climate in sport questionnaire-2 in a sample of female athletes. *Journal of Sports Sciences, 18,* 275-290.

Nicholls, J. G. (1984). Conceptions of ability and achievement motivation. In R. E. Ames & C. Ames (Eds.), *Research on motivation in education, volume 1: Student motivation* (pp. 39-73). Orlando: Academic Press.

Nicholls, J. G. (1992). The general and the specific on the development and expression of achievement motivation. In G. C. Roberts (ED.), *Motivation in sport and exercise* (pp. 31-56). Champaign: Human Kinetics Publishers.

Ommundsen, Y., Roberts, G. C., Lemyre, P. N., & Miller, B. W. (2005). Peer relationships in adolescent competitive soccer: Associations to perceived motivational climate, achievement goals and perfectionism. *Journal of Sports Sciences, 23,* 977-989.

Pensgaard, A. M., & Roberts, G. C. (2003). Achievement goal orientations and the use of coping strategies among winter Olympians. *Psychology of Sport and Exercise, 4,* 101-116.

Petherick, C. M., & Weigand, D. A. (2002). The relationship of dispositional goal orientations and perceived motivational climates on indices of motivation on male and female swimmers. *International Journal of Sport Psychology, 33,* 218-237.

Reinboth, M., Duda, J. L., & Ntoumanis, N. (2004). Dimensions of coaching behavior, need satisfaction, and the psychological and physical welfare of young athletes. *Motivation and Emotion, 28,* 297-313.

Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Society, 43,* 450-461.

Sarrazin, P., Roberts, G., Cury, F., Biddle, S., & Famose, J. P. (2002). Exerted effort and performance in climbing among boys: The influence of achievement goals,

perceived ability, and task difficulty. *Research Quarterly of Exercise and Sport, 73*, 425-436.

Seifriz, J. J., Duda, J. L., & Chi, L. (1992). The relationship of perceived motivational climate to intrinsic motivation and beliefs about success in basketball. *Journal of Sport & Exercise Psychology, 14*, 375-391.

Solmon, M. A., & Carter, J. A. (1995). Kindergarten and first-grade students' perceptions of physical education in one teacher's classes. *The Elementary School Journal, 95*, 355-365.

Standage, M., Duda, J. L., & Ntoumanis, N. (2003). Predicting motivational regulations in physical education: The interplay between dispositional goal orientations, motivational climate and perceived competence. *Journal of Sport Sciences, 21*, 631-647.

Vazou, S., Ntoumanis, N., & Duda, J. L. (2006). Predicting young athletes' motivational indices as a function of their perceptions of the coach- and peer-created climate. *Psychology of Sport and Execise, 7*, 215-233.

Vealey, R. S. (2005). *Coaching for the inner edge*. Morgantown: Fitness Information Technology.

Walling, M. D., Duda, J. L., & Chi, L. (1993). The perceived motivational climate in sport questionnaire: Construct and predictive validity. *Journal of Sport & Exercise Psychology, 15*, 172-183.

Xiang, P., McBride, R., Guan, J., & Solmon, M. (2003). Children's motivation in elementary physical education: An expectancy-value model of achievement choice. *Research Quarterly for Exercise and Sport, 74*, 25-35.

Xiang, P, McBride, R. E., & Solmon, M. A. (2003). Motivational climates in ten teachers' elementary physical education classes: An achievement goal theory approach. *The Elementary School Journal, 104*, 71-91.

Appendix A

University of North Carolina at Greensboro
The Department of Exercise and Sport Science

Coaching Information

Sport _____ Total Number of Years Coaching _____

Age _____ Years Coaching Current Team _____

Gender_____

Appendix B

University of North Carolina at Greensboro
The Department of Exercise and Sport Science

Player Information

Sport _____ Class Year _____

Age _____ Years on the Team _____

Gender_____

Appendix C

University of North Carolina at Greensboro
The Department of Exercise and Sport Science

CONSENT TO ACT AS A HUMAN PARTICIPANT

Project Title: The Effect of a Coach's Goal Orientation on Perceived Motivational Climate

Project Director: Russell Rodenbeck

Description and Explanation of Procedures

The purpose of this study is to investigate the relationship between the different types of goals a coach has and the motivational climate perceived by the children who play for that coach. This relationship has an effect on a child's intrinsic motivation for playing sports. This study should help shed light on that effect.

Both coaches and players will be given questionnaires to fill out, requiring approximately fifteen minutes to complete. These questionnaires will give accurate information about the goal orientation of both coach and player, the motivational climate perceived by the player and the level of intrinsic motivation the player has. The data gathered from these questionnaires will then be entered and analyzed to determine the strength of the relationships described.

Risks and Discomforts

No participant will be at risk for sustaining physical injury during this study. Also, no personally identifiable information will be included in the questionnaires nor used as a means of analysis. Participants are assured anonymity while responding to the questionnaires.

Potential Benefits

There is a great potential for gaining a better understanding of how a coach's goal orientation can affect the motivational climate and, in turn, the level of intrinsic motivation each player has. A greater understanding of these relationships could help coaches better understand the influence they have on their players and help them adapt their styles to become more effective coaches. Ultimately, coaches who increase their effectiveness should help their teams experience more success.

Consent

By signing this consent form, you acknowledge that you have read and understand the procedures outlined above, as well as understand the potential risks and benefits of participating in this study. You are free to not participate, or you can withdraw your participation at any time during the study without penalty. Your

participation is completely voluntary. Also, your privacy will be maintained at all times because you will not be asked to provide any personally identifiable information as a part of the data gathering process. All data gathered will be stored in a locked filing cabinet in the project director's home for a period of three years after completion of the project. After three years, all data will be shredded.

If you have any questions about your rights as a participant in this study, please feel free to contact the Research Compliance Officer in the Research Compliance Office at the University of North Carolina at Greensboro, 336-256-1482. If you have questions about the research you will be involved in, please contact the Principal Investigator, Russell Rodenbeck at 785-766-6696 or 785-462-8187.

By signing this form, you agree to participate in the project described to you by Russell Rodenbeck.

_____

Date

_____ _____

Signature Printed Name

Appendix D

University of North Carolina at Greensboro
The Department of Exercise and Sport Science

PARENTAL CONSENT TO ACT AS A HUMAN PARTICIPANT

Project Title: The Effect of a Coach's Goal Orientation on Perceived Motivational Climate

Project Director: Russell Rodenbeck

Description and Explanation of Procedures

The purpose of this study is to investigate the relationship between the different types of goals a coach has and the motivational climate perceived by the children who play for that coach. This relationship has an effect on a child's intrinsic motivation for playing sports. This study should help shed light on that effect.

Both coaches and players will be given questionnaires to fill out, requiring approximately fifteen minutes to complete. These questionnaires will give accurate information about the goal orientation of both coach and player, the motivational climate perceived by the player and the level of intrinsic motivation the player has. The data gathered from these questionnaires will then be entered and analyzed to determine the strength of the relationships described.

Risks and Discomforts

No participant will be at risk for sustaining physical injury during this study. Also, no personally identifiable information will be included in the questionnaires nor used as a means of analysis. Participants are assured anonymity while responding to the questionnaires.

Potential Benefits

There is a great potential for gaining a better understanding of how a coach's goal orientation can affect the motivational climate and, in turn, the level of intrinsic motivation each player has. A greater understanding of these relationships could help coaches better understand the influence they have on their players and help them adapt their styles to become more effective coaches. Ultimately, coaches who increase their effectiveness should help their teams experience more success.

Consent

By signing this consent form, you acknowledge that you have read and understand the procedures outlined above, as well as understand the potential risks and benefits of allowing your child to be a part of this

study. You are free to refuse to give your child permission to participate, or you can withdraw your child's participation at any time during the study without penalty. The participation of both you and your child is completely voluntary. Also, your privacy will be maintained at all times because you and your child will not be asked to provide any personally identifiable information as a part of the data gathering process. All data gathered will be stored in a locked filing cabinet in the project director's home for a period of three years after completion of the project. After three years, all data will be shredded.

If you have any questions about your rights or the rights of your child as a participant in this study, please feel free to contact the Research Compliance Officer in the Research Compliance Office at the University of North Carolina at Greensboro, 336-256-1482. If you have questions about the research your child will be involved in, please contact the Principal Investigator, Russell Rodenbeck at 785-766-6696 or 785-462-8187.

By signing this form, you agree to allow your child to participate in the project described to you by Russell Rodenbeck.

_____

Date

_____ _____

Signature Printed Name

Appendix E

University of North Carolina at Greensboro
The Department of Exercise and Sport Science

Children's Assent to Participate

This study is designed to gather information about how the goals your coach has affects your level of intrinsic motivation. This information could become a valuable tool for helping coaches to become more effective and help players achieve a higher level of success.

If you agree to participate in this study, you will be asked to fill out some questionnaires designed to determine your own goal orientation, the motivational climate you perceive and the level of intrinsic motivation you will have. The questionnaires are simple and straightforward and will take approximately 15 minutes to complete.

Your participation is entirely voluntary. No personally identifiable information will be asked of you while filling out the questionnaires. Your privacy will be maintained at all times. If at any time during the study you feel as though you are uncomfortable with participating, you have the right to withdraw your participation. You will not be penalized or punished in any way. You can ask questions about the study at any time. There are no right or wrong answers in these questionnaires. Truthful answers are all that is requested.

By signing this form, you agree that you have read the above information and want to be a part of this study. If you wish to not participate, please leave the form blank. Even if you have signed this form, you can still not participate if you change your mind at a later date.

All data gathered will be stored in a locked filing cabinet in the project director's home for a period of three years after completion of the project. After three years, all data will be shredded.

_____ _____
Signature of Participant Date

_____ _____
Signature of Investigator Date

Appendix F

Table 1

Coaching Demographics

Coach	Sport	Age	Gender	Total Years Coaching	Years Coaching Current Team
1	Girls' Basketball	52	Male	26	26
2	Girls' Basketball	60	Male	17	4
3	Boys' Basketball	46	Male	7	7
4	Boys' Basketball	42	Male	18	15
5	Girls' Basketball	59	Male	15	3
6	Girls' Basketball	42	Female	15	7
7	Boys' Basketball	32	Male	7	3
8	Baseball	38	Male	8	1
9	Softball	39	Female	17	2
10	Baseball	47	Male	16	1
11	Softball	63	Male	21	7
12	Baseball	41	Male	14	1
13	Baseball	45	Male	13	13
14	Softball	39	Female	18	10
15	Softball	28	Male	6	5

Coach	Sport	Age	Gender	Total Years Coaching	Years Coaching Current Team
16	Softball	43	Male	20	13
17	Baseball	39	Male	12	8
18	Baseball	31	Male	12	2

Appendix G

Table 2

Player Demographics

Sport	N	Gender	N	Age	N
Boy's Basketball	22	Male	82	14	10
Girl's Basketball	38	Female	105	15	54
Baseball	60			16	35
Softball	67			17	50
				18	22
				19	4
Total	187		187		175

Class	N	Number of Years Played	N
Freshman	46	1	57
Sophomore	46	2	49
Junior	46	3	43
Senior	37	4	26
Total	175		175

Appendix H

Table 3

Coach Descriptive Statistics

	N	Mean	Std. Dev.	Range
TEOSQ – Task	18	4.39	.35	1.00-5.00
TEOSQ – Ego	18	2.62	.67	1.00-5.00
PMCSQ-2 – Mastery	18	4.43	.31	1.00-5.00
PMCSQ-2 – Performance	18	2.32	.32	1.00-5.00

Appendix I

Table 4

Player Descriptive Statistics

	N	Mean	Std. Dev.	Range
TEOSQ – Task	187	4.21	.57	1.00-5.00
TEOSQ – Ego	187	2.33	.94	1.00-5.00
PMCSQ-2 – Mastery	187	4.24	.56	1.00-5.00
PMCSQ-2 – Performance	187	2.74	.79	1.00-5.00
IMI – Interest	187	6.30	.88	1.00-7.00
IMI – Competence	187	5.17	1.04	1.00-7.00
IMI – Effort	187	6.26	.89	1.00-7.00
IMI – Pressure	187	4.51	.88	1.00-7.00

Appendix J

Table 5

Correlations Between Coach Scores and Player Scores

	Coach Task	Coach Ego	Coach Mastery	Coach Performance	Player Task	Player Ego	Player Mastery	Player Performance
Coach Task	1	.100	.529*	-.016	.350	-.243	.283	-.054
Coach Ego	.100	1	-.265	.268	.092	.098	.099	-.265
Coach Mast.	.529*	-.265	1	-.176	.276	.071	.096	.199
Coach Perf.	-.016	.268	-.176	1	-.223	-.056	-.152	.193
Player Task	.350	.092	.276	-.223	1	.86	.627**	-.246
Player Ego	-.243	.098	.071	-.056	.086	1	-.295	.150
Player Mast.	.283	.099	.096	-.152	.627**	-.295	1	-.590**
Player Perf.	-.054	-.265	.199	.193	-.246	.150	-.590**	1

* Indicates significance at the 0.05 level (two-tailed)
** Indicates significance at the 0.01 level (two-tailed)

Appendix K

Table 6

Correlations Between Player Scores

	Task	Ego	Mastery	Performance	Interest	Competence	Effort	Pressure
Task	1	.196**	.469**	-.048	.291**	.256**	.447**	.211**
Ego	.196**	1	-.153*	.295**	-.022	.252**	.021	.079
Mast.	.469**	-.153*	1	-.408**	.419**	.165*	.439**	.043
Perf.	-.048	. 295**	-.408**	1	-.297**	-.060	-.167*	.187*
Int.	.291**	-.022	.419**	-.297**	1	.487**	.668**	.052
Comp.	.256**	.252**	.165*	-.060	.487**	1	.478**	.006
Eff.	.447**	.021	.439**	-.167*	.668**	.478**	1	.212**
Press.	.211**	.079	.043	.187*	.052	.006	.212**	1

* Indicates significance at the 0.05 level (two-tailed)

** Indicates significance at the 0.01 level (two-tailed)