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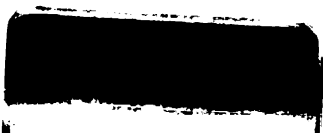
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THE DEVELOPING COACH: A SEASON-LONG INVESTIGATION OF
COACHING EFFICACY AND COACHING COMPETENCY, FEEDBACK, AND
PRACTICE BEHAVIORS

By

Ryan A. Hedstrom

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ABSTRACT

THE DEVELOPING COACH: A SEASON-LONG INVESTIGATION OF COACHING EFFICACY AND COACHING COMPETENCY, FEEDBACK, AND PRACTICE BEHAVIORS

By

Ryan A. Hedstrom

Today, most coaches are not provided a thorough or comprehensive education in the science of coaching. As research into coaching effectiveness is continually showing the complexity of roles and behaviors (Potrac, Brewer, Jones, Armour, & Hoff, 2000), addressing this lack of preparedness is even timelier. To accomplish a better understanding of coaching development, a season-long investigation of several inexperienced coaches could provide knowledge about how to better prepare coaches for their role. The importance of coaches' efficacy (Feltz, Chase, Moritz, & Sullivan, 1999) and the ability of coaches to use feedback effectively (Horn, 1985; Smoll, Smith, Barnett, & Everett, 1993) have been shown to be important characteristics of successful coaches. The question of how new or inexperienced coaches develop the efficacious beliefs posited by Feltz et al. (1999), or the understanding of how to use feedback effectively has not been addressed. Therefore, the purpose of this study was to investigate how coaching efficacy, feedback, and practice behaviors changed during the course of the season for inexperienced high school head coaches. Specifically, did time of season and season events affect the manifestation of these variables? An additional purpose was to examine how these changes in coaching efficacy and feedback were perceived throughout the season by the coaches and athletes. Participants (N= 3) were inexperienced high school varsity lacrosse coaches and their respective teams. Coaches took part in preseason and

postseason interviews, season-long systematic observation of practices, and measures of coaching efficacy at beginning, middle, and end of season. Athletes completed measures of coaching competency for their coach throughout the season. Selected athletes took part in postseason interviews. These developing coaches fluctuated in their confidence throughout the season based on season events, and spent a large part of practice providing non-skill/non-sport related feedback to athletes. Further, these coaches did not take advantage of teaching techniques such as modeling and physical assistance. Athletes also fluctuated in their views of their coach's competency over the course of the season. Interviews with coaches and athletes revealed effective and ineffective strategies employed by these coaches related to the efficacy/competency subscales, views on coaching confidence and leadership, and the effect of coaching feedback on performance and satisfaction. Implications for coaching education are the development of season-long strategies for development as well as mentoring programs for inexperienced coaches.

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CHAPTER ONE

Introduction

The development of athletes has been an important topic in sport psychology literature. Bloom's (1985) work has shown that athletes travel through three specific stages in order to reach the elite level: the early, middle, and later years, each with its own milestones and characteristics. Gould and his colleagues (Gould, Dieffenbach, & Moffett, 2002; Gould, Hodge, Peterson, & Giannini, 1989) have investigated the qualities of coaches who were influential in the development of elite athletes. These coaches were significant because they instilled confidence in their athletes, provided positive and effective skill instruction, provided positive encouragement, and interacted with their athletes in a manner that affected the individual's life as both an athlete and a person. Given the very important role of coaches in the development of athletes, it is surprising that few studies have addressed the process coaches go through to become effective coaches. A few studies have investigated coach development in the area of elite basketball (Schinke, Bloom, & Salmela, 1995) and professional soccer (Jones, Armour, & Potrac, 2003), but have neglected the area of scholastic, specifically high school, coach development.

The importance of coaches' efficacy (Feltz, Chase, Moritz, & Sullivan, 1999) and the ability of coaches to use feedback effectively (Horn, 1985; Smith, Smoll, & Curtis, 1979; Smith, Smoll, & Hunt, 1977; Smoll, Smith, Barnett, & Everett, 1993) have been shown to be important characteristics of effective coaches. The question of how new or inexperienced coaches develop the characteristics identified by Gould et al. (1989, 2002), the efficacious beliefs posited by Feltz et al. (1999), or the understanding of how to use

feedback effectively has not been addressed. Therefore, the purpose of this study was to investigate how coaching efficacy, feedback, and practice behaviors changed during the course of the season for inexperienced head high school coaches. Specifically, did time of season and season events affect the manifestation of these variables? Another purpose was to examine how these changes in coaching efficacy and feedback were perceived throughout the season by the coach and athletes.

Self-Efficacy and Coaching Efficacy

The theory of self-efficacy (Bandura, 1977, 1986) refers to the extent one believes he or she can be successful at a given task. Bandura stated that one develops his or her level of efficacy from several sources of information. These sources include past performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal. Due to this theory's applicability to the sport achievement domain, sport psychologists have examined both individual and team efficacy (Feltz & Chase, 1998; Feltz & Lirgg, 1998).

A fruitful expansion of that research was in *coaching* efficacy. Evolving from research in teaching efficacy (e.g., Coladarci, 1992; Woolfolk, Rosoff, & Hoy, 1990), coaching efficacy refers to the degree that a coach believes in his or her influence on the learning and performance of athletes (Feltz et al., 1999). Four dimensions of coaching efficacy have been identified: game strategy, motivation, teaching technique, and character building. Using the Coaching Efficacy Scale (CES), Feltz et al. (1999) reported that coaches with higher efficacy scores gave athletes more praise and instruction than coaches with lower efficacy scores. Further, athletes of high-efficacy coaches reported more satisfaction with the coach and season (Feltz et al., 1999). Coaching efficacy has

also been examined in relation to other factors such as coaching education (Malete & Feltz, 2000), coaches' expectations for team performance (Chase, Lirgg, & Feltz, 1997), the interplay of coach, team, and player efficacy (Vargas-Tonsing, Warners, & Feltz, 2003), and leadership style (Sullivan & Kent, 2003). While these studies have furthered understanding of the construct of coaching efficacy, the fluctuation of coaching efficacy in relation to feedback behaviors and expectations has not been fully examined with coaches who have different preparation for the role of head coach or who are just becoming head coaches.

During the course of a season, coaches are forced to respond to ever-changing environments. Exploring this possibly unstable atmosphere could aid in a greater appreciation of the impact of efficacy on an inexperienced head coach's behavior and interaction with athletes. For example, it is assumed that coaches would not accept a head coaching position without a high coaching efficacy in the areas of motivation, teaching technique, character-building, and game strategy. Many events during the season, such as time of the season (preseason, season, postseason), outcomes (winning or losing), and uncontrollable events surrounding athlete participation (e.g., injury, dropout) which may influence a coach's efficacy over time and subsequent responses to athletes, have not been investigated. Previous research has relied primarily on a single time of self/coaching efficacy score collection during the season. Incorporating a season-long examination of coaching efficacy in relation to feedback and behaviors could aid in a better understanding of how different events during an athletic season impacts an inexperienced coach's efficacy. This study examined the ebb and flow of an entire athletic season versus "snapshots" of coaching behavior.

Coaching Feedback

In addition to their coaching efficacy, the ability of coaches to teach skills and strategies, correct skills, and reinforce performance is critical to their success. Many head coaches do not have degrees in pedagogy and are not teachers in the schools in which they coach. The question of how inexperienced head coaches develop effective teaching and reinforcement strategies has not been fully investigated. Hedstrom, Ewing, and Gilson (2004) recorded the feedback and coach-athlete interactions of inexperienced youth soccer coaches across a season. They reported that these coaches struggled with communicating desired feedback, properly managing their teams, and teaching soccer skills and strategies. Further, athletes on these teams noted some frustration with the coaches' inexperience in pedagogical techniques. Interviews with the coaches revealed that they believed that more education would provide them with valuable insight into a more effective and positive coaching and feedback style.

To assess the impact of education on coaching feedback and behavior, Smith et al. (1979) placed little league coaches in either an experimental or control group. The experimental group was given Coach Effectiveness Training (CET) in which they were taught how to provide positive feedback, contingent and information-based responses to players, as well as techniques to avoid the use of punishment. The control group was not given this training. Both experimental and control teams were observed over the baseball season, using the Coaching Behavioral Assessment System (CBAS; Smith et al., 1977; Smoll, Smith, Curtis, & Hunt, 1978) to code coaching behaviors. Players were also given measures of attitude and enjoyment, perceived coaching behaviors, and self-esteem. Several interesting findings were revealed through this study. First, children who played

for the CET coaches reported more enjoyment with the season as well as liking their coach and teammates more than the players who were coached by those in the control group. Further, those children who started the season with lower self-esteem and played for a CET trained coach showed a greater increase in self-esteem over the season than those with lower self-esteem who played for the control group coaches. The CBAS results showed that trained coaches exhibited greater amounts of “positive coaching” by providing technical instruction, mistake-contingent instruction, positive encouragement, and lower levels of punitive behaviors. The results of the study became more salient when it was shown that the two groups (experimental and control) had comparable win/loss records, ruling out success as an antecedent to enjoyment and satisfaction.

Attrition rates in participation have also been affected by this positive type of coaching. Following-up on an earlier study, Smoll et al. (1993) interviewed athletes 1-year after playing for either a CET trained or untrained coach. The researchers found that those athletes who played for an untrained coach reported an attrition rate of 26%, whereas those athletes playing for a CET trained coach reported attrition rates of only 5% (Barnett, Smoll, & Smith, 1992). These findings substantiate the effect of positive coaching behaviors on keeping youth active in sports.

Following the protocol established by Smith, Smoll, and colleagues, Horn (1985) further investigated coaching feedback in interscholastic softball utilizing both a modified version of the CBAS and player self-perceptions (competence, performance control, and expectations). Horn reported that those players who received a higher amount of praise, reinforcement, and non-reinforcement after successful performances reported a lower sense of competence. Those athletes who received criticism after unsuccessful

performances reported higher levels of competence. While these findings may seem counterintuitive, Horn's explanation posed an interesting possibility. Those athletes who received criticism after failure could have attributed their performance to effort; consequently, increased effort could elicit not only praise from the coach, but also successful performance. This attribution of effort could cause an increase in both perceived competence and perceived control. Conversely, those athletes who received reinforcement without information after successful attempts reported lower levels of competence, feeling that they had exhibited the extent of their skill mastery; therefore, no further instruction was needed. Another interesting finding in this study was that athletes perceived the feedback given by the coach in practice to be more salient than feedback given during games. Horn attributed this to the climate of skill development during practice.

Of the observed coaches (Horn, 1985), all were either certified school-employed teachers or in teacher-training programs. Further, all had coached their team for at least 2 years in a position of head coach and had other interscholastic coaching experience. These coaches had multiple years, both as coaches and teachers, to develop their feedback styles and coaching behaviors. The results of this study may have been different if the coaches were less experienced and came from educational backgrounds other than teaching. Perhaps the feedback patterns and practice behaviors would not be perceived by the players in the same manner. This study addressed how experience and education of a coach affected feedback patterns and behaviors. An examination of how less experienced coaches begin to understand the benefit of a positive coaching style and feedback could aid in understanding the development of effective coaches.

These lines of research (Horn, 1985; Smith et al., 1977; 1979; Smoll et al., 1993) show the compelling impact that coaching style and feedback can have on the psychosocial development of athletes. The positive approach to coaching has been found to influence perceptions of ability, self-esteem, satisfaction with the season, competence, and other important outcomes of sport participation. The results of these studies show the effectiveness of a coaching style rich in information-contingent feedback, encouragement, and low in punitive or punishing behaviors. This study extended the literature by examining feedback in a season-long contextual manner. Feedback was also investigated in conjunction with coaching efficacy and behaviors of the coach as well as how the athletes interpret their coach's feedback behaviors.

Coaching Behaviors and Development

Today, most coaches are not provided a thorough or comprehensive education in the science of coaching. As research into coaching effectiveness is continually showing the complexity of roles and behaviors, addressing this lack of preparedness is even more timely (Dodge & Hastie, 1993). Traditionally, most high school coaches were teachers in the school who had the benefit of teacher preparation courses where effective feedback was discussed and practiced before assuming full responsibility for a classroom. With fewer coaches having a traditional background in education and the rise of contract-hire coaches (those individuals being hired from outside of the school system), coaching education advocates are beginning to warn against the lack of professional preparation among coaches (Stewart & Sweet, 1992). For example, the Michigan High School Athletic Association reports that over half of their coaches throughout the state are non-faculty (J.R. Johnson, personal communication, October 7, 2005). Researchers have

started to investigate the interplay of education, coaching development, and the changing role demands of scholastic coaches (Dils & Ziatz, 2000; Sage, 1987, 1989; Stewart & Sweet, 1992). Of specific interest to coaching education is how differing educational backgrounds affect coach effectiveness, specifically, behaviors and coach-athlete interactions. For example, a contract-hire coach may be unfamiliar with appropriate pedagogical techniques for teaching skills. In contrast, the teacher-coach may understand that in the scholastic setting athletics are viewed as an educational domain. These coaches' differing educational backgrounds may influence their views on success in sports, the role of teaching skills, or team management techniques. A purpose of this study is to examine the interplay between educational experience with the variables of coaching behaviors, efficacy of these coaches over the course of a season, and the impact of this interplay on athletes' perceptions of coaching effectiveness.

The effectiveness of feedback in changing behavior in athletes is complex and often subtle. Therefore, using field observation and multiple assessment strategies are warranted to capture both verbal and nonverbal feedback of the coach. Tharp and Gallimore (1976) observed coaching legend John Wooden during practices for a majority of the 1974-1975 collegiate basketball season. The authors used observation techniques from teacher education to assess the coach's behavior during practice. In this seminal investigation of coaching behaviors, Tharp and Gallimore (1976) reported a constant interplay between praise and scolding, an emphasis on "hustle", and the use of physical modeling. In addition, the researchers (1976) found a strong emphasis on instruction. Coach Wooden spent over 50% of all exhibited behaviors on giving instruction. In a later analysis of this study, Gallimore and Tharp (2004) reviewed the previous findings and

interviewed Coach Wooden to expand on observed behaviors. An interesting extension of the earlier work was the explanation of a “Wooden”; this was a behavior involving a sequence of scold, modeling-positive skill performance followed by modeling-negative performance, and modeling-positive performance again. Coach Wooden referred to this as a sandwich approach.

For some time, Docheff (1990) has advocated the use of a very similar sequencing of feedback, which he called a “sandwich” approach when providing feedback as an effective pedagogical technique. The findings of these studies (Gallimore & Tharp, 2004; Tharp & Gallimore, 1976) extended knowledge of teacher-coach pedagogy as well as identifying behaviors of a very successful coach. Coaches who are learning their profession may use this approach early in the season while the emphasis is on skill instruction. However, as they move into the performance or game phase of the season, it is not clear if these developing coaches would continue to apply this technique as they experience the ebb and flow of wins and losses or injuries to players on their team that impact team cohesion. The frustration of these negative events or the expectations associated with a winning streak of three or four games might cause novice coaches to become more demanding and critical, while failing to use a positive approach.

An addition to the line of research using systematic observation was the development of the Arizona State University Observation Instrument (ASUOI; Lacy & Darst, 1984; Lacy & Darst, 1989). This instrument was developed in order to categorize and examine coach’s teaching behaviors. This instrument originally consisted of 14 behaviors: use of first name, preinstruction, concurrent instruction, postinstruction, questioning, physical assistance, positive modeling, negative modeling, hustle, praise,

scold, management, uncodable behaviors, and silence. The behavior of “use of first name” is considered a dependent behavior-- meaning that it can only be recorded in conjunction with another behavior. For example, if a coach says, “John, next throw when you go through your rotation lead with your hips,” the observer would record the behaviors of both “preinstruction” and “use of first name”. These behaviors were deemed appropriate by the researchers for several reasons. First, these behaviors take into account and use past research using systematic observation of coaches (Dodds & Rife, 1981; Tharp & Gallimore. 1976). It also takes into account differing aspects of feedback such as when instruction is given (pre-, concurrent, and postinstruction) and motivating behaviors such as hustle, scold, and praise. One advantage that the ASUOI has over other observation instrument (e.g., Coaching Behavioral Assessment System) is that it takes into account both verbal and nonverbal behaviors. One disadvantage is that behaviors are not categorized as responsive or spontaneous; both behaviors are treated the same with this instrument.

One study using the ASUOI examined behaviors of male and female coaches during two phases of the athletic season. In this investigation Lacy and Goldston (1990) observed male and female high school basketball practices three times during two phases of the season, preseason phase and inseason phase. Lacy and Goldston used 13 behaviors from the earlier instrument (14 behaviors; Lacy & Darst, 1989); use of first name was considered a dependent behavior so was not categorized by itself. Also, event recording was used so the category of silence was not used. Several interesting results were reported from these observations. First, verbal instruction (pre-, concurrent, and postinstruction) accounted for the majority of all coaching behaviors across genders and

both phases of the season. Gender differences were found in that female coaches displayed more praise and hustle behaviors than the male coaches. Female coaches used first names more, especially in preseason, than male coaches. Finally, male coaches displayed more modeling and questioning behavior than female coaches.

While systematic observation has been used in sport psychology and coaching literature in various forms (Bloom, Crumpton, & Anderson, 1999; Lacy & Goldston, 1990; Seaborn, Trudel, & Gilbert, 1998; Trudel, Cote, & Bernard, 1996), several additions to the literature are warranted. First, systematic observation is a valuable tool in order to understand not only what behaviors are being exhibited, but also at what time of the practice session and season and in what context the specific feedback behavior is occurring. An extension of this study was to observe coaches over the course of the entire season in order to investigate fluctuations and changes in behavior. While several studies have incorporated this approach (Bloom et al., 1999; Tharp & Gallimore, 1976), most have observed coaches only a few times during the season. A second extension to this work is to investigate the changes in behaviors based on the time of season. Lacy and Goldston (1990) observed high school basketball coaches during preseason and inseason. However, observation of behaviors during the postseason is a valuable addition to the coaching literature due to higher expectations and pressure to win. Finally, there is a sample of the coaching population that has not been adequately observed. Most studies have focused on elite coaches (Bloom et al., 1999; Tharp & Gallimore, 1976) or successful high school coaches (Claxton & Lacy, 1986; Lacy & Darst, 1985), but what about the developing coach? This question is particularly relevant in light of the recent findings that revealed no relationship between conceptions of ability to coach and

coaching efficacy. In other words, collegiate head and assistant coaches believed they were “born” to coach and need little training (Chase et al., 2004). Examination of developing high school coaches could prove a valuable addition to coaching education literature and understanding of the coaching development process.

This study examined several additions to this framework of research that could aid in a more comprehensive understanding of how coaches develop effective feedback strategies. First, insight into subtle shifts in feedback type due to contextual effects could prove to be beneficial. As previously discussed with coaching efficacy, these contextual effects such as time of season, outcome, and uncontrollable events could greatly impact the feedback patterns of coaches. To accomplish this understanding, a season-long investigation of several developing coaches as case studies provided depth and breadth of knowledge. While a small sample may seem problematic, the use of both extensive observation and a case study design in the analysis support this framework (Gallimore & Tharp, 2004; Tharp & Gallimore, 1976; Yin, 2003a). Within the field of sport psychology, there has also been a recent call for and use of this research framework (Gilbert & Trudel, 2004; Krane, Greenleaf, & Snow, 1997, Smith, 1988). Secondly, the work of Smith, Smoll, and colleagues as well as Horn (see Horn, 1985; Smith et al., 1977; Smoll et al., 1993) have convincingly examined the effects of coaching feedback on young athletes, but what about the impact of these behaviors on the coaches themselves? How is the type and delivery of feedback influenced by a coach’s cognitive processes (such as efficacy)? Further, investigating shifts in these coaches’ feedback patterns due to both contextual (e.g., season events) or cognitive (coaching efficacy) factors is an important addition to research in youth sports.

Purpose

The purpose of this study was to investigate how coaching efficacy, feedback, and practice behaviors change during different intervals (preseason, season, postseason) of the season, how inexperienced head coaches are affected by season events, such as win or loss streaks, and how coaching behaviors may be affected by a coach's educational and experiential background. Specifically, how are these variables manifested in a developing head coach? Another question is how these changes in coaching efficacy and feedback are perceived throughout the season by the coach and athletes. In order to investigate the interplay of these variables, two research questions were addressed in this study:

1. How do the variables of coaching efficacy, feedback, and practice behaviors change during different intervals (preseason, season, postseason) of the season;
2. How are these changes in coaching efficacy and feedback perceived throughout the season by the coach and athletes?

For this study a developing coach was operationally defined in the following manner:

Developing Coach. A developing coach is defined as an individual who has between one and three years of head coaching experience in a high school varsity setting in the sport. The individual may have more years as an assistant coach but this will be minimized through selection of participants.

CHAPTER TWO

Review of Literature

In organized athletics, a coach plays a variety of roles such as teacher, role model, and leader (Clark, 2001). Throughout a young athlete's development, the impact of significant adults, such as coaches, can have a dramatic influence on young athletes. Because of this potential influence on developing athletes, the behaviors and beliefs of the coach are important areas of investigation. How a coach views his or her ability to impact the sport experience of young athletes could influence that coach's behavior, feedback style, and overall effectiveness. The purpose of this chapter is to discuss and highlight pertinent literature in the role and development of coaches, coaching behaviors, systematic observation of coaches, and coaching efficacy. Specifically, the literature is examined in light of the developing or inexperienced coach. A second purpose of the chapter is to use existing coaching science and sport psychology literature in illuminating the purpose of the present study: to investigate how the variables of coaching efficacy, feedback, and practice behaviors change over the season in a developing coach and how certain season events are perceived by both coach and athletes.

The Role of Coaching

Understanding the role of the coach has become a major area of research within the study of sport pedagogy. Because of this focus, a body of literature examining both the process a coach goes through while developing as well as how this process impacts outcomes such as effectiveness and behaviors has started to emerge (Abraham & Collins, 1998; Cushion, Armour, & Jones, 2003; Douge & Hastie, 1993; Woodman, 1993). How a coach views his or her ability to impact the sport experience of young athletes could

influence that coach's behavior patterns, communication style, and pedagogical techniques. In turn, the range or valence of skill within these traits can affect perceptions of coaching effectiveness by both the coach and athletes (Smith & Smoll, 2002). The ability to simultaneously teach, motivate, plan, execute, and lead a group of learners requires not only an understanding of the role and influence of the coach, but also a belief in one's capability to accomplish these tasks. The confidence that coaches exhibit both internally and externally, through thoughts and behaviors, can greatly impact their overall behaviors throughout a season. Examination of the impact of this belief on feedback type, pedagogical technique, and coaching behaviors could greatly add to the body of knowledge in coaching science. To truly capture the subtle changes in coaching confidence, feedback type, coaching behaviors, and athlete perceptions of the coach, a season-long, systematic observation is advantageous.

The Coaching Profession

The coaching profession has been investigated throughout the sport pedagogy literature. For example, Schinke and colleagues have examined the career stages of elite basketball coaches (Schinke, Bloom, & Salmela, 1995). A follow-up to this study examined the development of communication skills in elite basketball coaches (Bloom, Schinke, & Salmela, 1997). However, to fully understand different types of coaches, it is important to look at the role and occupation of coaching. For example, most students pursuing a career in coaching have benefited from earlier sport participation (Dodds et al., 1991). While this prior experience is invaluable, participation in sports does not necessarily prepare young professionals for the role demands of coaching. Sage (1987, 1989) has described how even though both personal experience with sport and observing

other coaches are beneficial to learning how to coach, most new coaches find their new occupation a shock and are not prepared for the demands placed on them by this new position. For example, numerous studies have identified barriers to novice coaching effectiveness such as inadequate sport knowledge and skills (Weiss, Barber, Sisley, & Ebbeck, 1991), working hours and time demands (Everhart & Chelladurai, 1998), and type of school (Wang & Ramsey, 1998).

Traditionally, novice coaching recruits have come from the ranks of physical education teaching recruits. However, it is important to note that coaching and teaching may not necessarily be analogous roles. Several studies have examined the professional roles of coaching and teaching, finding differences in how teacher/coach recruits viewed the two professions. One line of research found that teaching and coaching were fundamentally different in both task and perception (Chelladurai & Kuga, 1996; Chelladurai, Kuga, & O'Bryant, 1999). For example, undergraduate students found coaching to provide a greater variety of job offerings while teaching provided one with a greater sense of control over his or her occupation (Chelladurai et al., 1999). While coaching and teaching may have some different roles and responsibilities, teacher preparation has transferable skills that some other professions may not (e.g., developing a practice/lesson plan, developing learning objectives, analyzing needs of student-athletes). This interplay of professional preparation and coaching is interesting when scholastic sports organizations are reporting shifts in those coaches who are faculty members and contract-hire coaches; schools are starting to hire a majority of contract-hire coaches (J.R. Johnson, personal communication, October 7, 2005). Attention towards this shift in the predominance of the teacher-coach is even more imperative when one considers the

impact of differing education on coaching knowledge. Stewart and Sweet (1992) have reported that as many as 2.5 million of the 3 million coaches in this country have no formal training in sport science. While this may be an alarming statistic, it draws consideration to how the type of educational experiences that coaches have coming into the profession affect the roles and barriers previously discussed.

Coaching Development

Coaching science literature has devoted much time studying the elite or expert coaches in order to glean “best practices” for coach effectiveness. For instance, Bloom and Salmela (2000) examined personal characteristics of elite coaches and found these experts possessed a strong desire for constant growth, learning, and development in their respective sport. Research has also investigated expert coaches’ perceptions of the importance of mentoring (Bloom, Durand-Bush, Schinke, & Salmela, 1998), team-building strategies (Bloom, Stevens, & Wickwire, 2003), pre- and postcompetition routines (Bloom, Durand-Bush, & Salmela, 1997), as well as impact of sport knowledge on effectiveness (Hardin, 2000; Jones, Armour, & Potrac, 2002; Saury & Durand, 1998). Professional characteristics of experienced coaches have also been compared to that of inexperienced coaches in several studies (Ahlgren, Housner, & Jones, 1998; Griffey & Housner, 1991; Jones, Housner, & Kornspan, 1995). In one study (Jones, Housner, & Kornspan, 1997), coaches were given time to plan a 30-minute practice session. During the practice session experienced coaches provided more technical instruction while inexperienced coaches exhibited more silence during the actual practice session. Inexperienced coaches also exhibited more behaviors not relating to the practice session (Jones et al., 1997). While these studies provide interesting contrasting behaviors

between experienced and inexperienced coaches, more research needs to be done in this area of sport pedagogy and coach development.

Much research has investigated coaching development and the process of becoming a competent and effective coach (e.g., Jones et al., 2002; Potrac, Brewer, Jones, Armour, & Hoff, 2000). Several interesting case studies have also examined the process a coach goes through as he or she is navigating the barriers and unforeseen obstacles of a season (De Marco, Mancini, & Wuest, 1997) or reflecting on a career in coaching (Templin, Sparkes, Grant & Schempp, 1994). The present study adds to the current knowledge base in several distinct ways. First, while most of the coaching science literature has focused on expert or elite coaches, this study examines the characteristics and behaviors of inexperienced coaches. Through both quantitative analysis of practice behaviors and coaching efficacy as well as qualitative analysis of coaches' reflections of the seasons, a better understanding of what inexperienced coaches go through in one of their first years is examined. Secondly, this examination of inexperienced coaches takes place over the course of an entire season, investigating possible shifts in both coaching efficacy and practice behaviors. Knowledge of these shifts could aid researchers and coaching educators in better understanding obstacles and concerns of these novice coaches.

Coaching Behaviors

The behaviors that a coach exhibits during a practice session can greatly impact how the coach is perceived by his or her athletes. Further, coach-athlete interactions during these practice sessions have been linked to coaching effectiveness (d'Arripe-Longueville, Fournier, & Dubois, 1998; Schempp et al., 2004), and overall compatibility

of coaches and athletes (Horne & Carron, 1985; Kenow & Williams, 1999). It is important to understand the scope and valance of coaching behaviors that are exhibited during instruction and learning. Within the sport psychology literature, coaching behaviors have been associated with numerous outcomes that impact not only coach-athlete interactions, but the entire sport experience for members of the team and coaching staff.

Coaching behaviors are an important, if not the most important, determinant of effectiveness in instruction and associated outcomes in athletes. On a fundamental level, Stewart (1993) states:

Behavior is the “window” to the true philosophy of any coach. While most coaches can talk a “good game”...the real answer to what type of coach and person we are is the specific behaviors we exhibit in game situations or behind closed practices (p. 23).

While it is quite accepted that a coach acts as a model of instruction during practice (Hodges & Franks, 2002), Stewart raises an interesting point: a coach’s behaviors during interactions with athletes may knowingly or unknowingly influence athletes’ perceptions of the coach. Behaviors are a crucial part of a coaching philosophy; however, this raises concern for an inexperienced or developing coach. At a time when coaching philosophy may not yet be formulated, these coaches may struggle with exhibiting both desired and effective behaviors during practices.

The literature on coaching behaviors has been quite extensive within sport science. Interestingly, studies on coaching behaviors are usually viewed through the perceptions of athletes. Anshel and Straub (1991) found in interviews with both athletes

and coaches an inconsistency between perceived behaviors. While this may raise a concern within the research, it also draws attention to the need for analogous measures of coaching behaviors and attitudes for both coaches and athletes. Coaching behaviors have been found to correlate with group cohesion (Gardner, Shields, Bredemeier, & Bostrom, 1996; Westre & Weiss, 1991), athlete satisfaction (Baker, Yardley, & Cote, 2003; Feltz, et al., 1999; Weiss & Friedrichs, 1986), and athletes' sport anxiety (Baker, Cote, & Hawes, 2000; Kenow & Williams, 1992). These last two studies highlight the impact of coaching behaviors on coach-athlete interaction. Baker et al. (2000), for example, reported that a negative rapport with the coach was a significant indicator of sport anxiety in athletes. This line of research indicates a clear link between coaching behaviors and psychosocial outcomes such as group cohesion, athlete satisfaction, and athletes' sport anxiety.

During practice sessions, a primary behavior exhibited by a coach is the feedback that he or she provides to an athlete; this feedback impacts the learning and development of athletes. Feedback provides athletes with a sense of their ability and skill at a given task (Allen & Howe, 1998; Amorose & Weiss, 1998). Allen and Howe (1998) found that those players who rated coach feedback as incorporating both praise and information reported higher perceived competence in field hockey and a greater satisfaction with the coach. While perceived ability is an important component of satisfaction and efficacy, Solomon and colleagues have found that coaches' feedback may differ based on a coach's expectation for individual players on a team; this gives rise to flexible and differential feedback based on coach perceptions (Solomon & Kosmitzki, 1996; Solomon, Golden, Ciapponi, & Martin, 1998). Sinclair and Vealey (1989) found that

those athletes ranked highly by coaches received more feedback than athletes ranked lower in ability.

An important factor in feedback is the impact of nonverbal communication. It is estimated that roughly 70% of communication is nonverbal in nature (Martens, 2004). This is interesting, considering that most of the previously reviewed articles focused solely on verbal feedback given to athletes by coaches. Crocker (1990) studied the congruency of facial and verbal messages in coaching. Regardless of the actual intent of the message, any negative stimuli, be it facial or verbal, was rated as negative by participants in the study. The lack of attention to nonverbal communication warrants a closer look into nonverbal communication patterns by coaches when providing feedback to athletes.

The impact of time on feedback has been found to be an important determinant in the effectiveness of instruction and performance (Curtner-Smith, Wallace, & Wang, 1998, 1999). For instance, using the Physical Education Teacher Assessment Instrument Curtner-Smith et al. found changes in coaching feedback over the course of the season. Specifically, high school basketball coaches were found to begin the season focused on skill development and exhibit more strategy feedback as the season progressed. Further, these coaching behaviors were related to athlete performance. Immediate coaching feedback has also been found to be negatively associated with the amount of practice and repetition of skills in archery (van der Mars, Darst, & Sariscsany, 1991). Feedback has also been found to differ based on situation and setting; coaches spend more time on instruction and organization during practice and provide more encouraging remarks during competition (Wandzilak, Ansorge, & Potter, 1988).

The present study extended the current literature on coaching behaviors and feedback in several ways. First, there has been little investigation to date on how educational background is associated with behaviors of coaches. Specifically, is there a difference in regards to behaviors between faculty and contract-hire coaches in high school athletics? Secondly, this study provides a season-long investigation of both verbal and nonverbal feedback provided by coaches. This investigation also illuminates the changes in behavior by developing high school coaches during the season.

Systematic Observation of Coaching Behaviors

To better understand coaching behaviors, the field research method of systematic observation has been used in numerous settings. Systematic observation is a technique of observing and recording behaviors using a guideline of predetermined categories (Siedentop & Tannehill, 2000; van der Mars, 1989a). This form of research provides both practitioners and researchers with a tool for analyzing behavior and interpreting pedagogical techniques. Systematic observation has been found to be beneficial as a tool of analysis within sport pedagogy; mainly, recording and analyzing behaviors of teachers and coaches (De Marco, Mancini, Wuest, & Schempp, 1996). Lines of research using different forms of systematic observation instruments (e.g., Coaching Behavioral Assessment System; CBAS; Arizona State University Observation Instrument; ASUOI) have provided both researchers and practitioners a better understanding of trends in coaching behaviors.

One of the first applications of systematic observation within sport science literature was an observation of legendary UCLA basketball coach John Wooden. In this investigation (Tharp & Gallimore, 1976), coach Wooden was observed during the 1974-

1975 basketball season. Educational researchers recorded and categorized his behaviors during practice. In all, 2,326 behaviors were recorded over a period of 30 hours; these acts were categorized into 10 general categories of behavior. Coach Wooden spent the largest amount of observed time giving instructions to his athletes (50.3%). Other behaviors exhibited by coach Wooden included actions such as modeling (both positive and negative), praising, scolding, nonverbal communication, and hustles (verbal statements meant to quicken the pace or stimulate players during practice). Tharp and Gallimore (1976) also noted the interaction of praise, scold, and instruction. Through both verbal statements and nonverbal modeling, coach Wooden would sometimes provide praise, negative modeling, and criticism within a single feedback statement. In a follow-up to this study, Gallimore and Tharp (2004) interviewed John Wooden about his use of behaviors and instruction during practice. Coach Wooden was adamant about his role as a teacher on the basketball court; this is evident by the large amount of time spent on instruction. During this interview, coach Wooden further discussed the interplay of modeling and instruction observed in the earlier study. The examination of his use of modeling and verbal instruction gave invention to the “Wooden” behavior. This sequence of behaviors would start with a scold, followed by positive modeling of desired behavior, then a negative model of the athlete’s attempt, and finally, a positive model of the skill. The observation and development of the “Wooden” not only shows the interplay of both verbal and nonverbal (instruction and modeling) coaching behaviors but also the complexity of effective pedagogy within athletics and skill instruction.

Following the work of Tharp and Gallimore, research using systematic observation has been greatly influenced by the work of Smith et al. (1977) who

developed the Coaching Behavioral Assessment System (CBAS). The CBAS consists of 12 coaching behaviors categorized by both reactive and spontaneous behaviors. Early research with the CBAS (Smith et al., 1977; Smoll et al., 1978) found that there was reliability between coaching behaviors (perceived and actual) and researcher observation of these behaviors. Thus, the CBAS was found to be an appropriate measure of coaching behaviors. To further look at coaching feedback and behavior, player ratings of coach and team were used along with the CBAS observational measure (Smith et al., 1979). In this investigation, little league coaches were placed in either a group that was given Coach Effectiveness Training (CET), in which coaches were taught about positive feedback, providing contingent and information-based responses to players, as well as avoiding punishment or a group that was not given this training. Observation of coaches using the CBAS over a little league baseball season as well as measures of satisfaction by the athletes revealed the effect of the CET. Athletes who played for coaches who received CET reported more enjoyment with their season and liking their coach and teammates more than the players who had coaches not receiving CET. Further, those children who started the season with lower self-esteem and played for a coach receiving CET showed a greater increase in self-esteem over the season than those with lower self-esteem playing for the control group coaches. Throughout the season, trained coaches provided more technical instruction, mistake-contingent instruction, positive encouragement, and lower levels of punitive behaviors than non-trained coaches.

A study of basketball coaches (Smith, Zane, Smoll, & Coppel, 1983) used the CBAS and measures of self-esteem and enjoyment used in previous research (Smith et al., 1977; Smoll et al., 1978) to investigate satisfaction with the season. In this

investigation, coaches in a youth league were chosen at random to be observed during games. Coaches who displayed behaviors and provided feedback that included more technical instruction, mistake-contingent encouragement/instruction, and positive encouragement were better liked by their athletes and these athletes reported more satisfaction with their season. This study supported previous research findings while concluding that even without Coach Effectiveness Training, coaches who utilize a positive approach to coaching are preferred by their athletes.

One of the most compelling results of these early studies of Smith, Smoll, and colleagues was the effect of coaching interactions on self-esteem. Smith and Smoll (1990) have discussed how those athletes who reported low self-esteem at the beginning of the season were greatly affected by coaches who were trained in “positive” coaching. In a study similar to earlier work, Smoll et al. (1993) found that, again, self-esteem was greatly influenced by coaching styles that included positive encouragement, technical instruction, and low levels of punishment. The findings showed that athletes who reported low self-esteem had great regard and liking for their coach as well as a sense of satisfaction with the season.

This type of coaching style has also been found to affect attrition rates in youth sports as well. Following an earlier study (Smoll et al., 1993) it was found that those athletes who played for an untrained coach reported an attrition rate of 26% whereas those athletes playing for a CET trained coach reported rates of only 5% (Barnett, Smoll, & Smith, 1992). These findings corroborate the effect of positive coaching behaviors and coach-athlete interaction on keeping youth active in sports.

While the CBAS has been widely accepted and popular in the sport psychology literature, other investigations of coaching behavior using systematic observation have added to the understanding of sport pedagogy. Influenced by the seminal work of Tharp and Gallimore (1976), Bloom and his colleagues developed a modified behavior recording instrument including revised behaviors of technical instruction, tactical instruction, general instruction, and humor (Bloom et al., 1999). The researchers used this revised instrument to observe coach Jerry Tarkanian over the course of a collegiate basketball season. As with John Wooden, coach Tarkanian exhibited instruction (tactical) as his highest observed behavior (29%). Along with tactical instruction, hustles and technical instruction, 16% and 14% respectively, comprised the coach's highest three observed behaviors. Systematic observation has also been used to examine coaching behaviors in other populations such as youth football (Seagrave & Ciancio, 1990), ice hockey coaches (Seaborn et al., 1998), ice hockey referees (Trudel, Cote, & Sylvestre, 1996), and practice and game behaviors of youth soccer coaches (Wandzilak et al., 1988).

An important addition to the use of systematic observation in sport pedagogy occurred with the creation of the Arizona State University Observation Instrument (ASUOI; Lacy & Darst, 1984; 1989). Inspired by previous observations of coaches practice behaviors (e.g., Dodds & Rife, 1981; Tharp & Gallimore, 1976) Lacy and Darst created an observation instrument focused on teaching or instructive behaviors. This instrument consists of 14 original behavior categories; use of first name, preinstruction, concurrent instruction, postinstruction, questioning, physical assistance, positive modeling, negative modeling, hustle, praise, scold, management, uncodable, and silence. Unlike the CBAS however, these behaviors are not categorized by either reactive or

spontaneous behaviors of a coach. The ASUOI is collected in the same manner as previously discussed literature, with two or more researchers observing and recording an individual's behaviors during a predetermined duration of time. However, one addition made by this instrument is its versatility; it can be recorded and analyzed in two distinct ways. First, behaviors can be recorded using an event recording procedure. This method, traditionally used with instruments such as the CBAS, consists of totaling each behavior with the use of tally marks and calculating the rate per minute (RPM) and percentage of each behavior. Interval recording, however, consists of observing behaviors and recording a discrete behavior for a predetermined segment of time (usually 5-10 seconds). This procedure allows for analysis of timing during the observation session and the recording of silence. Neither of these examinations of behaviors are available with event recording procedures. The ASUOI has been analyzed using both the event recording and interval coding procedures within sport pedagogy research.

The ASUOI has been used in an extensive line of research examining coaching behaviors in numerous populations. Specifically, the ASUOI has been used to investigate behaviors of winning high school football coaches (Lacy & Darst, 1985), winning tennis coaches (Claxton & Lacy, 1986), elite women's soccer coaches (Vangucci, Potrac, & Jones, 1997), collegiate volleyball coaches (Lacy & Martin, 1994), teaching versus coaching behaviors of physical education teachers (Jones, Potrac, & Ramalli, 1999), and an examination of behavior differences in more and less successful tennis coaches (Claxton & Lacy, 1988). This last study is of note because the methodology employed both the event and interval recording procedures. Results of the event recording indicated that less successful coaches (records of winning less than 50% over the previous three

years) used postinstruction and praise twice as often as more successful tennis coaches (records of winning 70% or higher over the previous three years). These coaches also engaged in less questioning of athletes during practice. When the behaviors were analyzed using interval recording, it was also found that more successful coaches engaged in silence and management more than less successful coaches. However, the interval analysis revealed that the more successful tennis coaches exhibited these behaviors in shorter durations of time compared to the other group. The use of more praise by less successful coaches is an interesting finding; however, the researchers did not record if this praise was either accurate or skill-dependent. Lacy and Goldston (1990) observed male and female high school basketball practices during two phases of the season: preseason phase and inseason phase. Verbal instruction (pre-, concurrent, and postinstruction) accounted for the majority of all coaching behaviors across genders and both phases of the season. Female coaches displayed more praise and hustle behaviors than the male coaches over the course of the season. Female coaches also used first names more, especially in preseason, than male coaches. Finally, male coaches displayed more modeling and questioning behavior than female coaches. This study examined not only the gender of the coach but how behaviors differ during specific times of the season.

Systematic observation has been shown to be a valuable and reliable tool for recording and examining coaching behaviors in a sports context. While the Coaching Behavioral Assessment System (CBAS) and Arizona State University Observation Instrument (ASUOI) are arguably the two most popular tools in this line of research, several key factors differentiate the instruments. First, the CBAS does not take into account a coach's nonverbal communication (e.g., modeling, physically assisting athletes

with movements) while the ASUOI assesses behaviors such as positive and negative modeling and physical assistance. Further, the ASUOI (using the interval recording procedure) provides the opportunity to observe the amount of silence exhibited by a coach. Using the CBAS in an event recording manner does not take into account at what time of the session a behavior occurred or the duration of the behavior. For example, with event recording a 5-second scold and 20-second scold would both be recorded as simply one discrete behavior, discounting the duration or length of the observed behavior. Using the ASUOI with an interval recording method was warranted for the purpose of this study. Understanding the patterns and changes in behavior over the course of the season can be accomplished with this instrument and data collection method. Further, the ASUOI provided insight into nonverbal communication and silence exhibited by the coach. The interval method allows for analysis of time during the practice and duration of behaviors. In keeping with the research questions of the present study, the ASUOI provided the researchers with more accurate data and insight into duration and type of verbal and nonverbal communication.

Self-Efficacy and Coaching Efficacy

How an individual views or judges his or her ability to perform a certain skill is an important determinant in sport as an achievement domain. Bandura's (1977) self-efficacy theory helps in explaining this cognitive appraisal process. Self-efficacy is defined as one's belief in his or her ability to perform a task (Bandura, 1977, 1986). While self-efficacy will later be shown to have a relationship with performance, this construct is a person's judgment that may or may not be accurately congruent with performance outcomes. Bandura argues that this cognitive view of one's ability, i.e., self-

efficacy, could help to explain a wide array of facilitative or debilitating behaviors in performance (Bandura, 1982). Bandura posits four sources of self-efficacy: performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal. These sources of self-efficacy influence one's expectations about performance on the task. The interplay of these four sources and the influence on expectations leads to an individual's behaviors towards and cognitions about one's ability. In essence, the information that one possesses from internal and external sources about ability directly relates to not only the consequences of the performance but how he or she views success or failure on a task (Bandura, 1977).

Because of its explanatory nature of performance and cognitive judgments (Bandura, 1982), self-efficacy has greatly influenced sport psychology literature. Feltz (1982, 1988) has examined the impact of self-efficacy on performance on a high avoidance motor task (back-diving). She found that past performance was the primary indicator of overall performance and that gender differences were found in the relationship between self-efficacy and performance (Feltz, 1982; 1988). McAuley (1985) examined the impact of modeling on self-efficacy in learning a gymnastic skill. Students were provided with either aided participant modeling (providing physical assistance), unaided participant modeling (with only verbal description), or only shown a short instructional film of the skill. Those students receiving modeling and physical assistance provided higher efficacy scores for the skill and performed better than those in the control group. These early studies (Feltz, 1982, 1988; McAuley, 1985) began to show the link between one's self-efficacy and performance as well as the use of the self-efficacy theory within the sport psychology literature.

The theory of self-efficacy has been used in numerous studies to explain determinants of performance in a variety of achievement domains. Specifically, the self-efficacy/performance relationship has been examined in regards to tennis (Barling & Abel, 1983), baseball (George, 1994), equestrian (Beauchamp & Whinton, 2005), as well as the motivation to continue participation (Schunk, 1995), and conception of ability with gender (Lirgg, George, Chase, & Ferguson, 1996). A meta-analysis review of literature related to the self-efficacy/performance relationship found that the correlation between self-efficacy and performance was .38 over 45 studies examining this relationship (Moritz, Feltz, Fahrbach, & Mack, 2000).

While a substantial line of research has investigated the relationship between self-efficacy and performance, a recent addition to this investigation is the construct of *coaching* efficacy. Coaching efficacy is defined as the extent to which coaches believe they can affect the learning and performance of athletes (Feltz et al., 1999). Feltz and colleagues have developed a conceptual model of coaching efficacy containing four coaching efficacy dimensions: game strategy, motivation, teaching technique, and character building. To test these dimensions of coaching efficacy, Feltz et al. (1999) constructed the CES. High school coaches representing multiple sports were used for an exploratory factor analysis of a 41-item efficacy instrument for coaches. A second sample of coaches was then given a revised version of 24-items for the confirmatory factor analysis. Through further reliability testing it was found that coefficient alphas with test-retest coefficients were between .88 and .77 for character building, .89 and .78 for technique, .91 and .83 for motivation, and .88 and .84 for strategy; these four factors resulted in a coefficient alpha of .95 to .82 for the CES (Feltz et al., 1999).

A second phase of this initial study (Feltz et al., 1999) was to examine the sources and outcomes of coaching efficacy. For this study, 30 high school coaches (15 scoring the highest CE and 15 scoring the lowest CE out of an initial pool) were assessed during several practice sessions using the CBAS (Smith et al., 1977). A post-season questionnaire was also given to coaches and athletes assessing commitment and satisfaction respectively. Results of the questionnaires found sources of coaching efficacy to be win-loss record, years of experience, perceived team ability, and support of community and school (See Figure 1). This study also found that reported coaching efficacy was associated with several outcomes; high-efficacy coaches had higher winning percentages, were more satisfied with players, and exhibited more “positive” coaching behaviors during practice such as contingent praise and encouragement. Those coaches reporting lower coaching efficacy provided more instruction and organizational behaviors during practice. This seminal work examining a coach’s sense of efficacy and its relationship to sources and outcomes of efficacy has produced a fruitful line of research.

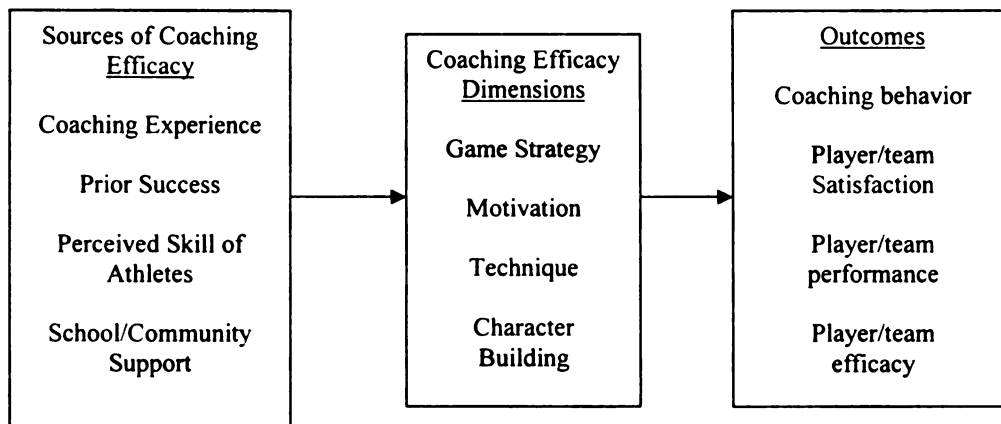


Figure 1. *Coaching Efficacy Model (Feltz et al., 1999).*

With the development of the CES (Feltz et al., 1999) a line of research has examined how a coach’s efficacy impacts numerous factors within sport. Specifically,

coaching efficacy has been examined with regards to the interplay of coaching, team and player efficacy (Vargas-Tonsing et al., 2003), predicting leadership style (Sullivan & Kent, 2003), and commitment (Kent & Sullivan, 2003), as well as the impact of certification and educational programs on efficacious beliefs (Lee, Malete, & Feltz, 2002; Malete & Feltz, 2000). What is surprising about the original coaching efficacy model (see Figure 1) is that the list of proposed outcomes of coaching efficacy did not include coaching satisfaction. It stands to reason that overall satisfaction with the experience would be a positive outcome of efficacious beliefs. Paiement (2006) examined coaching satisfaction in relation to coaching efficacy. He found that both coaching experience and social support were predictors of coaching satisfaction. Therefore, a revision of the original coaching efficacy model would include satisfaction as an outcome. Further investigation into how coaching efficacy and behavior are perceived by, and influence, both coaches and athletes has elicited several interesting findings. An examination into sources of coaching efficacy with collegiate coaches found social support to be a stronger source of efficacy for female coaches compared to males and gender of coach compared to gender of athletes mediated outcomes of efficacy (Myers, Vargas-Tonsing, & Feltz, 2005). An investigation into efficacy-enhancing techniques found that coach and team behaviors such as instruction, acting confident, and positive self-talk influenced efficacy. However, coaches and athletes were not found to be congruent in their perceptions of use and frequency of these techniques (Vargas-Tonsing, Myers, & Feltz, 2004).

Within this line of coaching efficacy research a comparison between coach and athlete perceptions of coaching efficacy has been limited. Short and Short (2004) examined how football players perceived the coaching efficacy of their position coach at

the end of the season as compared to the efficacious beliefs of the coaches themselves.

While most coaches rated themselves higher than their respective athletes, perceptions of coaching efficacy were similar between athletes and coaches. While this study examined both coach and athlete perceptions, further examination into shifts and reasons for similar or dissimilar perceptions is necessary in understanding the effect of coaching efficacy on performance and team climate.

One study that examined coaching efficacy at differing points of the season addressed the relationship of coaching efficacy and coaching burnout in high school basketball coaches over a season. Haugen, Short, Brinkert, and Short (2004) found coaching efficacy and coaching burnout to be negatively correlated across the season. Further, coaches had a higher sense of burnout and lower coaching efficacy at the end of the season. While this study investigated coaching efficacy changes at the beginning and end of the season and its association to burnout, it did not take into account shifts of efficacy throughout the season or the events that influenced these scores.

An interesting extension of the CES has been the development of the Coaching Competency Scale (CCS; Myers, Feltz, Maier, Wolfe, & Reckase, 2006). The purpose of this instrument is to assess athletes' evaluative perceptions of a coach's behavior, judging the coach's competence in the areas of coaching efficacy. This scale is analogous to the CES; it is a 24-item scale assessing 4 subscales (motivation efficacy, game strategy, character building, and teaching technique). Instead of the CES question stem, "How confident are you in your ability to...", the CCS asks athletes to score their coach's competence with the stem, "How competent is your head coach in his or her ability to..." Athletes respond to items such as "understand competitive strategies" (game

strategy competence); “motivate his/her athletes” (motivation competence); “develop athletes’ abilities” (technique competence); and “instill an attitude of respect for others” (character building competence). Myers et al. (2006) provided initial validity for this instrument with a sample of intercollegiate men’s and women’s ice hockey and soccer teams, finding that the CCS can be used to gain further knowledge of athletes’ evaluations and perceptions of coaching behaviors.

The present study extended current knowledge in coaching efficacy in several ways. First, in keeping with the research questions, coaches were assessed over the course of the season; this will aid in understanding how efficacy changes over the course of the season instead of taking one or two measurements as most studies have done. This season-long approach allowed for coaches to rate efficacy beliefs at milestones during the season, specifically, beginning, middle, and end of season. To date, no study has investigated efficacious beliefs of developing or inexperienced head coaches. This study provided, at least at the case study level, an understanding of these coaches’ changes in efficacy over the course of a season. Finally, this study used both the CCS and CES to gauge not only coaching efficacy but athletes’ sense of coaching competence. This is an important addition to knowledge in coaching efficacy because it provides, not only further validation for the CCS, but a richer understanding of how both coaches and athletes view a coaches’ perceived and actual efficacious beliefs over the season.

Summary

This chapter has discussed the pertinent literature in coaching development and impact of coaching behaviors on both coach and athlete. While numerous studies have investigated the behaviors of expert coaches (e.g., Jones et al., 2003; Schinke et al., 1995;

Tharp & Gallimore, 1976), few studies have examined the development of coaches during one of their first seasons as a head coach. Further, while research has shown the importance of a coach's efficacious belief on numerous outcomes (e.g., Feltz et al., 1999), few have examined the impact of efficacy throughout an athletic season. Finally, research using systematic observation has provided invaluable insight into coaching behaviors (e.g., Claxton & Lacy, 1988; Lacy & Goldston, 1990). Using this research method along with assessment of coaching efficacy and coaching competency as well as qualitative inquiry into perceptions of the season could provide a comprehensive understanding of the developing coach.

CHAPTER THREE

Research Design and Methods

Participants

Participants for this study were 3 high school varsity lacrosse coaches and their respective teams. All lacrosse programs were in the first year of varsity status but had previously sponsored club status programs. Coach 1 was a 29-year-old Caucasian male beginning his first season as a high school coach of any kind. Team 1 consisted of 26 male athletes (25 participated in the study) with an average age of 17.2 years ($SD = .89$); 96% of the team members reported Caucasian ethnicity and 1 athlete reported Asian/Pacific Islander ethnicity. Athletes on this team had an average of 1.8 ($SD = .41$) years of experience with the club lacrosse program. Coach 2 was a 46-year-old Caucasian male beginning his third season as a high school lacrosse coach and first year as a head varsity coach. Team 2 consisted of 24 male athletes (22 participated in the study) with an average age of 17.1 years ($SD = .85$); 100% reported Caucasian ethnicity. Athletes reported an average of 1.8 ($SD = .38$) years of experience with the club lacrosse program and this head coach. Coach 3 was a 31-year-old bi-racial female beginning her third season as a high school lacrosse coach and first year as a head varsity coach. Team 3 consisted of 23 female athletes (19 participated in the study) with an average age of 16.5 years ($SD = .69$); 95% reported Caucasian ethnicity, while one athlete did not report ethnicity. Athletes reported an average of 1.95 years ($SD = .23$) of experience with both the club lacrosse program and this head coach.

Instrumentation

Demographic Questionnaire. A demographic questionnaire was distributed to coaches who served as participants in the study (see Appendix A). General demographic information such as age, gender, and race was collected as well as more specific information regarding education background (e.g., education level and emphasis, certifications, workshops). Athletes were also given a demographic questionnaire in order to collect descriptive information about the sample (e.g., race, ethnicity, playing experience) (see Appendix B).

Coaching Efficacy Scale. The Coaching Efficacy Scale (CES; see Appendix C) is a 24-item scale designed to measure a coach's perception of coaching efficacy and the four subscales that comprise the model of coaching efficacy: game strategy efficacy (GSE), motivation efficacy (ME), teaching technique efficacy (TE), and character building efficacy (CBE) (Feltz et al., 1999). A 10-point Likert scale ranging from "not at all confident" (0) to "extremely confident" (9) was used to assess coaching efficacy. Each scale item began with the stem "How confident are you in your ability to..." Examples of questions are "How confident are you in your ability to motivate athletes?" (ME); and "How confident are you in your ability to maximize your team's strengths during competition?" (GSE). Feltz et al. (1999) reported coefficient alphas of .88, .89, .91, and .88 for the subscales of character building, technique, motivation, and game strategy, respectively.

Coaching Competency Scale. The Coaching Competency Scale (CCS; Myers, et al., 2006; see Appendix D) is a 24-item scale that measures athletes' perceptions of their coach's competency as well as four subscales that comprise coaching competency: game

strategy (GSC), motivation (MC), technique (TC), and character building (CBC). This measure is analogous to the Coaching Efficacy Scale (CES; Feltz et al., 1999). For the present study a 10-point Likert scale ranging from not at all confident (0) to extremely confident (9) was used to score coaching competency as assessed by athletes. Each scale item began with the stem “How competent is your head coach in his or her ability to...” Examples of questions are “How competent is your head coach in his or her ability to build the self-esteem of his/her athletes?” (MC); and “How competent is your head coach in his or her ability to adapt to different game situations?” (GSC).

Observation Instrument. The Arizona State University Observation Instrument (ASUOI; Lacy & Darst, 1984; Lacy & Goldston, 1990) was used for the observational component of this study. The ASUOI assesses 14 behaviors (both verbal and nonverbal; see Table 1) recorded in a systematic interval method. This measure was chosen for two reasons: (a) it enables one to accurately assess a combination of verbal and nonverbal behaviors and to establish a systematic observation schedule for the coaches’ behaviors during practice; and (b) the ASUOI records the amount of silence or non-feedback given by the coach. These two instrument characteristics enabled observation of both feedback type and behaviors throughout a practice session. Researchers conducting the video analysis took part in numerous training sessions to become familiar with the measure and observer reliability was calculated throughout the season to ensure accuracy amongst the recorders. Three researchers conducted video analysis, two per each team, over the course of the season. The inter-observer reliability over the season was 83.5% which exceeded established standards for interval recording research (Siedentop & Tannehill, 2000; van der Mars, 1989b).

Table 1

Arizona State University Observation Instrument Behaviors and Definitions

Behavior	Definition
1. Preinstruction	Information given before execution of the skill.
2. Concurrent Instruction	Information given during skill execution or play.
3. Postinstruction	Instruction given after execution of skill.
4. Questioning	Questions posed to the athletes regarding any aspect of the sport or skill.
5. Physical Assistance	Physically moving a player through a skill sequence or range of motion.
6. Positive Modeling	Demonstration of correct skill or movement.
7. Negative Modeling	Demonstration of incorrect skill or movement.
8. Hustle	Statements made by the coach intended to produce increased effort.
9. Praise	Verbal or nonverbal signs of appreciation or satisfaction with performance.
10. Scold	Verbal or nonverbal signs of dissatisfaction with performance.
11. Management	Statements regarding details of practice not having to do with skills or play.
12. Uncodable	Behavior could not be distinguished or recorded.
13. Use of first name	Use of first name during verbal interaction. (This is a dependent behavior and is only recorded in combination with other behaviors.)
14. Silence	Silence by the coach.

Interview Guides. Three semi-structured interview guides (See Appendices E-G)

were used. Pre- and post-season interviews were conducted with the coaches. The

preseason interview focused on general coaching beliefs and behaviors, while the postseason interview focused on the subscales of coaching efficacy and on specific observations from the season. A sub-sample of athletes from each team was also individually interviewed postseason. These athletes were chosen based on their overall CCS responses over the season; those interviewed represented varying scores over the season. Post-season interviews used specific examples obtained from different events during the season to capture athlete perceptions of contextual feedback and behaviors. Further, coaches and athletes were asked about their individual patterns of responses to CES and CCS scores across the season. The semi-structured nature of these interviews was designed to facilitate the use of probes and follow-up questions when appropriate (Patton, 2002).

Procedures

After the Institutional Review Board gave approval for the project (see Appendix H), the lead researcher contacted high school athletic directors within one conference to solicit names of coaches of team sports who had less than 3 years of scholastic coaching experience. Coaches identified as meeting the experience criteria were then contacted with permission of the athletic directors. Coaches were telephoned or emailed and given a description of the study, their level of responsibility if participating in the study, the purported benefits of participating, and their level of interest in participating was ascertained. If the coaches were willing to participate, they were emailed further information about the project and preliminary materials (Consent Form, Demographic Questionnaire, and CES). Keeping with the research design, it was desirable to have participants with the same amount of experience but different educational backgrounds.

In all, 7 coaches were contacted via email or telephone call, 3 were sent further information and preliminary materials, and those 3 agreed to participate in the study for the duration of the season. These coaches all had less than 3 years of varsity head coaching experience and represented different educational backgrounds (education, business, and social work).

Participants chosen as case studies were observed for the entire athletic season. Before the season, coaches were interviewed (preseason interview) and assent/parental consent was obtained for athlete participation (see Appendices I-K for all consent/assent forms). In all, 20 practices were observed over the course of the season (Team 1, 6; Team 2, 7; Team 3, 7). Observational field notes and video/audio recordings of the practices were compiled during the practices by two trained observers. During practice, the coach was videotaped and audio-taped via a lapel microphone and digital voice recorder. This recording process was as unobtrusive to the practice as possible. The camera was located in a position where visual contact was obtainable and interference of practice could be avoided. To aid in this positioning, at the beginning of practice the coach was consulted as to advantageous locations for video and field note recording. Prior to each practice the coach was given the digital recorder and microphone. The coach carried the digital recording device in a small belt pack and the microphone was attached with a lapel clip on his or her shirt or jacket. The recording device was tested at the beginning of and once during the practice at a convenient time for the coach.

At different intervals of the season (preseason, middle of season, post/end of season), the CES and CCS were given to both coaches and athletes, respectively. For this, the coaches were contacted and asked to provide 10 minutes for survey completion at the

beginning of the next practice. The athletes completed the demographic form with the first measure during the season. The coaches were given the CES, usually via email per their request, and completed it within a timely manner. The full CES and CCS were used for the first and last measure of coaching efficacy and coaching competence respectively. For middle of the season measure only the game strategy and motivation subscales were collected for the CES and CCS. With an attempt to collect CES/CCS data several more times throughout the middle of the season, the researchers decided to use a shorter measure to allow more data collection opportunities. It was decided that, out of the 4 CES/CCS subscales, GSE/GSC and ME/MCC would be most likely to change, therefore TE/TC and CBE/CBC would not be used during the middle of the season. Due to the teams' competition and practice schedule, however, only one middle of season collection was possible.

Video and audio data were analyzed using the interval recording method with the ASUOI. The protocol for this methodology followed traditional systematic observation literature (Lacy & Darst, 1989; Siedentop & Tannehill, 2000). Researchers first loaded the audio and video files from the practice onto a computer and the files were synchronized so that both could be viewed/heard simultaneously. The recorders viewed the practice and recorded the behaviors using the interval method. For this, another audio file played along with the practice and every 8 seconds the recorders heard a prompt to "record". At this time they recorded whatever behavior was dominant in the previous interval using a predetermined list of behaviors (see Table 1 for behavior categories). The researchers did not differentiate between behaviors that were reactions to athletes' behaviors or those that were spontaneous. The number assigned to the desired category

was recorded vertically on a grid laboratory sheet (see Appendix L for an example). Each behavior had its own designated number; the use of first name behavior was coded as a dependent behavior and therefore was coded only with other behaviors. Every 5 intervals, the recorders ensured they were synchronized on the grid sheet. Behaviors were recorded for the entirety of the practice. The overall calculated percentages of behaviors were based on the entire time of the practice session.

At the end of the season, coaches and a sub-sample of athletes on their respective teams took part in an individual post-season interview. In all, interviews were conducted with all 3 coaches and 11 athletes (4 from Team 1, 3 from Team 2, 4 from Team 3). These interviews lasted roughly 30-minutes and focused on idiosyncratic perceptions of the season, coaching behaviors, and changes/patterns in measure scores over the season. The interviews were transcribed verbatim by two researchers for analysis. Qualitative interview data were divided based on subjects of the semi-structured interview script. Specifically, quotes were grouped based on the subscales of coaching efficacy and competence (game strategy, motivation, teaching technique, and character building), coach and athlete explanation of their respective scores on collected measures, and views on specific season events. Quotes for these different topics were grouped by two researchers and assertions were developed for support of the themes (Bogdan & Knopp Biklen, 2003). A third researcher served as a reliability check by independently analyzing the data and confirming assertions developed from the data.

CHAPTER FOUR

Results and Discussion

Overview of Data Management

The purpose of this study was to investigate how coaching efficacy, feedback, and practice behaviors change during different intervals (preseason, season, postseason) of the season, how head coaches are affected by season events, such as win or loss streaks, and how coaching behaviors may be affected by a coach's educational and experiential background. More specifically, how are these variables manifested in a developing head coach? Another question was how these changes in coaching efficacy and feedback are perceived throughout the season by the coach and athletes. In order to investigate the interplay of these variables, two research questions were addressed in this study:

1. How do the variables of coaching efficacy/coaching competency, feedback, and practice behaviors change during different intervals (preseason, season, postseason) of the season? and,
2. How are these changes in coaching efficacy and feedback perceived throughout the season by the coach and athletes?

To investigate changes in the study variables across the season, coaching efficacy scores and coaching competency scores as rated by the athletes were collected at the beginning, middle, and end of the season. In order to compare the athletes' sense of their coach's competency with the coach's sense of efficacy (at the subscale level), a series of one-sample t-tests were conducted using the coach's mean score (total efficacy or subscale score divided by number of scale/subscale items) as the test value for comparison. The one-sample t-test was an appropriate statistical procedure because of the

desire to compare one group (mean athlete scores) with a known value (coach score), the coach score having no variance (Howell, 2002). In order to investigate the athletes' changes in perceptions of coaching competency over the season a one-way repeated measures ANOVA was conducted for each subscale (GSC, MC, TC, CBC) within groups by team over the three data collections over the season. Further, practices were observed and practice behaviors of the coach were recorded over the course of the season.

The second research question for this study investigated the perceptions of the coach and athletes with regards to the season, changes in practice behaviors and feedback, and coaching efficacy/coaching competency. Both the coach and selected athletes were interviewed to ascertain their perceptions on these topics. Qualitative interview data were divided based on topics of the semi-structured interview script. Specifically, quotes were grouped based on the subscales of coaching efficacy and competency (game strategy, motivation, teaching technique, and character building), coach's and athlete's explanations of their respective scores on collected measures, and views on specific season events. Quotes for these different topics were grouped and assertions were developed for support of the themes (Bogdan & Knopp Biklen, 2003). See Appendices V-X for qualitative data grouped with assertions for each team. Qualitative interview data are presented based on these themes and assertions in conjunction with the other forms of data to provide a more complete picture of the developing coach.

The results are presented in a case study discussion of three developing coaches. The case study design was influenced by all forms of data in the research framework. Patton (2002) supports this multi-source method of case development, stating that this

process provides a holistic, context sensitive, and layered approach to data analysis. Yin (2003a, 2003b) discusses this analytic strategy for case study development as a way to understand a phenomenon within real-life context, often using multiple sources of evidence. Developing these case studies provides an in-depth understanding of the variables over the course of the season. The frame for this study also allows for a possible pattern-matching approach in investigating the experiences of these coaches across a season. While comparison between three case studies cannot form generalizations of a population, examining these case studies as individual units of analysis can aid in understanding the influence of the variables on coach development.

Overview of Case Studies

The three case studies for this study were high school varsity lacrosse coaches. The sport of lacrosse became an obvious choice while contacting area school systems about appropriate participants. Lacrosse was beginning its first year as a varsity sport sanctioned by the state's governing athletic association; this would also be the first year for a postseason tournament. Of all sports offered by area high schools, lacrosse had the greatest number of inexperienced coaches and teams. Table 2 provides a demographic description of each of the three lacrosse coaches. The names of the coaches and teams have been changed in order to protect confidentiality.

Table 2

Demographic Description of Case Study Coaches

Coach:	Coach 1 -- Mark	Coach 2 -- Rob	Coach 3 -- Jen
Gender	Male	Male	Female
Team	Highland Bears – Boys' Varsity	Oak Hills Tigers – Boys' Varsity	Highland Bears – Girls' Varsity
Ethnic Affiliation	Caucasian	Caucasian	Caucasian & Asian-American
Age in Years	29	46	31
Occupation	Teacher	Business Owner	Social Worker
High School Sport Experience	Soccer, Lacrosse	Hockey	Cheerleading
College Sport Experience	Lacrosse	Lacrosse	Lacrosse (club)
Years Coaching Club Program	0	2	2

CASE STUDY 1

Overview of Coach 1

Mark was the head coach of the Highland Bears Boys' varsity lacrosse program. He was a 29-year-old Caucasian male. He had experience as both a high school and college athlete, playing soccer and lacrosse in high school and varsity lacrosse in college. Mark was beginning his first year as a high school varsity coach and inherited a club program that was three years old. He was assisted by a volunteer assistant coach who attended the first part of the season. After the assistant stopped attending, Mark then conducted practice sessions on his own for the remainder of the year. Mark's educational and occupational background was in education; he was a teacher in the school system in which he coached.

Overview of Highland Bears Practices and Data Collection

The Bears practiced at a local junior high school close to the high school. Both varsity and junior varsity squads practiced directly after school (3:30-5:30 p.m.) but on separate areas of the field. The team was observed for a total of 6 practice sessions over the course of the season, the last practice representing postseason preparation. Measures of coaching efficacy and coaching competency were given three times during the season, representing beginning, middle, and end of season.

Coaching Efficacy and Coaching Competency

Little research has examined how a coach's sense of efficacy changes during a season. Further, no study has examined the relationship between a coach's sense of coaching efficacy and his or her players' perceptions of coaching competency. Since not all subscales of the CES and CCS were collected over the entire season what are

presented are results of coaching efficacy and coaching competency at the subscale level (Game Strategy, Motivation, Teaching Technique, and Character Building). Tables 3-5 show the results of one-sample *t*-tests of the CES/CCS subscales over the season.

In order to investigate the athletes' perception of coaching competency over the season, a series of one-way repeated measures ANOVA were conducted for the different CCS subscale scores. There was no statistically significant difference in athletes' perceptions of coaching competency. The results were: game strategy competency, $F(2,24) = .395, p > .05$; motivation competency, $F(2,24) = .471, p > .05$; teaching technique competency, $F(1,24) = .063, p > .05$; and character building competency, $F(1,24) = .008, p > .05$. These results indicate that there were no statistically significant changes in the athletes' views of the coach's competency when investigated over the length of the season.

Table 3

Team 1-- Beginning of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	<u>Coaching Efficacy</u>		<u>Athletes' Perceived Coaching Competency</u>		<i>t</i>
	<i>M</i>		<i>M</i>	<i>SD</i>	
Game Strategy	6.57		7.62	.89	5.75**
Motivation	6.29		7.19	.87	5.28**
Teaching Technique	7.50		7.90	.71	2.87*
Character Building	7.75		8.33	.75	3.77**

* $p < .05$, ** $p < .005$

Note. The coach's efficacy score was used as the test value in the one-sample *t*-test.

Table 4

Team 1 -- Middle of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	<u>Coaching Efficacy</u>	<u>Athletes' Perceived Coaching Competency</u>		
	<i>M</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Character Building	--	--	--	--
Teaching Technique	--	--	--	--
Game Strategy	5.33	7.73	.98	12.00**
Motivation	4.83	7.16	.84	13.53**

** $p < .005$

Note. The coach's efficacy score was used as the test value in the one-sample *t*-test.

Table 5

Team 1 -- End of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	<u>Coaching Efficacy</u>	<u>Athletes' Perceived Coaching Competency</u>		
	<i>M</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Game Strategy	6.00	7.63	1.30	4.68**
Motivation	5.00	7.35	1.30	6.75**
Teaching Technique	7.00	7.90	1.15	2.95**
Character Building	7.25	8.30	1.07	3.68**

** $p < .005$

Note. The coach's efficacy score was used as the test value in the one-sample *t*-test.

Game Strategy. The subscale of game strategy efficacy (GSE) and game strategy competency (GSC) was measured at the beginning, middle, and end points of the season. Mark followed the same trend in his GSE scores as TCE, decreasing from the beginning of the season ($M = 6.57$) to the middle of the season ($M = 5.33$) and then increasing his

score at the end of the season ($M = 6.00$). The athletes' scores of GSC showed an increase from beginning of the season ($M = 7.62$, $SD = .89$) to the middle of the season ($M = 7.73$, $SD = .98$) and then a decrease to the original score at the end of the season ($M = 7.63$, $SD = 1.30$). Statistical analysis of the GSE and GSC scores found significant differences between athletes' and coach assessment across the entire season. See Tables 3-5 and Figure 2 for scores across the season and one-sample t -test results.

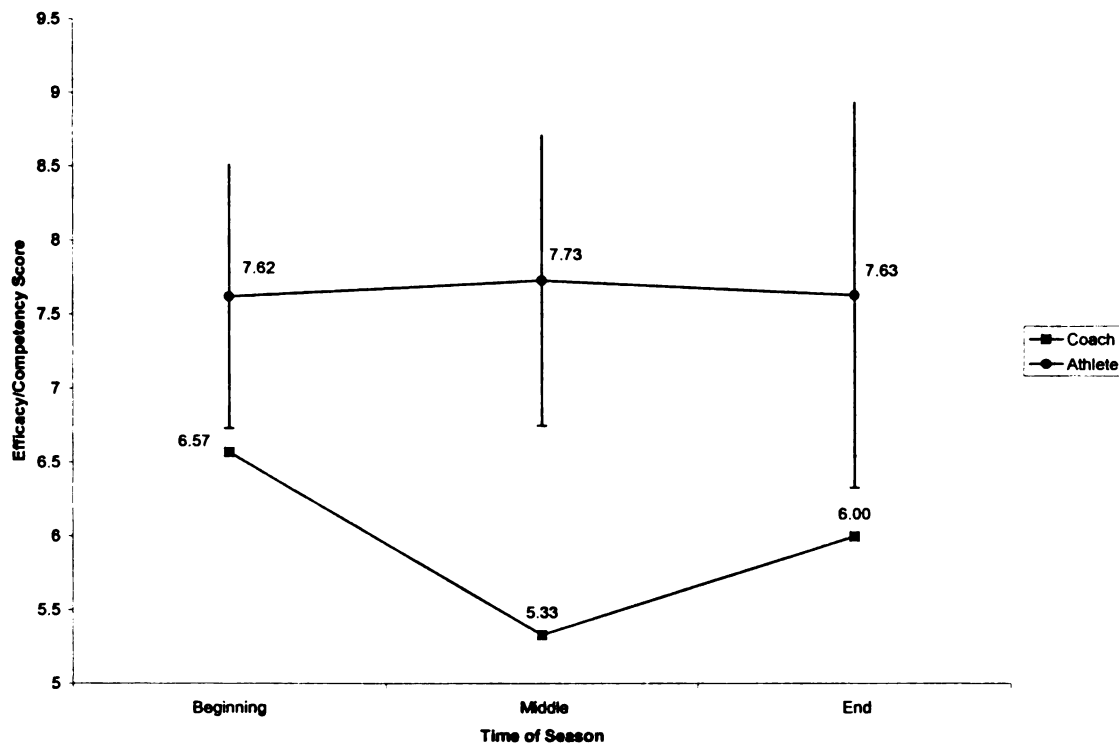


Figure 2. Team 1 – Changes in Game Strategy Efficacy and Game Strategy Competency over the Season.

Note. Vertical lines across Athlete mean scores represent standard deviation.

One of the reasons for the changes in the coach's GSE and GSC scores was the introduction of offensive and defensive plays. During the preseason interview the coach

discussed this strategy for his first year, “My focus is going to be for the most part of this year on getting probably 2 or 3 offensive formations and 2 defenses in there. And working with those and getting the players comfortable with that” (Appendix V, 4). However, the decrease in GSE could have come from the coach becoming frustrated with his inability to strategize during the game due to coaching inexperience:

I think if I was sitting up in the stands and watching things go on, I’d be much better at strategizing. But, so far it’s been hard for me to do it right on the spot. So, what I’m starting to do is, I wrote down a few things like, if this team is playing this kind of offense, then do this on defense. If they’re playing this type of defense, do this on offense (Appendix V, 8).

One athlete echoed this fact that the coach seemed to struggle with game strategy when the team would be losing in a game:

He wasn’t always sure what to do when we got down because he was always used to winning, because he played college and he won then. That was a new experience for him; I could see. I felt bad for him, more than us. When we started losing I think the players felt bad, but you could just see that he wanted to win so badly and he was just ready to win. That was probably the worst part—him not knowing what to do when we’re losing to get us back up (Athlete 1, Appendix V, 23).

The increase in GSC scores at midseason by the athletes could be due to the introduction to a sense of game strategy. While the coach was frustrated with strategy, before this season the players did not even learn any strategy:

I've been playing for 3 years so I know how to play the game, but we learned a lot of plays this year. I've never been involved in lacrosse plays. The program we had before we just didn't do that. So, I learned a lot of that kind of stuff. He taught us positioning, where we should be in certain situations. Things like what we need to do in the off-season to become better lacrosse players (Athlete 3, Appendix V, 220).

By the end of the season, the coach's score increased because he saw that learning of game strategy had occurred by the end of the season. However, the athletes' sense of GSC decreased due to the overall frustration of the season; the team was losing so game strategy, while increasing skill and knowledge, was not effective.

Motivation. The subscales of motivation efficacy (ME) and motivation competency (MC) were measured at the beginning, middle, and end of the lacrosse season. Both coach and athletes followed the same trend of decreasing from beginning to middle of the season and then increasing at the end of season measure. The scores for the coach were beginning of the season ($M = 6.29$), middle of the season ($M = 4.83$), and end of season ($M = 5.00$). The MC scores of the athletes were higher with beginning of the season ($M = 7.19$, $SD = .87$), middle of the season ($M = 7.16$, $SD = .84$) and end of season ($M = 7.35$, $SD = 1.30$). It is also of note that this subscale had the lowest score of the efficacy subscales across the entire season. Results of the two-tailed one-sample t -tests were beginning of the season, $t(24) = 5.28$, $p > .005$, middle of the season, $t(24) = 13.53$, $p < .005$, and end of season, $t(24) = 6.75$, $p < .005$. See Tables 3-5 and Figure 3 for results of ME and MC scores over the season.

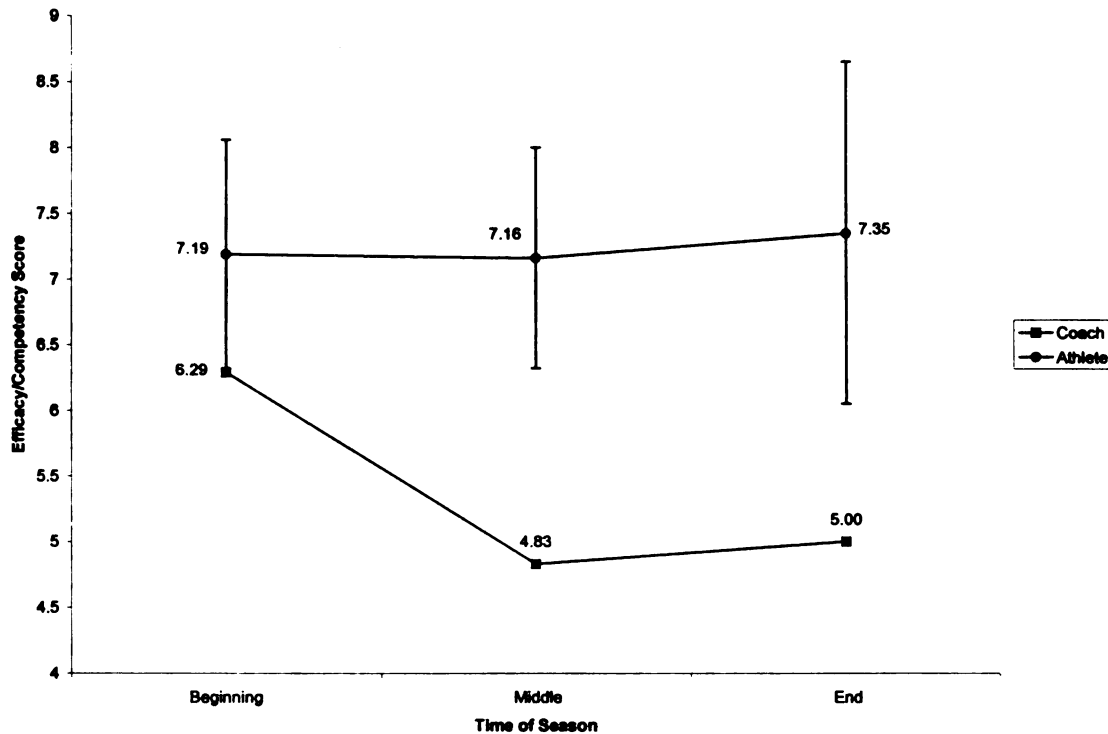


Figure 3. *Team 1 – Changes in Motivation Efficacy and Motivation Competency over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

Based on the middle of the season ME and MC scores, it is evident that the coach struggled with maintaining motivation during the season:

That's probably one of the harder things for me. I try to get them to play for a sense of respect for themselves. You know, everyone go out there and play hard. I think with me, as a player, my motivation came from within. So, I tend to leave a lot of that up to the kids, probably more than I should (Appendix V, 53).

Several of the players discussed how the coach's sense of frustration and tone of voice would actually motivate them to try harder:

You can tell when he gets frustrated or aggravated in his eyes or the tone of his voice. He would call a timeout and talk to the whole team. If that didn't motivate you, then nothing else would have. He'd say to the team, "We're not playing the way we should." You know, how to play better and stop making so many mistakes. If that didn't motivate you, then nothing else would (Athlete 2, Appendix V, 70).

Another athlete recalled the same effect, "And the disappointment tone kind of motivated us. You know, we don't want this, this is his first year. You know we wanted to be successful. He's a nice guy, he's good to us" (Athlete 1, Appendix V, 86).

While motivating the players was a challenge to the coach, he did notice by the end of the season that trying to instill a sense of pride and self-motivation in the team had paid off:

To really see them realize that they can play well and they are capable of success and, to me, that's a great place to be. To have kids who are hungry to be better and know that they can get there. Maybe I'm mistaken, but I feel like that's where most of them are at (Appendix V, 58).

One athlete remarked that, while the season was disappointing, the coach's attempts at motivating the athletes to keep going did pay off, "[The season was] frustrating because we kept losing, but it was fun too because the coach made it fun. He didn't get really down on us like if we were losing the game, he kept trying and trying" (Athlete 4, Appendix V, 102).

Teaching Technique. The CE and CC subscale of teaching technique was measured at the beginning and end of the season. Mark's scores of teaching technique

decreased over the season from $M = 7.50$ at the beginning of the season to $M = 7.0$ at the end of season. The athletes' scores of teaching competence actually did not change over the season with beginning ($M = 7.90$, $SD = .71$) and end of the season ($M = 7.90$, $SD = 1.15$) scores being the same. It is of note that, like all subscales, the standard deviation for teaching technique did increase across the season. One-sample t -tests did reveal that the scores of TE and TC were statistically different at both beginning and end of the season: beginning of the season, $t(24) = 2.78$, $p < .05$ and end of the season, $t(24) = 2.95$, $p < .05$. See Tables 3-5 and Figure 4 for t -test results and changes in TE and TC over the season.

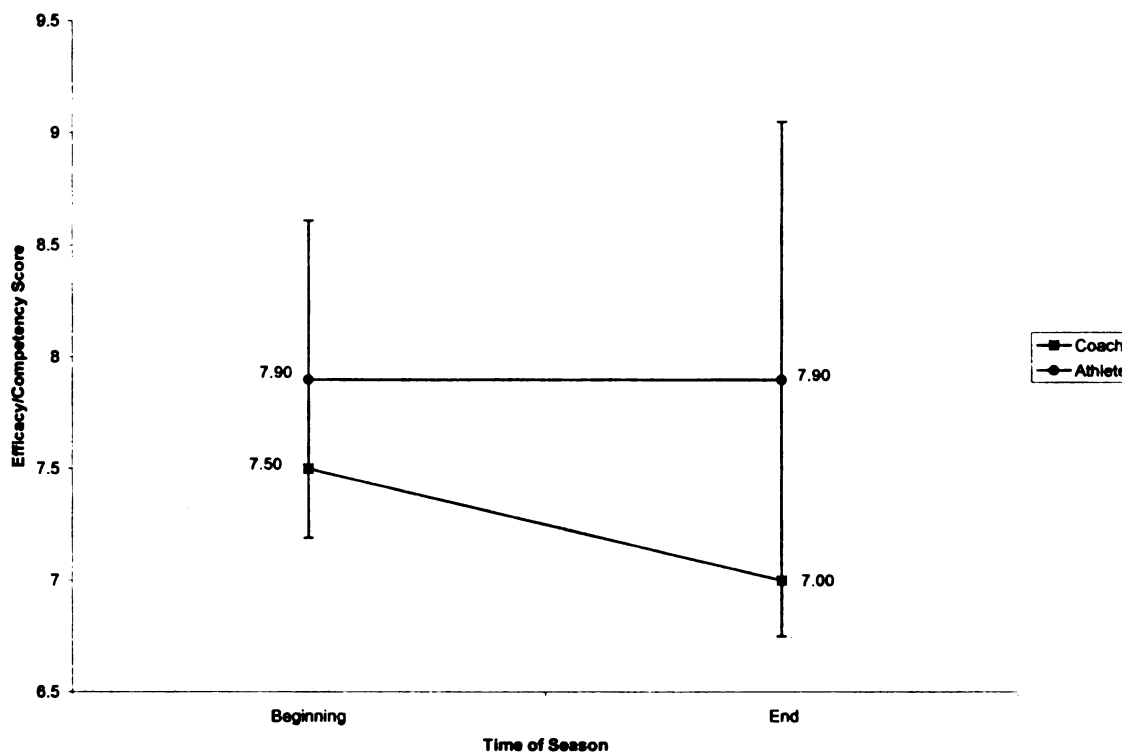


Figure 4. *Team 1 – Changes in Teaching Technique Efficacy and Teaching Technique Competency over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

Being a teacher-coach was important to Mark. He believed that his occupation as a teacher gave him insights into how to effectively teach skills. Further, he saw his role as a teacher in the school system as an opportunity to teach both sport and school discipline. He explained, "I think that if they're going to be a good student of the game, they're going to be a good student in school too. So it's trying to develop both of those aspects" (Appendix V, 110). Mark further explained that he could use management techniques from the classroom on the lacrosse field:

I guess I treat it similar to a class where I only have them doing a certain activity for a certain amount of time, because I've found after that they'll get seriously distracted. Things are only good for 20-30 minutes and then move into something different. And really try to point out things to them that will really make them better players, smarter players. Little things about where they should stand, where they should be looking and really getting them to get a feel for the game (Appendix V, 136).

One of the reasons why Mark's scores on TE decreased over the season could have been the result of how he struggled as a first-year coach. For instance, while he was confident in his role as a teacher, he was unprepared for the level of unlearning that needed to occur:

Definitely the challenges are unlearning things they have learned in the past, because I'm finding that they've been coached by people who don't play the game and don't have a real good understanding of it and that makes it really hard. If you're starting from scratch it's easier to teach them good things but when you gotta go back and unlearn it, it's a real struggle...They think they've played

lacrosse for 3 or 4 years and they've got it. What they're really missing is the basics (Appendix V, 114).

Along with trying to teach correct skills to the athletes, Mark struggled with learning how to teach skills he was unfamiliar with as a player:

I played defense so I'm a lot more comfortable teaching them defensive stuff than offensive stuff. I have stuff that I've printed off the internet because I don't know where they should be. I tell them that and they laugh when I pull out my cheat sheet. That's the kind of stuff that no one ever taught me and most of the people I played with, someone taught them along the way, and you just get comfortable in knowing what you should do in certain situations (Appendix V, 151).

The athletes did point out that sometimes it seemed as if Mark struggled as a first-year coach. While he did bring a wealth of knowledge to these inexperienced players, there were times that he was unsure of how to teach a certain drill or concept:

It was frustrating at times and sometimes it was fun. Frustrating in a sense of, a couple times, he would not know what to do for a couple of people drill-wise. So, we'd be doing the same thing. But, at the same time, we were learning more about the sport than we ever had. He brought that to us and he brought how well he knows the sport to us. So, that was a good thing that he knew the sport and he brought it to us. He definitely tried to make us a better team (Athlete 2, Appendix V, 213).

Another athlete noted his dissatisfaction would be visible when Mark became frustrated during teaching:

His body language. He'd be tense. And then his tone of voice. If it was really, really important, he'd almost get quieter to make sure we'd listen and if it was something we were doing bad, you could just hear disappointment in his voice and that was worse for us than getting yelled at (Athlete 1, Appendix V, 257).

When asked what Mark could do to become a better teacher of lacrosse, the athletes had several suggestions. One athlete spoke about increasing the variety of teaching methods:

Also, coming up with more creative methods of teaching the game and things like that, like I said it was a lot of repetition. We did the same thing over and over again. And that helped because we learned different parts of the game, but once we do learn that and we keep doing it, it's not making us any better. I think we need a couple of more creative areas where we can learn the game in different ways and learn different aspects of the game (Athlete 3, Appendix V, 235).

Another athlete discussed introducing strategy earlier in the season:

Start working on the plays right away, because only about half the guys knew the plays at the end of the season. And start working on those right away and keep the competitive atmosphere in the practice because we didn't do that so much at the beginning of the year and at the end and it really was helping us (Athlete 1, Appendix V, 262).

While Mark did struggle with teaching skills and tactics during the season, several of the athletes pointed out his willingness to teach and help athletes. One athlete mentioned his approach to individualized instruction:

He taught me a lot about the sport and how to play it right...He's able to understand each kid's individual personality and he works with that. He works with kids one-on-one before practice, during practice, and after practice. He does what is comfortable for the kids. If a kid's not getting something, he'll try something else, another way to explain it. So, he understands what he has to do with individual kids (Athlete 2, Appendix V, 195).

Mark seemed to struggle over the season with teaching lacrosse skills and tactics. While his skills as a teacher were evident through setting up practice plans, using short bouts of instruction, and individualized focus, he was not prepared for effectively coaching a team who had inherited poor skills and discipline. He also found it difficult to teach skills that he found innate as a player. It is interesting that, while the players pointed out this struggle, they rated his teaching competency relatively high over the course of the season. Perhaps it was because they could see him trying to improve throughout the season. Several of the athletes did mention that they understood he was a first year coach and accepted that both coach and team were in a learning phase of development.

Character Building. The subscales of character building efficacy (CBE) and character building competency (CBC) were assessed at the beginning and end of the season. Overall, Mark's score of CBE decreased from $M = 7.75$ to $M = 7.25$ over the season. The athletes' decreased slightly from beginning ($M = 8.33$, $SD = .75$) to end of the season ($M = 8.30$, $SD = 1.07$). There were statistically significant differences in perceptions of CBE and CBC at both times of the season. See Tables 3-5 and Figure 5 for two-tailed one-sample t-test results and changes in CBE and CBC over the season.

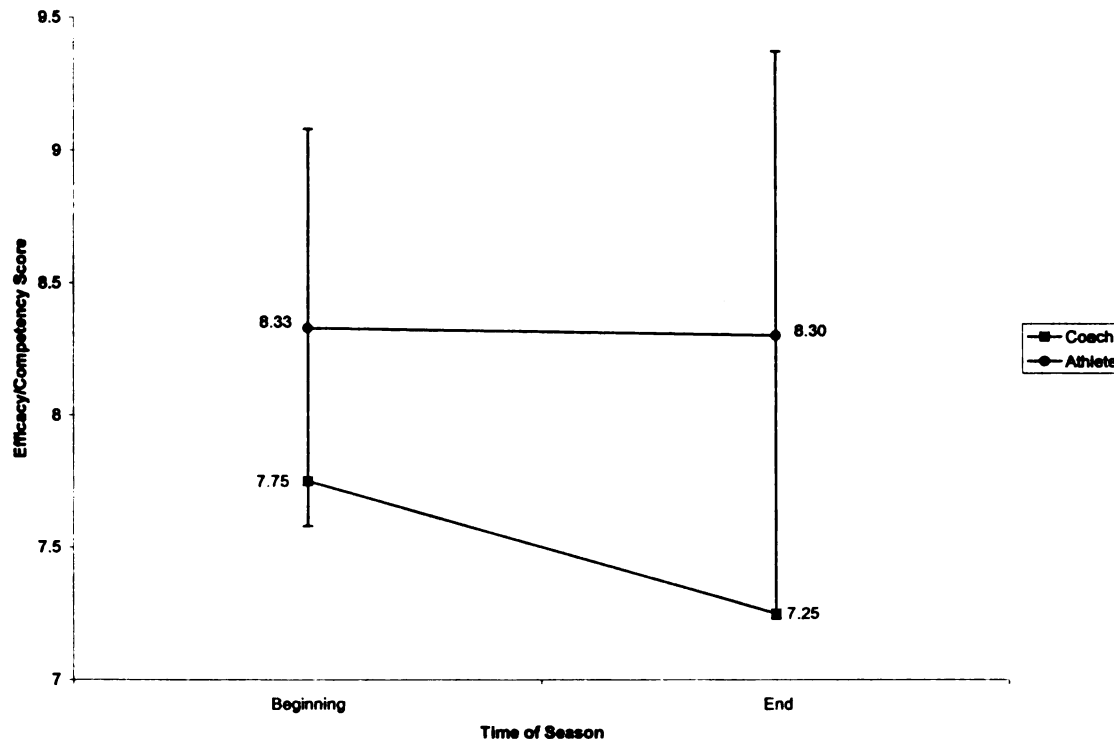


Figure 5. *Team 1 – Changes in Character Building Efficacy and Character Building Competency over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

Mark used lessons from his past coaches to guide his view of developing character in athletes:

When I think back to my coaches, the ones that made an impact on me, were the ones that taught me a lot, but that I also really looked up to them as people -- as far as character, what they do for us, how they treated other people, stuff like that (Appendix V, 291).

For the most part, athletes felt that Mark's demeanor and interaction with them was a positive model of character. One athlete discussed how Mark stressed that lacrosse was a part of their lives and that other priorities were equally, if not more, important:

He's tried making me a better person by the fact that we have to know our responsibilities, either at home or at school and it's not just about athletics or lacrosse, we have other responsibilities. Most of us won't play lacrosse in the future. It's about getting your future prepared and making sure that everything is okay at home first. I mean if something came up with a family member, he makes it so family is more important than the sport. If we tell him that we can't make it, he understands that. Basically, he understands that you need to do the things that you do first, and lacrosse isn't the most important thing (Athlete 2, Appendix V, 314).

One issue that did arise during the season that related to character was developing rules that were fair and consistent. Mark pointed out that this was an issue he struggled with throughout the season:

I think there were times when if a kid got in my dog house, it was hard to get out. Or some of the kids who I think maybe should have been reprimanded, I didn't always do that. It was hard dealing with the personal relationship with kids versus the ones I didn't know; it was easier to be hard on them (Appendix V, 296).

When discussing the coach's management of rules and team structure, one athlete discussed how the coach's inconsistencies in team rules affected the overall team climate:

I think it'd just be the fact that he's just a little inconsistent with his rules and setting rules. He started rules late in the season and he really didn't follow all of them. Just the fact that you're going to set rules and make sure that everyone's on the same field. If you're going to set them, set them early on. He said, 'Well, if you miss practice because of academic reasons, you sit out the first quarter. If you

miss because of another reason, it's the first half.' But that didn't come in until 2/3's of the season was already over with. So, I mean people weren't too sure on how to take him, if he was serious or not. There were a couple of times where people missed the practice because they were sick, yet they still went in the first half after those rules were set. I think the rules are good because last year everyone was skipping practice whenever they wanted to and we had a little bit of that in the beginning of this year. But, just set them early and everyone knows them and they're like written down (Athlete 2, Appendix V, 322).

The character building Efficacy/Competency subscales patterned the same trends as the teaching technique subscales. While Mark had the best intentions, and did provide some lessons of character to his athletes, he struggled with how to develop a fair and consistent set of rules. This could have been a reason for his scores dropping. By the end of the season he witnessed the effects of this inconsistent discipline.

Explanation of Efficacy/Competency Scores. An interesting discussion during postseason interviews focused on the coach and athletes' respective scores on coaching efficacy and coaching competency measures given throughout the season. Mark's scores of coaching efficacy fluctuated throughout the season, dropping at the middle assessment and then increasing at the end. He offered this explanation for the fluctuating score:

I remember feeling like I was kind of fluctuating a little bit. But, you know it was a lot of emotions for me. Days feeling like I didn't know at all what I was doing, and then days where I felt really good about what I was doing...I think I went out there with really high expectations and I think the kids really did too. And then, that just crashed right in on us. Then, I saw some of the changes that they were

making as they started to improve a little bit and they started to play as a team.

So, that probably made me feel a little bit more confident. By the end of the season, there were still some disappointments, but there wasn't the same kind of pressure as maybe there was in the beginning (Appendix V, 378).

One athlete, whose scores of coaching competency decreased over the season, discussed how specific instances during the season impacted his scores:

Earlier on I was excited for the year, and then I noticed that there was just a couple of instances later on where he had set rules or we did something. Like when we ran, we didn't know what we were running for till after the practice, which is kind of frustrating and mentally draining because you don't know what you're running for....As far as game strategies go, towards the end of the year we had a lot of teams where it could have been pretty close, if not win, and half-time he'd sit there and say, 'We have to do this, have less turnovers, and move the ball more. We have to come out in the second half and perform better.' So, we'd have half of the half time, and we weren't really learning anything as far as like making adjustments on the field. I think he got frustrated with how we were performing because he expected us to play better. He'd call a timeout and say, 'Look up when you're running down the field, you have people wide open.' He wouldn't say, we're going to make these adjustments or anything. He didn't really experiment with changing up lines, as far as how other people would work together and see what would work, because some people are stronger at certain things. So, he didn't really try that. The whole mental aspect for me just wasn't there anymore (Athlete, 2, Appendix V, 390).

Another athlete, whose scores decreased and then increased at the end of the season, summed up that the coach's behaviors and specific instances affected overall perceptions of coaching competency:

Yeah, I went up and down a couple times during the season. I guess it was just moments like maybe in the season that changed my opinion throughout it. Maybe games that we won or things that we saw even in games that we lost that I saw things that I liked about him, or that I disliked. So my opinion changed quite a bit (Athlete 3, Appendix V, 411).

Examining the motives and perceptions behind a coach's sense of efficacy and athletes' views on coaching competency is valuable in understanding shifts and changes in scores over the season. It is interesting that both Mark and the athletes used general trends and specific incidents of the season in their assessment of efficacy and competency.

Systematic Observation of Practices

It was of interest to this study how practice behaviors and type of feedback changed during different intervals of the season. Further, the coach and athletes were asked to respond to specific season events or behaviors. Systematic observation methodology was employed in order to view changes in behaviors and observe specific events occurring during practice. In total, 6 practices were observed over the season representing beginning of the season (practices 1 and 2), middle of the season (practices 3 and 4), and end of the season (practices 5 and 6). Further, practice sessions were divided into three segments; beginning, middle, and end of practice. Attempts were made to observe practices every week, however, team schedule and contests conflicted with

weekly observations. Data from specific behaviors discussed in this section, including number and percentage of each behavior, can be seen in Table 6; data from all observed behaviors over the season for this team, as well as segments of each practice, can be seen in Appendices M-O.

A total of 1,434 behaviors were recorded at the beginning of the season (see Table 6 and Appendix M). The behavior of silence represented the highest observed category with 21.9% of recorded behaviors. Of the three forms of instruction, preinstruction and concurrent instruction were highest, 14.3% and 14.2% respectively. Postinstruction followed with 12.6% of recorded behaviors. During these two observed practices the coach never provided negative modeling and provided physical assistance only 0.1% of behaviors.

A total of 2,236 behaviors were recorded during the middle of the season (see Table 6 and Appendix N). The behavior of silence doubled from the beginning of the season, representing 44.4% of recorded behaviors. Management also increased from 10.5 to 16.6% of behaviors, making it the highest recorded behavior during the middle of the season. Positive modeling increased from no recorded incidents in the beginning of the season to 12.9% at the middle. All forms of instruction decreased at the middle of the season with preinstruction, concurrent instruction, and postinstruction accounting for 5.9%, 8.7%, and 3.1% of behaviors respectively. During the middle of the season the three motivator behaviors (hustle, praise, and scold) were low, representing only 3.2% of total behaviors.

Table 6. Team 1 – Observed Practice Behaviors Over the Season

	Beginning		Middle		End	
	No.	%	No.	%	No.	%
Preinstruction	205	14.3	131	5.9	41	2.4
Concurrent Instruction	204	14.2	195	8.7	270	15.8
Postinstruction	181	12.6	69	3.1	33	1.9
Questioning	15	1.0	28	1.3	25	1.5
Physical Assistance	2	0.1	0	0.0	0	0.0
Positive Modeling	78	5.4	288	12.9	132	7.7
Negative Modeling	0	0.0	0	0.0	0	0.0
Hustle	67	4.7	37	1.7	16	0.9
Praise	28	2.0	24	1.1	38	2.2
Scold	22	1.5	10	0.4	14	0.8
Management	151	10.5	371	16.6	376	22.1
Uncodable	13	0.9	2	0.1	5	0.3
Use of First Name	154	10.7	88	3.9	139	8.2
Silence	314	21.9	993	44.4	616	36.1

Note. Due to decimal place rounding of percentages not all columns add up 100%.

A total of 1,705 behaviors were recorded during the end of the season (see Table 6 and Appendix O). The behaviors of silence and management continued to be the dominant recorded behaviors, accounting for 36.1% and 22.1% respectively. Out of the three forms of instruction, preinstruction and postinstruction continued to decrease while concurrent instruction increased to 15.8%. The motivator behaviors continued to remain low with hustle, praise, and scold accounting for 0.9%, 2.2%, and .08% of all recorded behaviors.

Several interesting trends in practice behaviors were observed over the course of the season. First, Mark's primary behaviors were silence and management. This could be due to his inexperience as a coach and running practices by himself; he could be constantly thinking and planning what needed to occur next. The three forms of

instruction fluctuated throughout the season. For instance, at the beginning of the season pre-, concurrent, and postinstruction were all relatively high for observed behaviors. By the end of the season, only concurrent instruction remained high. This pattern of behavior could be due to Mark's decreasing score in teaching technique efficacy. As he struggled to instruct, he finally ended up relying on instruction regarding what was going on at that minute, decreasing instruction before and after drills. It is of note that the behaviors of physical assistance and negative modeling were hardly ever seen over the season, the only record of either was physical assistance representing 0.1% of behaviors at the beginning of the season. Finally, it was also of interest that the three behaviors associated with motivation (hustle, praise, and scold) remained relatively low over the season. Perhaps this helps in explaining both Mark's and the athletes' fluctuations in motivation efficacy/competence.

Views on Season Events. One purpose of this study was to examine how the coach and athletes perceived behaviors and changes in CE/CC throughout the season. As part of this research question specific season events and idiosyncratic coaching behaviors were discussed in order to understand how the coach and athletes viewed these in light of the season. The first event for this team was the beginning of the year record. This team spent several of the first weeks without a win and then had one week with a 3-game win streak. Of interest was how the coach and athletes viewed this sudden streak of wins after a series of losses. Mark discussed how he noticed a considerable change in attitude during this point of the season:

Well, getting to that point was really frustrating because we lost a couple of games that I think the kids were expecting to win and I definitely was expecting

to win. I think that they improved a lot at the beginning of the year and I was teaching them some things that were new to them so they were optimistic, and then to go in and lose 6 in a row was pretty tough. Then, when we won those 3 games, it was just a complete reversal of those kids and I could see it even after winning one of them. Their attitudes changed and everything. It was really neat to see. They went from thinking really negatively to thinking really positive. I think they got a taste of what it was like to win. They won a couple of those games pretty handily. They saw what they were capable of and a little bit of what it takes to do that. Two of those 3 wins they really played as a team and that was the biggest difference with just about every other game we played all year (Appendix V, 442).

One athlete discussed that, while important for the confidence of the team, the winning could have impacted the rest of the team's season:

Well, both me as an athlete, and the team, it gave us confidence and confidence is a big thing... We were playing well and we thought we could go on and win more games. We could have probably won a couple more and went on a 5 or 6 game win streak. It's just high school sports where you play bad one game and it just affects us. And we don't prepare all the time for home and away games. I mean it was an up and down season, I would say. It's all about confidence and how you mentally prepare and how you prepare during practice. You practice how you play and when that goes toward games, we got maybe a little too confident and we started goofing off during practice and it would show during the game and it just affected the rest of the season (Athlete 2, Appendix V, 463).

Another athlete viewed this beginning of the season as impacted by their learning; however, he also alludes to a dangerous attitude shift in the team:

I think at the beginning of the year we were learning the system and trying to figure things out. How we all came together as a team and how he worked as a coach. And then those 3 games where we started winning everything had clicked for us. Then, for whatever reason, after that we played some better teams and we got too cocky about what we were doing and started not running the offense or doing what he said and that's when it fell apart (Athlete 1, Appendix V, 488).

It is important to understand these views on how the 3-game win streak affected the team's attitude because the second season event discussed is the fact that the Highland Bears did not win a single game for the rest of the season. This is even more discouraging when it is taken into account that they played 3-4 games per week during the season. Mark talked about that, by the end of the season, it was easy to focus on the off-season and future of his new program:

Seeing some kids who really weren't enjoying playing and stuff was very frustrating. And they didn't like losing, it hurt. They were teased by other kids at school, and they heard about it there. So, it wasn't any fun for them and I think some of them, I mean it does take the fun out of the game when you're losing all the time. A big group of kids took their licks and they were looking towards the future and I started doing that towards the end too; really trying to think about the process that we're in and building a team, and not so much worrying about the losses (Appendix V, 508).

One athlete discussed the impact of the losses on team motivation and frustration:

I felt like the whole team was just giving up. We had already lost so many games that it really didn't matter anymore. So, I feel like people really weren't maybe playing as hard as we should. We were just out there playing a game, it wasn't anything really serious and it was kind of frustrating. I guess we had a pretty frustrating season (Athlete 3, Appendix V, 525).

Another athlete added that this overall record affected players' interest in going to practice and working on improvement:

It's frustrating and kids were quitting and just didn't want to come to practice because we were always losing. It just wasn't good because no one wanted to be there and people were saying that they didn't want to go to practice because there's no point of practice because we're just going to lose the next game. So, it just was not fun for a lot of kids (Athlete 4, Appendix V, 535).

Understanding this coach's practice behaviors and how he and the athletes viewed certain season events adds to the richness of this coach and team as a case study observation. Identifying trends in behaviors, both positive and negative, can help to appreciate the ebb and flow of the season as well as how certain events affected this coach and team. For instance, the coach's use of motivating behaviors and different types of instruction decreased over the season. Perhaps the overall record impacted those behaviors. Further, as the season progressed and the team kept losing, perhaps the coach was unsure of how to properly teach and strategize, this could explain increases in silence and management, the coach feeling overwhelmed at practice sessions. Another explanation could be that as the season progressed the coach allowed more open play that allowed the athletes' responsibility for strategy and tactics.

CASE STUDY 2

Overview of Coach 2

Rob was the head coach of the Oak Hills Tigers Boys' varsity lacrosse program. Rob was a 46-year-old Caucasian male. He played hockey in high school and lacrosse in college. During the observed season, Rob was beginning his third year as the boys' lacrosse coach. He had helped the school develop a club lacrosse team and, because the club was transitioning into a varsity team, this was his first year as a high school varsity coach. Other than being a parent in the community, Rob had no affiliation with the school system. The varsity squad has several volunteer assistant coaches who attended practice on an irregular basis. He opted to volunteer his time as varsity lacrosse coach and donate his coaching salary to the program. Rob's educational and occupational background was in business, being a small business owner in the community.

Overview of Oak Hill Tigers Practices and Data Collection

The observed practices of the Tigers were held at a local park adjacent to the high school sports complex. The varsity squad practiced directly after school (3:30-5:00 p.m.) followed by the junior varsity squad. Practice sessions were observed a total of 7 times over the season, the last two represented post-season preparation and play. Measures of coaching efficacy and coaching competency were given three times during the season, representing beginning, middle, and end of season.

Coaching Efficacy and Coaching Competency

As part of the first research question, it was of interest how coaching efficacy and perceived coaching competency changed over the season. Because not all subscales of the CES and CCS were collected over the entire season, what are presented are results of

coaching efficacy and coaching competency at the subscale level (Game Strategy, Motivation, Teaching Technique, and Character Building). The results of one-sample t -tests of the CES/CCS subscales over the season are presented in Tables 7-9.

In order to investigate the athletes' perception of coaching competency over the season, a series of one-way repeated measures ANOVA were conducted for the different CCS subscale scores. There was no statistically significant difference in athletes' perceptions of coaching competency. Results were game strategy competency, $F(2,21) = 3.05, p > .05$; motivation competency, $F(2,21) = 1.11, p > .05$; teaching technique competency, $F(1,21) = 3.44, p > .05$; and character building competency, $F(1,21) = .337, p > .05$. Thus, there were no statistically significant changes in the athletes' views of the coach's competency when investigated over the length of the season.

Table 7

Team 2 -- Beginning of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	<u>Coaching Efficacy</u>	<u>Athletes' Perceived Coaching Competency</u>		t
	M	M	SD	
Game Strategy	7.29	7.75	.72	2.94**
Motivation	7.14	7.51	.74	2.37*
Teaching Technique	7.67	7.74	.77	.439
Character Building	9.00	8.22	.78	-4.71**

* $p < .05$. ** $p < .005$

Note. The coach's efficacy score was used as the test value in the one-sample t -test.

Table 8

Team 2 -- Middle of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	<u>Coaching Efficacy</u>	<u>Athletes' Perceived Coaching Competency</u>		<i>t</i>
	<i>M</i>	<i>M</i>	<i>SD</i>	
Character Building	--	--	--	--
Teaching Technique	--	--	--	--
Game Strategy	7.67	7.44	.93	-1.15
Motivation	6.00	7.15	1.4	3.98**

** $p < .005$

Note. The coach's efficacy score was used as the test value in the one-sample t-test.

Table 9

Team 2 -- End of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	<u>Coaching Efficacy</u>	<u>Athletes' Perceived Coaching Competency</u>		<i>t</i>
	<i>M</i>	<i>M</i>	<i>SD</i>	
Game Strategy	6.86	7.56	.88	3.82**
Motivation	6.17	7.39	1.1	5.48**
Teaching Technique	6.60	7.36	.96	3.81**
Character Building	8.00	8.25	.83	1.45

** $p < .005$

Note. The coach's efficacy score was used as the test value in the one-sample t-test.

Game Strategy. The efficacy/competency subscale of game strategy efficacy (GSE) was measured at the beginning, middle, and end of the season. Although the coach rated himself highly over time, his score on GSE did decrease over the season. The athletes also rated the coach highly on Game Strategy Competency (GSC). Of interest is

that at the middle of the season, the coach actually increased his score from the beginning ($M = 7.29$ versus $M = 7.67$) at the same time the athletes' scores decreased ($M = 7.75$ versus $M = 7.44$). Further, at the beginning and end of the season the relationship between coaching efficacy and coaching competency were found to be statistically significant, but not at the middle of the season. See Tables 7-9 for one-sample t-test results and Figure 6 for changes over the season.

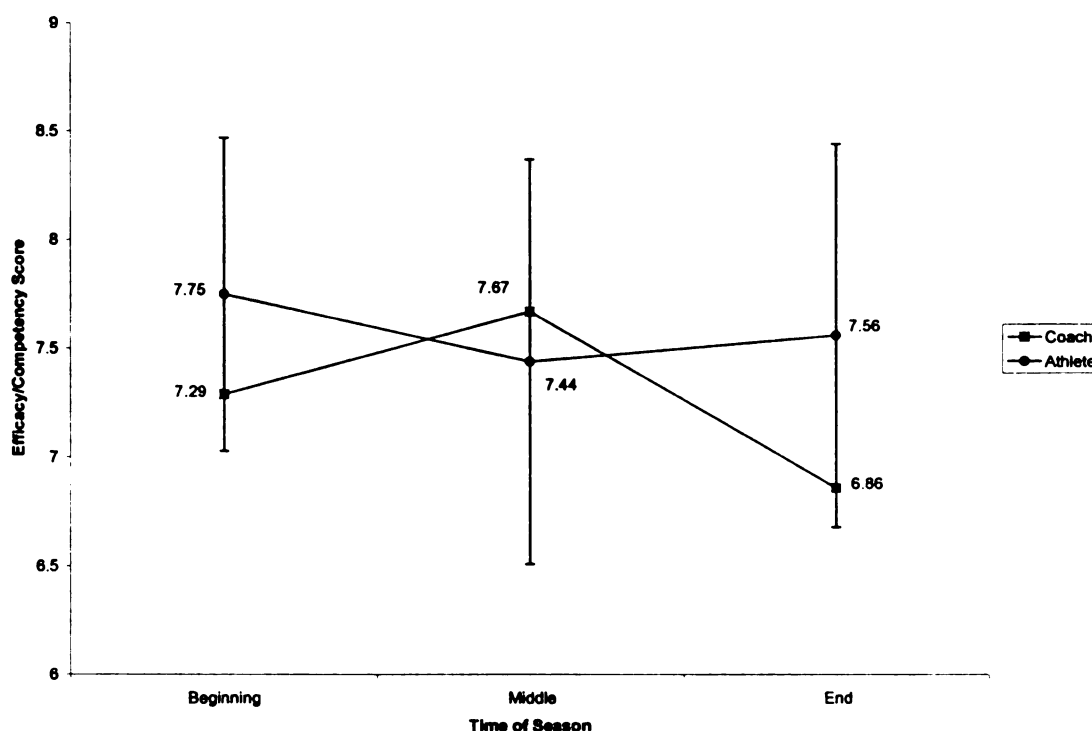


Figure 6. *Team 2 – Changes in Game Strategy Efficacy and Game Strategy Competency over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

To help explain the fluctuations in GSE and GSC scores, perceptions of the coach and athletes were ascertained through post-season interviews. Overall, the coach felt he was competent in game strategy stating, “I would say in the game, and strategy within the

game, I am confident that I know how to think the strategy of the game” (Appendix W, 32). However, he did caution that the teams’ experience impacted their ability to successfully learn and use certain tactics:

We have been at this so short of time that there are many, many strategies I would like to implement that either we’re not there yet skill wise or you can’t always seem to get new minds around so many things. I would love to have half a dozen plays and offensive sets and clears in there. But we, we have to get the basics down before we do it (Appendix W, 5).

One of the athletes spoke of how the coach changed his game strategy over the season and how this changed the athlete’s scores on coaching competency:

Yeah, his game strategy I think changed throughout the year. At the beginning I think I rated him kind of low, but we hadn’t played many games so I didn’t have much to go off of. But it got better because the specific case that I know, he doesn’t like to play zone defense. But, then as we needed it, as we came across teams that we needed to play zone defense, even though he didn’t like it, he thought that we could win with a zone defense. So, I think that it shows his competitive drive to win and not his selfish....So he did what he needed to do to win (Athlete 3, Appendix W, 51).

The change in the game strategy subscale scores could be a product of the season unfolding over a 3.5 month period. At the beginning of the season it may be difficult for coaches and athletes to evaluate game strategy when the majority of time is still devoted to practicing fundamental skills and preparing for upcoming competition. As competition started and both coach and athletes experienced the coach’s game strategy behavior,

scores tended to decrease. Perhaps this was simply the reality of the success and failure of certain strategies during the games leading up to the second data collection period. There do seem to be differences in how the coach and athletes perceived game strategy over the season. For instance, the coach relates his use of strategies as related to the skill level and experience of the team while the athletes related the coach's game strategy to specific changes witnessed over the season. Clearly, the coach has a broader view of the game and all the potential strategies than do the athletes. The athletes view the coach's ability more in the moment.

Motivation. The subscale of Motivation Efficacy (ME) and Motivation Competency (MC) was measured three times during the season; beginning, middle, and end of season. As seen in Tables 7-9 and Figure 7, both the coach's score of ME and athletes' score of MC decreased from beginning to middle of the season and then increased from middle to end of the season. Further, at all intervals of the season one-sample t-tests showed statistically significant differences in efficacy and competency scores. Results of the two-tailed t-tests for the beginning of the season were, $t(21) = 2.37$, $p < .05$, middle of the season, $t(21) = 3.98$, $p < .005$, and end of season, $t(21) = 5.48$, $p < .005$. This difference in perceptions of motivation may be due to the tactics used by the coach. For instance, the coach often played with the athletes during drills and scrimmages. While the coach saw this as a necessity due to lack of staff, the athletes viewed his playing as motivational. Of interest is that the athletes rated the coach higher on MC across the season than the coach rated himself on ME. This difference in perception could be due to how the coach and players perceived season events such as playing together during practice; the coach viewed it as having enough players for a

scrimmage while the athletes saw some of the coach's practice techniques as having a motivational effect.

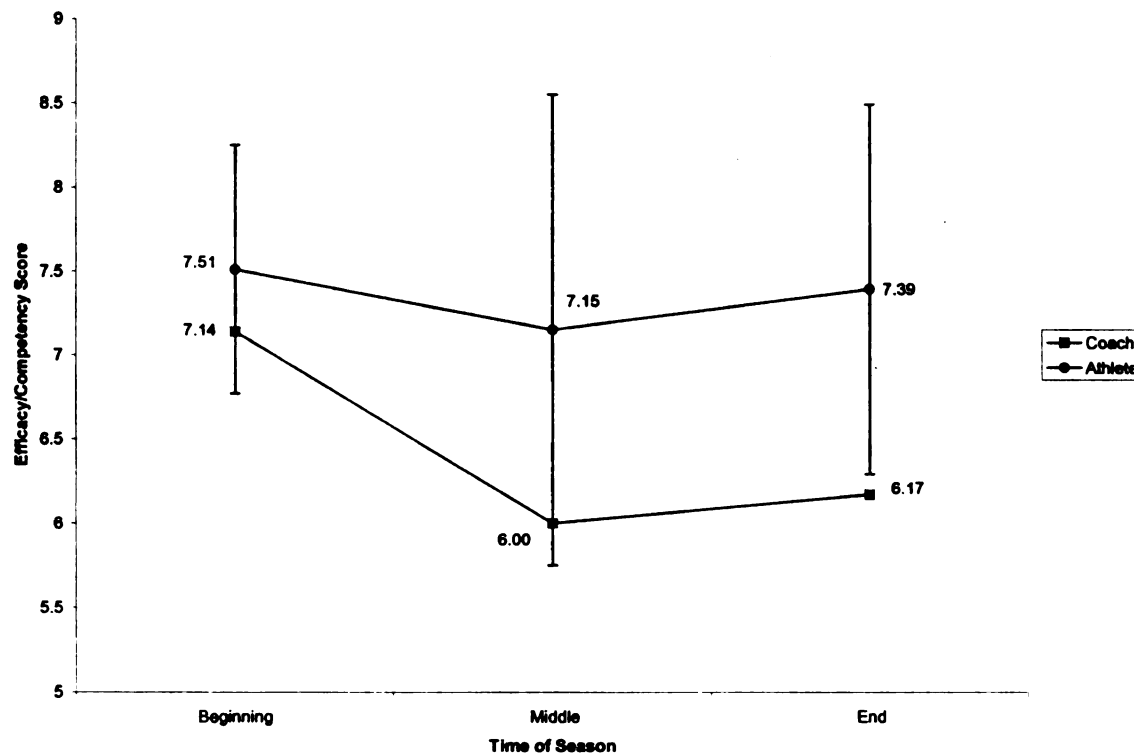


Figure 7. Team 2 – Changes in Motivation Efficacy and Motivation Competency over the Season.

Note. Vertical lines across Athlete mean scores represent standard deviation.

One of the motivational techniques used during the season was competition during practices. Rob viewed this as a technique to keep drills interesting:

Well, in practices we try to have fun. I mean we have fun with games; groups of guys versus each other. We do play the freshmen and sophomores versus juniors and seniors. You try to do something that, while going through just the dull drill, would try to make some competition of it. We'd have fast break drills where I'd put defense against offense...first one to get to 10 won, we had some incentive.

You know I think that's the type of thing you gotta throw them so that's what we tried (Appendix W, 87).

One athlete echoed this approach to motivation during practices:

We do a lot of competitions like relay races or whatever in practice. He says if you win, then the other group has to do sprints or whatever. You know, nobody likes doing sprints....He gives that competitive drive not only in practice but in games (Athlete 3, Appendix W, 106).

One of the behaviors noticed over the season was that the coach would join in a drill with the athletes during practices. One of the athletes discussed how this teaching technique was actually quite motivational:

I think it [playing with athletes during practice] was a big motivational technique because you see that he's willing to get in there with you, get in there with us and take hits. He's not afraid to do whatever it takes to coach us. It was a motivational technique whether it was intentional or not (Athlete 2, Appendix W, 135).

This behavior was one often observed over the course of the season. While this specific behavior will be discussed later in the case study, the athletes' response to this behavior was certainly related to their sense of the coach's motivational competency. Athletes regarded this behavior, that the coach believed was simply a necessity due to staffing, as developing team camaraderie.

Teaching Technique. The subscales of Teaching Efficacy (TE) and Teaching Competency (TC) were assessed at the beginning of the season and end of the season. Overall, the coach's rating of his TE decreased from $M = 7.67$ to $M = 6.60$ over the season. Further, the athletes' sense of the coach's TC decreased from $M = 7.74$ to $M =$

7.36 over the season. See Tables 7-9 for mean scores and one-sample *t*-test results for TE/TC and all subscales. While the overall scores are still high for a 10-point scale, this is the only subscale where both coach and athlete scores decreased over the entire season. See Figure 8 for changes in TE/TC over the season. This decrease could be due to the coach's overall perception of his effectiveness as a teacher. As the season wore on, perhaps the coach and athletes both perceived the coach's frustration with his teaching capability. Through both his behaviors and interview data, this coach really took to heart his role as a teacher. Unfortunately, it was also this role as a teacher that was the coach's greatest disappointment of the season:

I felt like in many ways I lost a year of improving kids individually. I do think that just 5 days a week practicing everything got them better. I don't know that I was able to move a kid a whole lot further. I think that was some of it that disappointed me (Appendix W, 188).

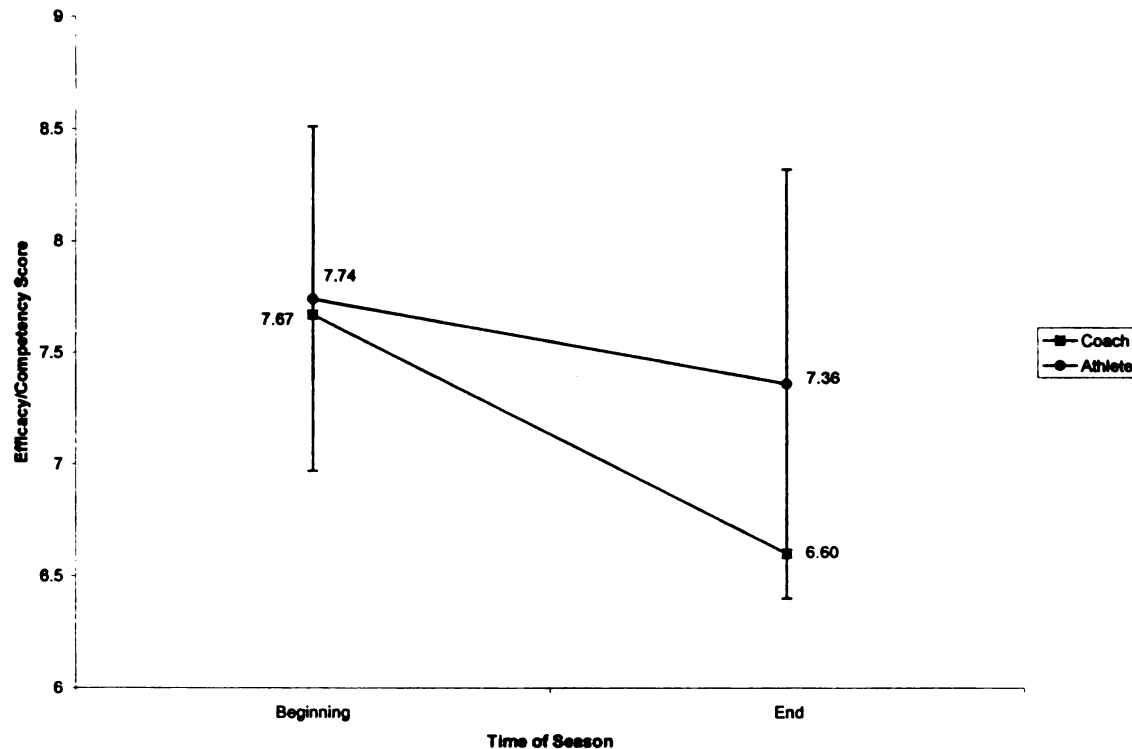


Figure 8. *Team 2 – Changes in Teaching Technique Efficacy and Teaching Technique Competency over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

The difficulty with this individual improvement was compounded by the team's lack of assistant coaching. This point was discussed by the coach:

If I had 2 assistants it would be much easier. What I'd like to do, ideally, is have someone running the drills and me coaching individuals, as you see something from the kid -- pull them over and say this is what I'd like you to do. What you end up doing when there's just one, like there was yesterday, you gotta stop and you gotta coach in front of everybody because you don't have the time otherwise. You're stretched thin. When it's just one of me there, when the other coach is not

able to be there, you just don't...you have to give up on saying I am going to teach a lot today, you hope to drill it (Appendix W, 162).

While this coach struggled with teaching without assistant coaches, athletes did point out positive teaching tactics that he employed throughout the season. One athlete mentioned the coach (often through necessity) demonstrating skills and playing with athletes during scrimmage, "It's nice to have them out there and demonstrate; it shows players they actually played the game, they are not just a text book coach. It just makes it easier to relate to the players themselves" (Athlete 1, Appendix W, 201). Along with this demonstration, the coach would use other players as peer-models when showing skills. One athlete mentioned this as a helpful technique:

He also uses the better players he has on his team to his advantage because there are certain players who have the skills already and he uses them to demonstrate those skills to the rest of us. So, if there is anything that he can't do, he isn't afraid to use them to show us how to do it (Athlete 2, Appendix W, 226).

Another athlete discussed how the coach's interaction with athletes affected the overall learning environment of practice:

He likes to almost discuss it. You know, a lot of coaches will yell to get their point across or something like that, but he just likes to get the team together around him and just tells them what we need to do. It's less like a parent and more like a boss, he's not yelling at us to do something or giving us chores; he's like-- this is the task that needs to be finished and this is what we need to do, let's go do it (Athlete 3, Appendix W, 245).

The type of feedback that the coach would give during teaching, as described in the above quote, might be different than the stereotypical yelling coach. In his preseason interview, this coach described how he was used to giving feedback to workers as a supervisor; however, he faced several challenges using the same technique with high school athletes:

I've got to try different ways to communicate because no matter how great you are, it's a 15-year-old kid and in some ways they're going to receive things differently. This is a new challenge for me communicating with a high school athlete... It's a different mindset, not quite as mature as the work place that I am used to.

Both Rob and the athletes reported a decrease in teaching efficacy/competency over the season. For Rob, it was apparent that not having consistent coaching help affected his sense of effectively teaching. Further, he struggled with addressing the individual learning needs of the athletes. This could have contributed to the athletes' decreased perception of teaching technique competency.

Character Building. The subscales of Character Building Efficacy (CBE) and Character Building Competency (CBC) were assessed at the beginning and end of the season. The coach rated his CBE score at $M = 9.0$ at the beginning of the season. The athletes scored CBC at $M = 8.22$, making the one-sample t -test relationship, $t(21) = -4.71$, significant at a .005 level. At the end of the season the coach's CBE had decreased to 8.0 and the athletes' CBC score had increased to 8.25. A one-sample t -test of the CBE and CBC scores revealed no significant difference in coach and athlete perceptions at the end of the season. See Figure 9 for changes in CBE/CBC over the season. As apparent by

the high CBE and CBC scores, the role of coach as a role model and character builder was taken very seriously by this coach. He saw the possibility of influencing his athletes beyond the lacrosse field:

I don't have to be the reason why they want to play lacrosse, I want to be just part of their reason...looking back I have the fondest memory of my high school hockey coach. I have a fond memory of my college lacrosse coach. To this day I still call him and meet with him. I have a lot of respect for the person (Appendix W, 257).

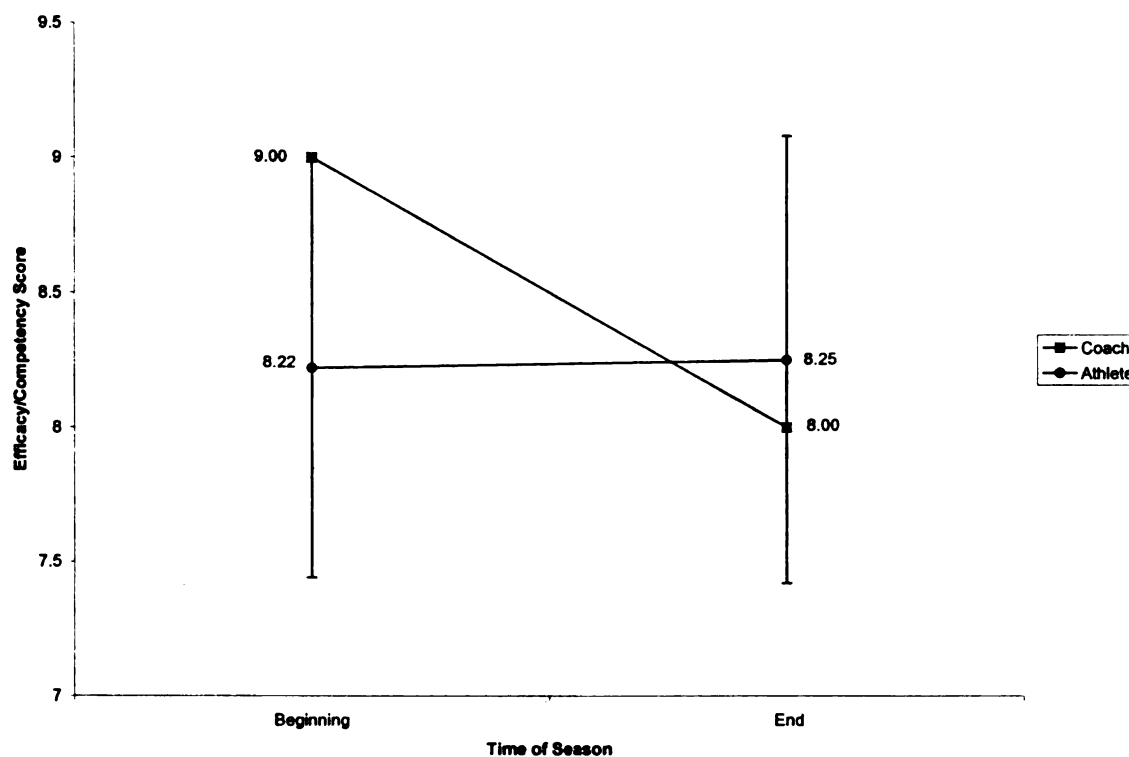


Figure 9. Team 2 – Changes in Character Building Efficacy and Character Building Competency over the Season.

Note. Vertical lines across Athlete mean scores represent standard deviation.

This coach would stress the importance of being respectful to the game and opponents.

He discussed the value of having character while playing lacrosse:

We got great kids that competed hard, never really gave up and were gentlemen.

I won't call lacrosse a violent game, but it is a very physical game and yet our guys are classy. I am proud of that and we worked at that. I mean I coached to that. One thing I keep coaching is, "you will be gentlemen" and they were good about it (Appendix W, 282).

One athlete spoke about how the coach would use his skills as a teacher to impact both the lacrosse player and developing young person:

He's really an upstanding guy. I noticed he really had a lot of integrity and outside of lacrosse he seemed really trustworthy and really honest. And in lacrosse he's just, he knows what he's talking about. He knows the basics of lacrosse and he knows how to coach us and make us better and it shows. Especially in high school you know, you can tell that he knows it's more about developing us than it is about winning. He doesn't ignore winning; he just really cares about the players (Athlete 1, Appendix W, 307).

Another athlete discussed the lesson of commitment to both team and self that he learned from the coach's direct and indirect modeling:

He emphasizes sportsmanship and commitment too. Commitment to the team but also commitment to everything else you do in life and hard work. He emphasizes a lot of like the skills that you teach in sports. He emphasizes using those outside of sport; so a good mentor in that way I guess and role model for the players in that way (Athlete 3, Appendix W, 320).

The subscale of character building was viewed by the coach and athletes as the coach's greatest strength in efficacy and competency. Through both his actions and words this coach would focus on creating a team of competitive, yet respectful, athletes. To achieve this, the coach saw himself as a model. For instance, one of the team's rules was to always use clean language. During observations throughout the season (7 in total) the coach was never observed using foul or inappropriate language.

Explanation of Efficacy/Competency Scores. During the postseason interview, the coach and athletes were asked about their coaching efficacy/competency scores over the season. For instance, the coach was asked about why his scores in coaching efficacy tended to decrease over the season. His explanation of the scoring echoed his concern for effective teaching and practice conditions:

I think mine went down because I felt the effects of being alone. And I felt I was not doing all I could do if I had more help. And so I didn't think I was doing a great job. You know, with the appropriate amount of help I could do a great job. Alone it was difficult so I felt I was not reaching what I could do. That's probably, that's where I kind of started knocking myself a little. That's all right (Appendix W, 326).

One of the athletes on this team consistently rated his coach high on all subscales of coaching competency. When asked about this he discussed how he viewed specific aspects of coaching competency:

Yeah, I think it was pretty stable. His motivation, it comes back to giving athletes credit where it's needed. He didn't do that very well I don't think throughout the year. But, everything is pretty stable except for that his game strategies got higher

as we had more games. I saw what he did differently in other games (Athlete 2, Appendix W, 343).

Another athlete scored the coach high at the beginning of the season, low at the middle of the season, and back up at the end of the season. When asked about this trend, the athlete spoke about the ebb and flow of the season and his views on the coach:

Thinking back to the season it seems like towards the middle of the season, I just got, I think personally I think I graded harder then. I just graded ridiculously, like I must of put 2 or 3 points lower than normal and I just was a lot tougher on Coach...probably mad at him for something. I don't want to say I was sick of him but like it seemed like in the middle of the season there was a low. I don't know if it was just me but I got tired of Coach because he really is strict about not swearing and I don't swear all the time but its part of my regular speech. It was just things like that where you were just getting irritated at him so I was probably mad at him about some things and I graded him for it (Athlete 3, Appendix W, 348).

When asked about why his scores at the end of the season increased, this athlete responded:

Oh I probably realized that I was being an idiot. Just because he doesn't want us to swear is no reason to call him a bad coach or grade him badly on our surveys. And that even if I do grade him badly on the surveys, I do really need to support him. I feel like the more I got back into lacrosse, the more I relearned the strategies, the more I realized that he was a good coach and liked him. I could appreciate the way he's coaching. Not knowing the sport very well, it's hard to

judge somebody else's knowledge of the sport if you don't know it. So, when I learned it more, my appreciation for his knowledge of the sport grew (Athlete 3, Appendix W, 359).

Examining the motives and perceptions behind a coach's sense of efficacy and athletes' views on coaching competency is valuable in understanding shifts and changes in scores over the season. For instance, Athlete 3 provided a candid appraisal of why his scores fluctuated over the season. However, if his perception of coaching competency was not assessed over the entire season these fluctuations could not be addressed. Rob's decreasing scores were greatly affected by coaching the team and running practices by himself for most of the season. As addressed in other areas of the results, this feeling affected his sense of teaching effectiveness, motivational behaviors, and strategy.

Systematic Observation of Practices

Systematic observation methodology was employed in order to view changes in behaviors and observe specific events occurring during practice. In total, 7 practices were observed over the season representing beginning of the season (practices 1 and 2), middle of the season (practices 3, 4, and 5), and end of the season (practices 6 and 7). Further, practice sessions were divided into three segments; beginning, middle, and end of practice. Attempts were made to observe practices every week; however, team schedule and contests conflicted with weekly observations. Data from specific behaviors discussed in this section, including number and percentage of each behavior, can be seen in Table 10; data from all observed behaviors over the season for this team can be seen in Appendices P-R.

A total of 1,237 behaviors were recorded at the beginning of the season (see Table 10 and Appendix P). The behaviors of silence and management represented the highest observed categories, 28.5% and 26.3% respectively. In general, the frequency of these behaviors decreased over a practice session. Of the three forms of instruction, concurrent instruction was the highest observed form with 11.6% of behaviors, compared to 4.5% for preinstruction and 6.3% of postinstruction. Modeling only occurred 3.2% over all behaviors at the beginning of the season, positive modeling being the only observed behavior. Also, this coach did not scold players, this accounting for only 0.4% of behaviors.

Table 10. *Team 2 ÷ Observed Practice Behaviors Over the Season*

	Beginning		Middle		End	
	No.	%	No.	%	No.	%
Preinstruction	56	4.5	125	7.3	105	7.9
Concurrent Instruction	144	11.6	315	18.5	193	14.6
Postinstruction	78	6.3	51	3.0	14	1.1
Questioning	52	4.2	72	4.2	35	2.6
Physical Assistance	0	0.0	0	0.0	2	0.2
Positive Modeling	40	3.2	17	1.0	66	5.0
Negative Modeling	0	0.0	0	0.0	1	0.1
Hustle	18	1.5	9	0.5	23	1.7
Praise	39	3.2	31	1.8	18	1.4
Scold	5	0.4	2	0.1	7	0.5
Management	325	26.3	449	26.3	302	22.8
Uncodable	4	0.3	1	0.1	2	0.2
Use of First Name	124	10.0	192	11.3	146	11.0
Silence	352	28.5	442	25.9	411	31.0

Note. Due to decimal place rounding of percentages not all columns add up 100%.

A total of 1,706 behaviors were recorded during the middle of the season (practices 3, 4, & 5) (see Table 10 and Appendix Q). Again, silence and management

were the highest observed behaviors, 25.9% and 26.3% respectively. However, these behaviors showed no pattern by segment of practice. Concurrent instruction continued to be the highest form of instruction with 18.5% of behaviors as compared to 7.3% for preinstruction and 3.0% for postinstruction. Interestingly, concurrent instruction was shown to increase during the practice session. Positive modeling accounted for 1% of observed behaviors over these three practice sessions. Physical assistance and negative modeling were not observed. During the middle of the season the coach provided little hustle, praise, and scold behaviors; these represented 0.5%, 1.8%, and 0.1% of observed behaviors respectively.

A total of 1,325 behaviors were observed during the end of the season, practices 6 and 7 (see Table 10 and Appendix R). Silence and management continued to be the highest observed behaviors, 31% and 22.8% respectively. Concurrent instruction continued to be the highest form of instruction with 14.6% of all behaviors. Preinstruction was found to increase over the season and account for 7.9% of behaviors at the end of the season. Conversely, postinstruction decreased over the course of the season. While modeling and physical assistance remained low, at the end of the season, positive modeling increased to 5% of total observed behaviors. Other trends included both praise and scold behaviors decreasing over the season and use of first name remaining relatively stable at 10-11.3% of behaviors.

There are several interesting trends in this coach's behaviors over the season. First, the highest observed behaviors were silence and management (those behaviors not having to do with skills or play). Perhaps this is a product of the coach having to often manage practice by himself, being silent while thinking about drills and teaching to come

in the session. Further, he could be spending a large amount of time on non-practice related information (e.g., team administration, travel plans) that other coaches may delegate to assistant coaches. As the season progressed, this coach's use of preinstruction increased. This could be due to practice shifting into competition preparation as the season continued. The behaviors of praise and scold could have remained low due to the coach attending to too many players at one time; correct and incorrect skills were simply missed due to the ratio of players to coach. Lastly, it was interesting that modeling and physical assistance remained low during the season. While the coach did tend to model through scrimmaging with the athletes, his overall physical assistance with athletes could be low due to the ratio of athletes to coach at most observed practice sessions. Trends in observed behaviors could also be due to lack of training in pedagogy and how to effectively teach both groups and individual learners.

Views on Season Events. One purpose of this study was to examine how the coach and athletes perceived behaviors and changes in CE/CC throughout the season. As part of this research question specific season events and idiosyncratic coaching behaviors were discussed in order to understand how the coach and athletes viewed these in light of the season. The first aspect of the season discussed was the team's up and down record. This team never had a long win-streak or loss-streak. The coach reacted to the record by discussing how strength of schedule impacts the overall view of success:

Well, there are some games that you walk into that we have no business winning.

At this stage we had no business beating Big Varsity High School. But you schedule them, and you don't want to do them all at once, but yet you need to find the victories that are within there. I mean we played [team name] and lost 8-6 or

6-4 whatever it was. It was a 2-goal game against a very, very good team. Our guys felt tremendous after that and they should've. Who cares? Who cares if we won? I mean they do, but as far as I am concerned, if you give it all, if you focus and give all the effort you have, what if you don't win? At least you can say you gave it your all. I am not going to say winning is over rated because I love to win. But I had no problems; I think the ones that hurt you are the ones you should've won, that you saw slip away, but we beat some teams that not many other people beat either (Appendix W, 371).

One athlete discussed some frustration with this up and down record:

I think as a team everybody felt the same about the frustration and stuff. Then the coaches they were confident every game that we could win if we just played our game and played to the best of our ability and stuff. So they kept a good head about it, but we all just got frustrated and some of us got down on ourselves (Athlete 2, Appendix W, 398).

Another athlete discussed how the style of scheduling in high school lacrosse actually helped keep spirits up during the early part of the season:

In a way it's kind of, it's nice because 2 years ago in football, we lost our first eight games. That's a lot worse because by about the 5th or 6th game, you're just like "what am I doing here"? Whereas with the lacrosse season, I don't think we lost more than 3 games in a row ever. With 2 or 3 games a week that means you didn't go a week or week and a half without a win. So, it kind of helped lift your spirits up but at the same time you never got on that roll (Athlete 3, Appendix W, 403).

A second season event discussed in the postseason interviews was the coach running with the athletes. For instance, if the coach was scrimmaging with the team or running through a drill because of participant numbers, if his team or group lost, he would run along with the athletes as a consequence. While the scrimmaging with the athletes was already discussed as affecting motivation and teaching technique, it was of interest in how the coach and athletes viewed the coach actually accepting punishment when playing. The coach discussed this behavior in the following way:

I'm going to play, I'm going to pay. I would've surely made everyone of them run... You're a team and just because I am middle aged and fat doesn't mean that I don't have to do that. I don't want to be their buddy, but I want to say "hey for this moment I was a teammate and I am going to, you know, you got to run, I'd run". That's fine. Otherwise, how can I ask everyone else to do it? (Appendix W, 419).

One athlete succinctly summed up the coach's behavior by stating, "Just a team sport, shows team unity. Win together, lose together" (Athlete 1, Appendix W, 428). However, one of the athletes saw this event as a critical lesson of commitment and modeling by the coach:

He's big into commitment and he's saying if we commit to being a team under him, he's committing himself in the same way to be our coach and do whatever it takes to make us the best team we can. He takes the wins with us and the losses with us so... It's a good feeling to know that your coach is there to back you up if something happens, being there to help you out if you need help off the field. He's actually there for you (Athlete 3, Appendix W, 437).

Understanding this coach's practice behaviors and how he and the athletes view certain season events adds to the richness of this coach and team as a case study observation. Identifying trends in behaviors, both positive and negative, can help to appreciate the ebb and flow of the season as well as how certain events affected this coach and team. For instance, it would be very easy for a new team to become frustrated by an "up and down" season record. While some of the athletes discussed frustration, it is important to understand that the coach could see benefit in providing a challenging season to his team. Because the coach sets the tone, with feedback and strategy, his ability to discuss with and explain to his team shined through.

Case Study 3

Overview of Coach 3

Jen was the head coach of the Highland Bears Girls' varsity lacrosse team. Jen was a 31-year-old bi-racial (Caucasian and Asian American) female. She was a cheerleader in high school and became involved in the sport of lacrosse through her husband, playing for his club team in college. During the observed season, Jen was beginning her third year as the girls' lacrosse coach. She had helped the school develop a club lacrosse team and, because the club was transitioning into a varsity team, this was her first year as a high school varsity coach. Jen had no affiliation with the school system. Jen's educational and occupational background was in social work. The varsity squad had no assistant coaches; a junior varsity coach would help with the team on occasion.

Overview of Highland Bears Practices and Data Collection

The Bears practiced at a local junior high school close to the high school. Both varsity and junior varsity squads practiced directly after school (3:30-5:30 p.m.) but on separate areas of the field. The team was observed for a total of 7 practice sessions over the course of the season, the last two practices representing postseason preparation. Measures of coaching efficacy and coaching competency were given three times during the season, representing beginning, middle, and end of season.

Coaching Efficacy and Coaching Competency

Little research has examined how a coach's sense of efficacy changes during a season. Further, no study has examined the relationship between a coach's sense of coaching efficacy and his or her players' perceptions of coaching competency. Because not all subscales of the CES and CCS were collected over the entire season, what are

presented are results of coaching efficacy and coaching competency at the subscale level (Game Strategy, Motivation, Teaching Technique, and Character Building). Tables 11-13 show the results of one-sample *t*-tests of the CES/CCS subscales over the season.

In order to investigate the athletes' perception of coaching competency over the season, a series of one-way repeated measures ANOVA were conducted for the different CCS subscale scores. There was no statistically significant difference in athletes' perceptions of coaching competency. Results were game strategy competency, $F(2,18) = .208, p > .05$; motivation competency, $F(2,18) = .025, p > .05$; teaching technique competency, $F(1,18) = .447, p > .05$; and character building competency, $F(1,18) = 2.24, p > .05$. These results indicate that there were no statistically significant changes in the athletes' views of the coach's competency when investigated over the length of the season.

Table 11

Team 3 -- Beginning of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	Coaching Efficacy	Athletes' Perceived Coaching Competency		
	<i>M</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Game Strategy	7.43	7.55	.82	.634
Motivation	7.57	7.10	1.0	-1.93
Teaching Technique	8.33	7.32	1.0	-4.29**
Character Building	8.00	7.68	1.3	-1.01

** $p < .005$

Note. The coach's efficacy score was used as the test value in the one-sample t-test.

Table 12

Team 3 -- Middle of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	<u>Coaching Efficacy</u>	<u>Athletes' Perceived Coaching Competency</u>		<i>t</i>
	<i>M</i>	<i>M</i>	<i>SD</i>	
Teaching Technique	--	--	--	--
Character Building	--	--	--	--
Game Strategy	7.57	7.71	.99	.547
Motivation	6.86	7.22	1.3	1.08

Note. The coach's efficacy score was used as the test value in the one-sample t-test.

Table 13

Team 3 -- End of the Season: One-Sample T-tests of Coaching Efficacy and Perceived Coaching Competency

Item	<u>Coaching Efficacy</u>	<u>Athletes' Perceived Coaching Competency</u>		<i>t</i>
	<i>M</i>	<i>M</i>	<i>SD</i>	
Game Strategy	7.00	7.47	.83	2.19*
Motivation	7.00	6.78	1.2	-.666
Teaching Technique	7.50	7.12	.90	-1.61
Character Building	7.75	7.55	1.0	-.764

* $p < .05$

Note. The coach's efficacy score was used as the test value in the one-sample t-test.

Game Strategy. Both Jen and the athletes exhibited the same fluctuation in game strategy efficacy (GSE) and game strategy competency (GSC) over the season. Jen increased her GSE score from the beginning of the season ($M = 7.43$) to the middle of the season ($M = 7.57$) and decreased at the end of the season ($M = 7.00$). The athletes followed the same trend but reported higher scores of GSC with beginning of the season

($M = 7.55$, $SD = .82$), middle of the season ($M = 7.71$, $SD = .99$), and end of the season ($M = 7.47$, $SD = .83$). See Figure 10 for changes in GSE and GSC over the season. One-sample t -tests of Jen's GSE scores and the athletes' scores on GSC were significant only at the end of season measure, $t(18) = 2.19$, $p < .05$. See one-sample t -test results in Tables 11-13.

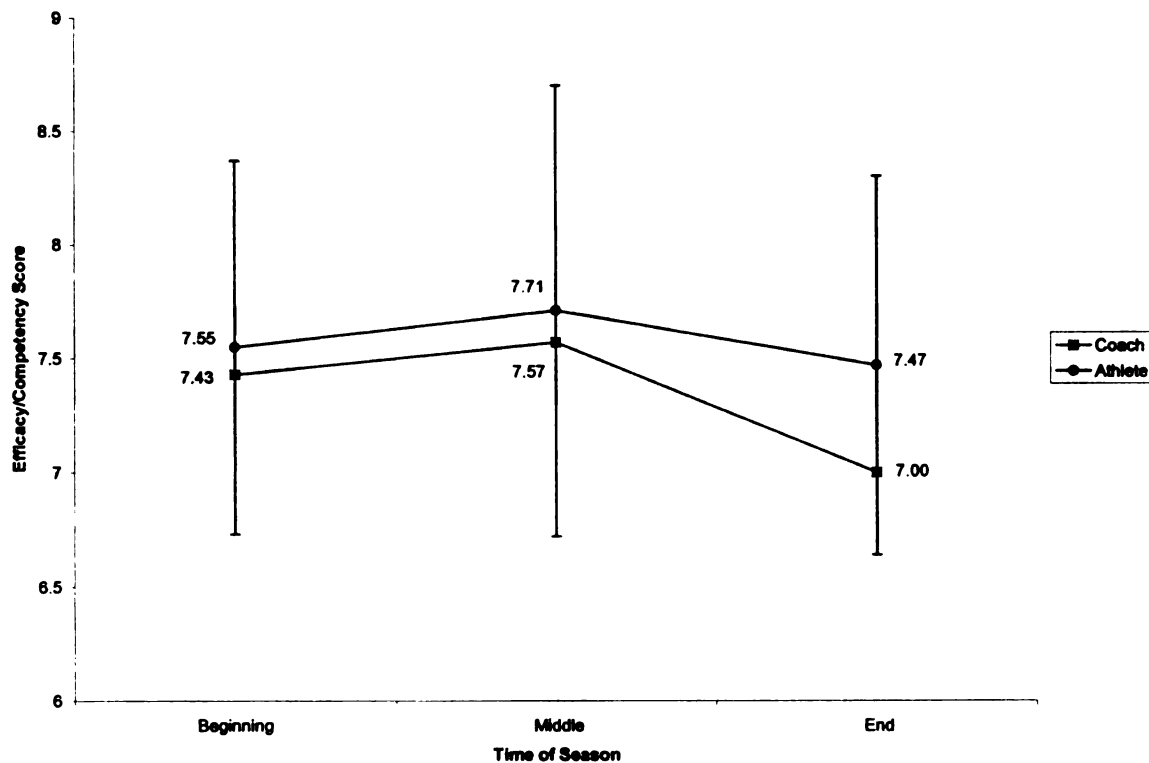


Figure 10. *Team 3 – Changes in Game Strategy Efficacy and Game Strategy Competency over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

Both Jen and the interviewed athletes were frustrated with the use of game strategy over the season. Jen explained:

The frustrating part is that you can strategize all you want but if your team does not buy into it, the strategy goes right out the window. That is something that I

have really tried to work with the girls, letting them know that I have faith in their abilities and they need to show me that they have faith in themselves. That is the hard part with strategy, knowing that your team is capable of doing something but actually getting the girls to do it is that work in progress (Appendix X, 4).

One athlete suggested that Jen work on incorporating more strategy into preparing for opponents. Apparently, this athlete did not feel adequately ready for certain game situations:

Another thing to work on is probably focusing on the other team's strategies; we never really focused on what the other team was doing. Like if the other team was rolling the crease, we never really looked at what they were doing and I think that's what killed us. The other team kept doing the same play over and over again, and our defense really didn't notice that, because our coach really didn't, we weren't really paying attention. So, I think if we would have noticed, that she could have helped us point that out...and we could have planned that out and maybe shifted and noticed that and got more on top of them and maybe that would have helped us a little bit (Athlete 1, Appendix X, 11).

The trend in game strategy scores and opinions over the season is not surprising. At the beginning of the season game strategy may not have been fully introduced and a regular part of practice. At the middle of the season game strategy is critical as teams are in the middle of the competition season. For instance, it was not uncommon for this team to play 3-4 games per week, a main focus of practices was preparing for upcoming games. As seen by the frustration of both Jen and the quoted athlete, by the end of the season the lack of game strategy could have caused the decline.

Motivation. The subscales of motivation efficacy (ME) and motivation competency (MC) were measures at three points during the season. Jen's motivation efficacy initially decreased from beginning of the season ($M = 7.57$) to the middle of the season ($M = 6.86$) and then increased at the end of the season ($M = 7.00$). The athletes' ratings of Jen's motivation coaching competency actually followed the opposite pattern with an increase from beginning ($M = 7.10$, $SD = 1.0$) to middle ($M = 7.22$, $SD = 1.3$) and a decrease at the end of the season measure ($M = 6.78$, $SD = 1.2$). Results of one-sample t -tests showed no significant differences across the season in perceptions of ME and MC. See Tables 11-13 for t -test results and Figure 11 for changes in ME and MC over the season.

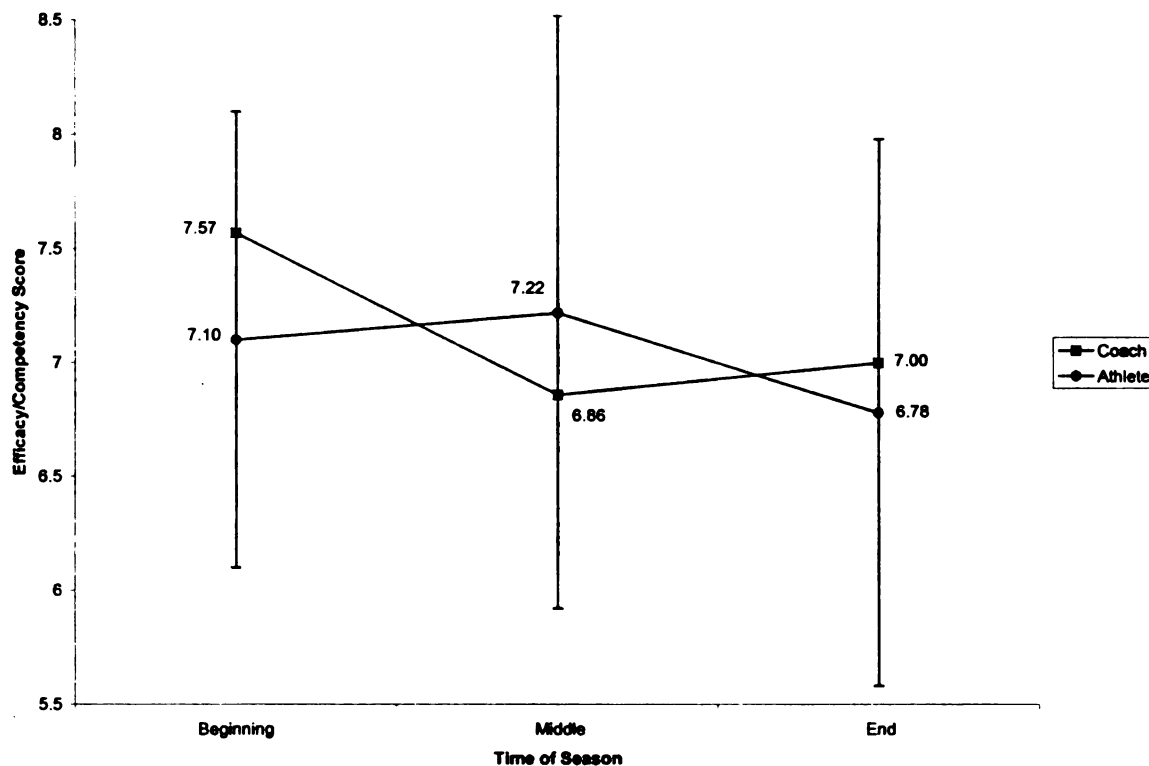


Figure 11. *Team 3 -- Changes in Motivation Efficacy and Motivation Competency over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

When asked about motivational strategies used, at the preseason interview, Jen spoke about the importance of self-motivated athletes:

I think this year the motivation is going to be a little bit easier. By setting up these three groups, I have my varsity, transition team, and junior varsity, the girls that are in the transition need the most motivation. By putting them in their own category I think I am putting the responsibility more on their shoulders, they know that where I put them for playing depends on how hard they work. I think that self-motivation will be the focus this year (Appendix X, 34).

By the end of the season, Jen spoke about how getting the athletes motivated was harder than anticipated, “It was unintentional, but I think some of that communication was missing. Some of that more positive aspect, like ‘Let’s pump up and have a great practice’ was lacking on some days” (Appendix X, 41). When asked about motivational strategies used by the coach, most of the athletes interviewed mentioned a certain type of speech that they found beneficial for motivation during games. This was coined the “You Suck” speech. One athlete discussed how this speech was used during the season to motivate the athletes during halftime:

Oh, it depends on how we played, like if we have this famous speech when we played Big Varsity High the first time. She’s like, “You guys are sucking.” Not really being serious, but then we came back and we won. So now if we’re doing badly, she’s like ‘Yeah, you suck’, but it’s a joke (Athlete 2, Appendix X, 68).

Another athlete discussed how this speech was motivational for her and the team throughout the season:

She'd always give us a speech, like the "you suck" speech, you might have heard that, and she'd, whenever we're playing bad it would always get us angry, but we wanted that speech. So, she'd always tell us that and it'd get all of us really motivated to keep playing better and she'd tell us that and we'd go out there in practice and we'd really hustle and work our butts off and we'd do really good. So, we just needed that little pep talk and then we made it really far and that's why we made it as far in the season as we did. That was the main motivation that she gave us (Athlete 1, Appendix X, 88).

While this motivational technique may have been viewed as beneficial, perhaps it became so common that it took the place of other positive motivating behaviors. For instance, one athlete spoke about the motivating effect of the "you suck" speech but also mentioned that her coach could provide more positive encouragement as motivation:

There are coaches that really, really compliment the girls and she does that, but not as much as I'd like to see her do it. Because in a sport you love to hear your coach say good things about you and sometimes she doesn't always recognize your strengths. She motivates us as best as she can, maybe that's the best she can do, but she could motivate us a little more I think (Athlete 4, Appendix X, 131).

Teaching Technique. The subscales of teaching technique efficacy (TE) and teaching technique competency (TC) were measured at the beginning and end of the season. Both Jen's TE and the athletes' ratings of TC decreased over the season. Teaching efficacy scores decreased from beginning ($M = 8.33$) to end ($M = 7.50$) while TC scores decreased from beginning ($M = 7.32$, $SD = 1.0$) to the end of the season ($M = 7.12$, $SD = .90$). One-sample *t*-tests of TE/TC scores revealed a statistically significant

relationship at the beginning of the season, $t(18) = -4.29, p < .005$. This test shows that Jen and the athletes differed significantly in perceptions of TE/TC at the beginning of the season but not at the end of season. See Tables 11-13 for t -test results and Figure 12 for changes in TE/TC over the season.

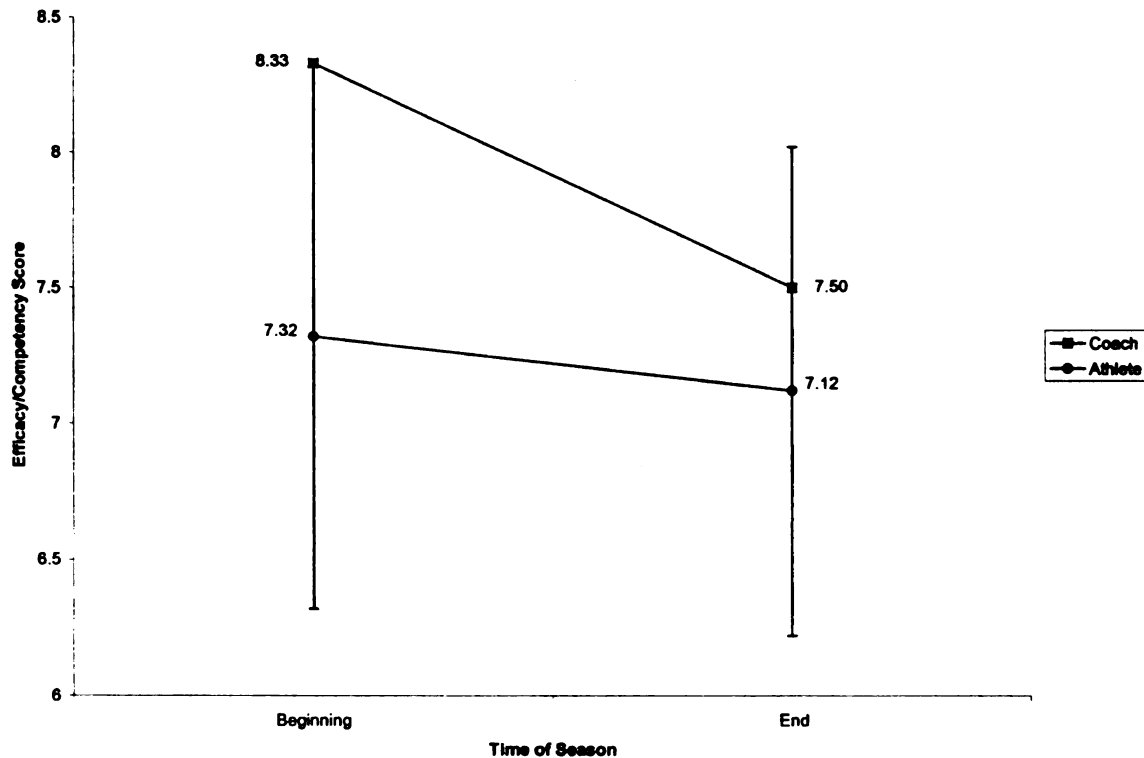


Figure 12. *Team 3 – Changes in Teaching Technique Efficacy and Teaching Technique Competence over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

When asked about how she viewed teaching lacrosse skills, Jen talked about creating an environment where effort was rewarded when trying new skills:

I try to create an environment where I do not care if you go out there and make a mistake as long as you are trying something, that is a message I am constantly

sending. Just show me that you are trying it. It's all about trying new things, trying new skills, and seeing what works for you (Appendix X, 160).

Further, she relates her work as a social worker to being an asset in communicating and teaching as a high school coach:

With teaching skills, with my experiences, with training, my education, and working with refugees where English is not the first language where you have to become real creative with how to send messages, those experiences have been a real asset. You have to use all those skills in coaching (Appendix X, 168).

Jen also discussed in her postseason interview how the emergence of lacrosse in the area has impacted her knowledge and approach to the game:

I think this new growth of lacrosse, it was definitely a growing year with the officiating and the coaching, the teams we played against. I think it really even drove the point home of how much better it is for players and teams to be a good educator and to teach them to do things the right way. I think its definitely, I think the girls got an appreciation of it because they would run off the field and go, "You taught us this way, but they aren't doing [it] this way" And having this dialogue of why is what you're teaching us different from what we're experiencing. And being able to have that, and even sometime second guessing myself and having to go back and say okay let me make sure that's the right way. In that aspect, this season has pushed me to be a better educator because there were so many inconsistencies (Appendix X, 182).

When asked about Jen's teaching competency and techniques, the athletes mentioned that she uses a varied approach such as demonstration, individualized

instruction, and drills. However, some of the athletes complained that the practice session would focus on a certain drill and then the team would go through that drill for the majority of a 2 hour practice:

She'd just keep, if she wanted to teach us a skill, she'd keep doing it over and over. She just makes us do it over and over until we get it. She focuses on one thing until we get it. I really like how she does that, but sometimes it can be hard because we do it like the whole practice. Some practices we focus just on one thing. One practice we were focusing on quick sticks and we had to do that the whole practice until we could get to 30, and that was just to 30. Some practices we'd do it like 40 or 50 and we couldn't even get 30. So, she'd make us do that the whole practice because we couldn't get it. So, I mean some of it is hard, but she wants us to get it right and that's good because she wants us to get better (Athlete 1, Appendix X, 230).

Another athlete spoke about how she would use a combination of demonstration, drills, and individualized instruction in teaching:

We do mostly drills and she'll show us how to do it. Then she'll put it into a drill, and then we learn the skill. Like if we're doing flip passes she shows us how to do it then we just pass and catch. I mean she can't just show you. And she'll also come around and help you individually if it's something you're having trouble with (Athlete 2, Appendix X, 219).

While this combination of demonstration, drills, and individualized instruction seemed to be effective for most skills, one athlete discussed that Jen should focus more on individual players' effort and needs:

She always had us practice with the team, which is what you're supposed to do, but sometimes she'd tell everyone that they weren't doing the ground balls right, but there were people doing it right. So you really wouldn't know if you were the one doing it wrong or right. She didn't really single out people as much. Like if she would have come up to me individually and said you need to do this better, it could have made me learn quicker how to do something. Instead of just saying as a whole team, you're not doing it correctly. Then, she would say whenever I say something it applies to the whole team, but sometimes you didn't really know if it did or not (Athlete 3, Appendix X, 256).

Character Building. The subscales of character building efficacy (CBE) and character building competency (CBC) were assessed at the beginning and end of the season. As with teaching technique, both CBE and CBC decreased over the season. Jen's CBE scores decreased from $M = 8.00$ to $M = 7.75$. The athletes' rating of CBC decreased from beginning of the season ($M = 7.68$, $SD = 1.3$) to end of the season ($M = 7.55$, $SD = 1.0$). Figure 13 shows changes in CBE and CBC scores over the course of the season. One-sample t -tests of the relationship between CBE scores and CBC scores found no statistical significance at the beginning or end of the season assessment. See Tables 11-13 for t -test results over the season.

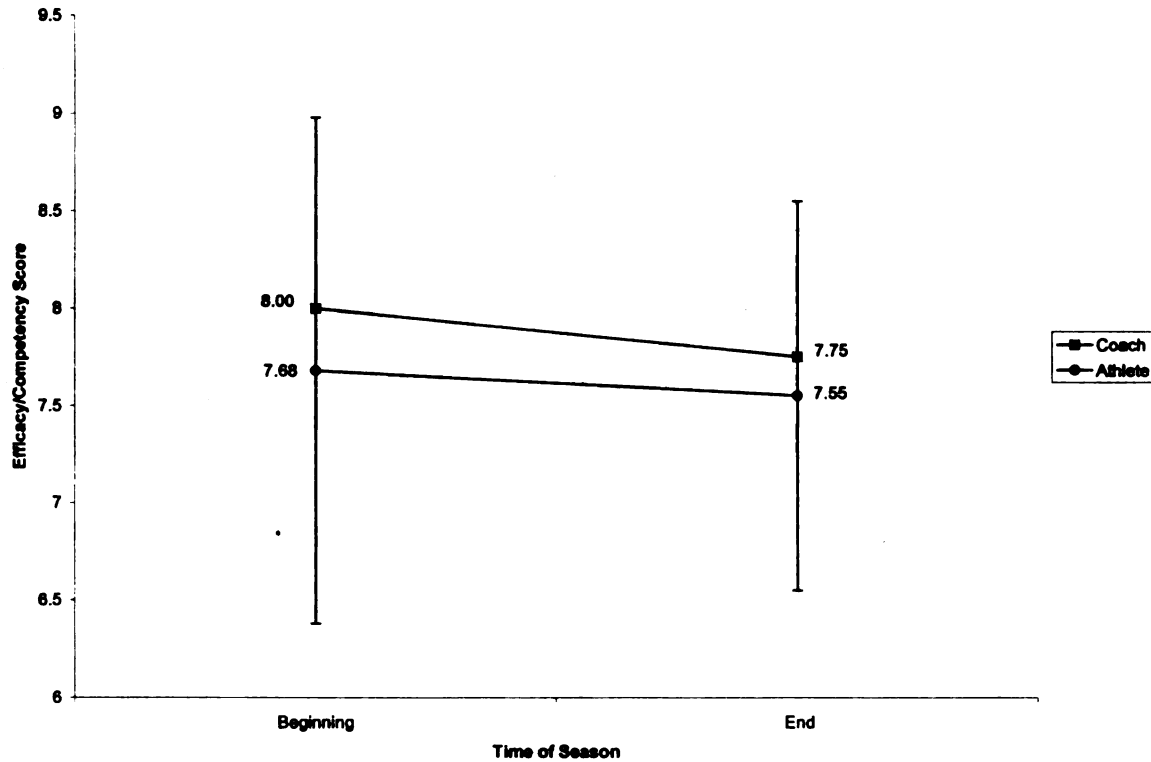


Figure 13. Team 3 – *Changes in Character Building Efficacy and Character Building Competency over the Season.*

Note. Vertical lines across Athlete mean scores represent standard deviation.

Jen spoke about how her job as a coach was important for teaching lessons both on and off the field. She had a more global view of the coach as teacher and character builder:

I do thoroughly believe that you have an impact both on the field and off the field and it's not only about the sport of lacrosse, but it's about character building. It's about instilling some things that I'm finding that you assume that kids know about respect and sportsmanship and you learn that it's not common place and just really holding true to that. Your job just isn't during the game, but, it's using those teaching moments that occur after the game, during the game when they're

not in play, but if you're not constantly staying on your toes you can miss out on a lot of things or you can overlook a lot of negative things that if they are not corrected, even though they may not directly impact your team, I think it directly impacts the fact that, that person may leave the experience with some pretty negative behaviors (Appendix X, 292).

During the postseason interview one athlete discussed how she was concerned with some of Jen's behavior during games. When there were bad calls or mistakes made by the referees, Jen would get upset and yell. This athlete was bothered by what she saw as unsportsmanlike behavior:

Stuff like during our games, this really bothered me, she wasn't being sportsmanlike, she'd yell at the refs or something like that. I think it reflects poorly on the team when she does that, but that's about it...sportsmanship towards the other team and the refs because of the way it affects how people look at our team. I think she's a good coach besides that (Athlete 2, Appendix X, 303).

This athlete went on to talk about how these behaviors went against lessons she had been taught and how that affected her view of Jen:

I don't think it bothered any of the other girls because they were all like, "Yeah that was a stupid call." It really bothered me but that's just because my dad raised me that way I guess. I lost a little bit of respect for her, but I still think she's a good coach (Athlete 2, Appendix X, 317).

When asked during her postseason interview about these behaviors, Jen again mentioned the impact of lacrosse being a new sport. Specifically, the differences between girls' and boys' lacrosse made quite an impact on the quality of officiating and coaching during the

team's first varsity year. In boys' lacrosse a player can check another player with his stick; in girls' lacrosse any contact is illegal. Jen said that officials and coaches who were used to the boys' game were misinterpreting the rules of girls' lacrosse. Because the girls' rules are all that Jen has known, she became quite upset as incorrect and unsafe playing was allowed or ignored. It is unclear if Jen shared these discrepancies with her team, explaining why she was frustrated; perhaps that discussion could have allowed the athletes to understand the motivation behind her behavior.

Another area of character building that was discussed by one of the athletes was how the coach and team atmosphere teach life lessons. One of the interviewed athletes had never, as a high school junior, played on any sports team before. In her interview she discussed how the coach instilled some valuable lessons:

I think it was the whole experience of being on a team just affected me because I've never had that before. Of course, being a coach, she taught us things we could use in everyday life. Like not giving up, or even just like listening skills, because you have to listen in order to be able to understand what she's talking about. So, that kind of stuff applies to life (Athlete 3, Appendix X, 354).

This same athlete also learned about teamwork and responsibility from Jen and her teammates over the season:

I learned a lot about being on a team, and teamwork. If we were playing bad, you can't just single out one person and say you're playing bad. You have to work at it as a team and figure out ways to not play as bad. You can't just blame it on one person and call it good. If you think about a job, everything relies on everyone in order to work well and that's how it was on the team. It's on everyone's shoulders

and you can't single out one person and say their playing bad so let's kick them off the team. It kind of helps you get along with people, even though you might not like them as much (Athlete 3, Appendix X, 360).

Inconsistencies in character building ideals and exhibited behaviors could have definitely led to a decrease in perceptions of character building efficacy/competency. Jen could have been frustrated with the lack of competence in referees and other coaches while the athletes could have witnessed her interactions and perceived them as unsportsmanlike. As with other subscales, understanding the context of the coaching behavior and athlete perception helps in understanding scores over the season.

Explanation of Efficacy/Competency Scores. As part of the postseason interviews both Jen and the athletes were asked about their scoring of coaching efficacy/competency over the season. For instance, Jen's scores of coaching efficacy tended to fluctuate or decrease throughout the season. When asked about this pattern, Jen mentioned the hardships and demands of the season in light of being pregnant:

I can definitely see it could have been a different season if, I feel like if I say this it sounds bad, but if my attitude was more consistent. Because I know that it went up and down, because of what I was able to do. You know there were days when I was out there and I really didn't want to be out there and feeling bad knowing that girls understood, but at the same time feeling that in a sense I was kind of cheating them in a way, because I couldn't give 100% and expecting them to (Appendix X, 389).

One athlete, whose scores decreased over the season, discussed how at the end of a long season there are several factors that affected her perceptions of coaching competency:

Yeah, I like Jen don't get me wrong. It's just that, towards the end of the season she got a little more edgy, well she's pregnant yeah, but she's just sterner I guess you could say. She might have just been more serious about it. Because of the playoffs, stuff like that. But I think a lot of the girls lost some respect for her because of the way she was coaching. Maybe it's just that after you spend so much time listening to someone, it just gets old (Athlete 2, Appendix X, 396).

Another athlete, whose scores fluctuated throughout the season, discussed specific behaviors or events that caused her perceptions to change:

I think that the stuff that bounced around score-wise was because it kind of depended on the game that we had or the practices that she, like sometimes, she did motivate us more to do stuff and other times she kind of just let us do our own thing and that's when it kind of fluctuated. I know it went down when it asked about working with individuals or something. I just remember that at the beginning of the year everything was going really well and by the end it was like well she hasn't really helped me individually and I didn't know exactly if I was doing it right and she never really said, so that went down. I think it just mainly depended on the games or practices before that and what I had to compare it to (Athlete 3, Appendix X, 416).

Understanding, not only the quantitative shifts in efficacy and competency scores, but the coach and athletes' reasoning for those scores allows for a greater understanding in the subtle shifts and fluctuations throughout a season. It is quite apparent that Jen's pregnancy affected her practice behaviors in several areas. However, most athletes did not see this as a problem that affected her coaching. As with other observed teams, the

coach tended to view shifts in scores as related to overall behaviors and attitudes while athletes would point to specific reasons or events for fluctuating scores.

Systematic Observation of Practices

Systematic observation methodology was employed in order to view changes in behaviors and observe specific events occurring during practice. In total, 7 practices were observed over the season representing beginning of the season (practices 1 and 2), middle of the season (practices 3, 4, and 5), and end of the season (practices 6 and 7). Further, practice sessions were divided into three segments; beginning, middle, and end of practice. Attempts were made to observe practices every week, however, team schedule and contests conflicted with weekly observations. Data from specific behaviors discussed in this section, including number and percentage of each behavior, can be seen in Table 14; data from all observed behaviors, including practice segments, over the season for this team can be seen in Appendices S-U.

A total of 1,360 behaviors were observed at the beginning of the season. The most frequently observed behaviors were silence (32.5%) and management (30.1%). Of the three forms of instruction, concurrent instruction was the highest observed with 15.5% of behaviors. Jen had no observed instances of physical assistance, and low observed positive or negative modeling, 2.1% and 0.4% respectively. In fact, she provided no positive modeling the entire second observed practice. See Table 14 for observed behaviors over the season and Appendix S for a full illustration of observed practice behaviors by segment.

Table 14. Team 3 – Observed Practice Behaviors Over the Season

	Beginning		Middle		End	
	No.	%	No.	%	No.	%
Preinstruction	68	5.0	79	2.8	43	3.5
Concurrent Instruction	211	15.5	505	17.8	229	18.5
Postinstruction	26	1.9	38	1.3	1	0.1
Questioning	21	1.5	78	2.7	74	6.0
Physical Assistance	0	0.0	0	0.0	0	0.0
Positive Modeling	29	2.1	18	0.6	4	0.3
Negative Modeling	6	0.4	0	0.0	0	0.0
Hustle	45	3.3	32	1.1	64	5.2
Praise	32	2.4	93	3.3	46	3.7
Scold	12	0.9	34	1.2	15	1.2
Management	409	30.1	525	18.5	405	32.7
Uncodable	1	0.1	0	0.0	0	0.0
Use of First Name	58	4.3	221	7.8	87	7.0
Silence	442	32.5	1214	42.8	269	21.7

Note. Due to decimal place rounding of percentages not all columns add up 100%.

A total of 2,837 behaviors were observed during the middle of the season. See Table 14 for observed behaviors over the season and Appendix T for a full illustration of observed practice behaviors by segment. Silence and management were still the highest observed behaviors, 42.8% and 18.5% respectively. Concurrent instruction (17.8%) continued to be exhibited over both preinstruction (2.8%) and postinstruction (1.3%), with these two forms of instruction decreasing from beginning of the season. At the middle of the season Jen's use of questioning increased, possibly due to more tactical or strategic drills in practice. The forms of assistance and modeling remained low with both physical assistance and negative modeling never being observed and positive modeling accounting for only 0.6% of behaviors.

At the end of the season a total of 1,237 behaviors were observed. At this point management was the most frequent behavior, accounting for 32.7% of observations. Silence decreased to 21.7% at the end of the season. Concurrent instruction continued to dominate other forms of instruction and actually increasing at the end of the season to 18.5% of all behaviors. The behavior of questioning continued to increase with 6% of observations. Finally, modeling and assistance continued to be low with no observations of physical assistance and negative modeling and only 4 (0.3%) instances of positive modeling observed over the two postseason practices. See Table 14 for observed behaviors over the season and Appendix U for a full illustration of observed practice behaviors by segment at the end of the season.

Several interesting trends emerged in Jen's observed practice behaviors over the season. First, her modeling (both positive and negative) and physical assistance were very low over the season. There were several occasions where she would sit on the ground for most of practice and interact with the athletes through concurrent instruction during drills. This could also explain why concurrent instruction dominated other forms of instruction and actually increased over the season. However, it is of note that all coaches observed over the season conveyed low levels of modeling and physical assistance. Along with concurrent instruction, Jen's use of questioning increased over the season. As the team was learning more tactical strategy, she would often question the athletes about their position and how a certain play should progress. Finally, Jen's use of motivating behaviors such as praise and scold actually increased as the season progressed. Perhaps because she could not physically aid the athletes as much through nonverbal behaviors such as modeling and physical assistance, she relied more on verbal coaching behaviors.

Views on Season Events. In order to understand both the coach and athletes' views of coaching efficacy and coaching competency in light of the season, specific season events and idiosyncratic coaching behaviors were discussed. Two specific events were discussed with Jen and the interviewed athletes. The first occurred early in the season. The team began practice with a discussion of the previous night's game. Apparently, several athletes from the Varsity squad had to do push-ups during the J.V. squad's game for not paying attention. Jen discussed with her team the importance of supporting the entire lacrosse program and why it was important to watch both games. When asked to reflect on this team discussion, Jen talked about her motives for it:

Well, I think part of it was the respect issue of being supportive to their younger teammates. It was kind of an ongoing problem and something we definitely had to work on just because, I don't think they realize it, but I know how much the younger players look up to the older players, and are just enthralled when they watch the varsity game. I wholeheartedly believe that you learn from watching and when they would watch and they would encourage, I really think they got something out of it. I think it was really to instill that respect, and letting them know that their job as a teammate isn't done when their game is done. They need to be supportive and also use it as an opportunity to learn when they're given it (Appendix X, 451).

When the athletes were asked about this event, they all remembered it as an important message for the development of teamwork. One athlete discussed the impact of this talk, "Because I know it was really important to her that we all stayed and watched. I think a lot of us girls took it to heart and did stay and try to learn by watching" (Athlete 2,

Appendix X, 485). Another athlete also discussed watching the other team and game as important to her learning:

I never really thought about watching your own teammates play and try to learn from that. I mean you watch the game, but maybe pick a person who plays the same position as you and see how they do it. Or, to see if there's anything that you can do to change how you play. That's how it kind of impacted me. Every game after that I kind of picked up on the people that played my position and I watched them. Even from just seeing where they were standing when the ball wasn't down there kind of helped me realize what I was doing wrong or if it worked out better or not. But, it impacted me a lot (Athlete 3, Appendix X, 512).

The second event was also a pre-practice discussion. Right before the postseason the team experienced a decrease in motivation for practice. This was further influenced by end of the school year events such as graduation, open houses, and the team banquet. Also, there was a heat wave and several of the athletes would complain about practicing in the hot weather. Jen decided to discuss the importance of the postseason for this first year program. Because lacrosse was a new sport in the area, all teams were guaranteed a first-round game but this team had the opportunity to advance further into postseason play. She addressed the lack of motivation, end of the school year activities, and the hot weather. When asked about her main motivation of this event she responded:

First of all, that we hadn't practiced for awhile and this was kind of a key opportunity to have to kind of brush some of the dust off, get our heads in the game, use this as an opportunity to feel out not only the weather, but how everyone responded to the weather, because I knew that was going to be an issue.

And for the girls to kind of mentally get prepared for the game...So, I was just trying to get them motivated to do that. And with the weather as hot as it was, it was going to be harder to get them motivated, so that was kind of the main message. We have a lot to do and especially the end of the school year I know it's so hard for the girls. They're already thinking about open houses and graduation, and for the juniors, senior pictures. You just gotta get them refocused (Appendix X, 539).

The athletes remembered this season event well. One athlete mentioned that the weather was a main factor in her lack of motivation, "And even though it's hot, we need to work hard. Because I know we were really lazy that day. She would get really ticked at us, but it was hot" (Athlete 1, Appendix X, 556). Another athlete viewed this pre-practice talk as a motivating message to prepare her for postseason play:

So, she was just letting us know all these different things that are going to be going on and what a challenging game it's going to be. When she said that, I really got kind of worried, because I was like its not going to be an easy game, we're going to have to work and if we're not there, and our heads aren't in the game then we're not going to win and I was getting worried at that point. So, she was just letting us know that our heads have to be in it and you guys have to bring your "A" game. She was just letting us know the challenge ahead of us (Athlete 4, Appendix X, 578).

Understanding Jen's practice behaviors and how she and the athletes view certain season events adds to the richness of this coach and team as a case study observation. Jen and her team faced some unique challenges over the course of the season. Most

noticeably, Jen's pregnancy during the season did impact her perceptions of coaching effectiveness in the areas of motivation and teaching technique. There were some days when she lacked the motivation for coaching and it was difficult to motivate her players. What is interesting is that very few of the athletes on her team mentioned her pregnancy as a hindrance to her coaching. In fact, several of the athletes mentioned in their postseason interviews that, "Win it for Peanut!" was a favorite team cheer in honor of Jen's baby. Overall, compared to the two other observed coaches, even with being pregnant during the season, Jen experienced the same types of experiences and exhibited comparable practice behaviors.

As was seen with all three teams, these athletes tended to be more forgiving of coaching behaviors than the coach's were, based on trends in efficacy and competency scores. Perhaps the outcome would not be the same if Jen was coaching male athletes. This unique issue was interesting to follow over the season and it was apparent, in this case, Jen's pregnancy was seen simply as an idiosyncratic trait of this team, it had very little impact on season outcome and athlete enjoyment.

Comprehensive Summary of Results and Discussion

The purpose of this study was to investigate how coaching efficacy, feedback, and practice behaviors change during different intervals (preseason, season, postseason) of the season, how head coaches are affected by season events, such as win or loss streaks, and how coaching behaviors may be affected by these case study coach's educational and experiential background. More specifically, how are these variables manifested in a developing head coach? Another question was how these changes in coaching efficacy and feedback are perceived throughout the season by the coach and athletes. To investigate trends and perceptions, the general results from the three case study coaches and teams were compared.

Coaching Efficacy and Coaching Competency. Overall, the scores for the subscales of efficacy/competency for coaches and athletes tended to fluctuate or decrease over the season. Specifically, fluctuating scores tended to decrease from beginning of the season to the middle of the season and then increase again at the end of the season measure. Haugen, Short, Brinkert, and Short (2004) found that, with a preseason and postseason measure, coaches tended to decrease in their CES scores over the season. Research in teacher efficacy has also found that efficacy tended to shift after first year experiences. For instance, those students who had not yet gone through their teaching internship have a higher sense of efficacy than those who have or who are current teachers (Parker, Guarino, & Smith, 2002). Further, Plourde (2002) found that student teachers decreased in confidence after a first year experience. However, this ebb and flow in scores shows how a coach's sense of efficacy and athletes' sense of their coach's competency shifts based on season events and team culture. It could be that these

inexperienced coaches were just unprepared or surprised by the responsibility of being a first year varsity coach. Sage (1989) states that most novice coaches have a “reality shock” when faced with the challenges and duties of coaching. It would be interesting to investigate whether coaches and athletes, regardless of coaching experience, encounter a decrease in efficacy/competence at mid season. It is of note that the coaches tended to attribute changes in efficacy to more global events or situations affecting the season while athletes tended to point out specific season events or behaviors that affected their perception of their coach’s total coaching competency. Again, it is also important to observe that when significant differences were found between coaching efficacy and coaching competency, that athletes scores of coaching competency were almost always higher. Overall, the athletes tended to be more forgiving or not take into account behaviors than their coach’s rating of coaching efficacy. This is also shown through the consistent perceptions over the season based on the one-way repeated measures ANOVA. While subtle shifts occurred with coaching competency subscales, athletes’ views did not show a statistically significant change over the season.

Game Strategy Efficacy and Game Strategy Competency. Across these three coaches and teams, game strategy efficacy/competency fluctuated with no common trend. While all coaches tried to implement more game strategies, most were unsuccessful in reaching the level they desired. What was interesting is that they saw the use of game strategy as a product of player development. For instance, both Jen and Rob discussed how if their players were better skilled in fundamentals they could implement more game strategy. Mark discussed how he needed to work on his athletes’ “unlearning” incorrect fundamentals learned from previous coaches before focusing more on game strategy.

Coaches and athletes appeared to view the use and effectiveness of game strategy differently on all three teams. For example, Jen would be frustrated with trying to teach strategy while several athletes commented that they did not remember using strategy throughout the season. Mark struggled with what to do, in the moment, during game situations. This ineffective use of tactics was echoed by athletes on his team. Perhaps inexperienced coaches need to be taught, not only how to teach strategy during practice, but how to implement it during game situations. It would be interesting to investigate how an inexperienced coach uses game strategy as a teaching tool during practices and how he or she uses it tactically during games.

Motivation Efficacy and Motivation Competency. This subscale of coaching efficacy and coaching competency tended to follow a fluctuating score for both coaches and athletes. There was a decrease in ME and MC from beginning to middle of the season and then an increase at the end of the season measure. The case studies provided the various ways in which these inexperienced coaches attempted to motivate their athletes. Strategies included such motivators as running and playing with the athletes during practice to giving motivation talks such as Jen's "you suck" half-time messages.

Jen, specifically, was an interesting example in motivating her athletes. She used differing techniques such as a task-oriented motivational climate during practices, encouraged self-motivation of her players, and also used negative messages such as "you suck". Perhaps, due to her inexperience, she struggled with finding the right motivating tactics. While task-oriented motivational climates have been advocated for player development, the use of negative feedback has been linked to harmful outcomes (Weiss & Ferrer-Caja, 2002). While the athletes on her team downplayed the negative effects of

“you suck”, Jen could have used other tactics during halftime talks. Coaching education could aid all three of these coaches by helping them to incorporate consistent motivational climates that focus on player development that are integrated throughout all areas of coaching efficacy, teaching techniques, character development, and strategy.

Teaching Technique Efficacy and Teaching Technique Competency. The scores of TE and TC tended to decrease over the season for both coaches and athletes. All three case studies provided examples of struggling with teaching skills and tactics. For instance, Mark struggled with how to use his skills and knowledge as a collegiate lacrosse player to teach his athletes. Rob believed that he did not effectively teach skills due to having an entire team and practice to manage. Because of this, he feared that he had not helped players individually improve and learn. Jen struggled with teaching skills during practice due to, not only managing a team and practice by herself, but also sometimes battling feeling ill and being physically drained throughout the season. These trends in decreasing teaching efficacy after novice experiences are consistent with current teaching efficacy literature (see Parker et al., 2002; Plourde, 2002).

The educational backgrounds of these three individuals may come into play with their views on teaching technique. Rob, while a teacher, believed that he needed to focus more on his experience as a player than a teacher. Jen used her skills as a social worker to connect with athletes and explain concepts, even though her use of physical instruction was lacking. Finally, Rob, as a business manager, would focus on what the team needed to do as a unit; he realized at the end of the season that he needed to focus more on individual player development.

Athletes on all of the teams suggested that their coaches use more individual instruction. It is apparent that inexperienced coaches need help in developing strategies for integrating individual and team teaching techniques as well as the use of modeling skills and physically assisting athletes.

Character Building Efficacy and Character Building Competency. As with TE and TC, scores on the subscales of character building efficacy and character building competency had a tendency to decrease over the season. This trend was interesting because the coaches all talked about the life lessons they tried to impart and most athletes reflected on lessons outside of lacrosse learned from their coach. Rob especially took to heart his influence as a model for the young men on his team. This focus on positive role modeling could have been in part because Rob was a father of teenage children; he saw the impact that a significant adult could have on developing young adults. Part of the reason for decreasing scores could be from the specific season instances mentioned by athletes. Mark struggled with developing a clear and consistent set of team rules. Jen's behaviors toward officials and coaches also affected one athlete's view of her coach's CBC. While the CBE/CBC scores decreased, it is important to remember that athletes did mention positive lessons learned throughout the season.

All three of these coaches cared about impacting their athletes on and off the lacrosse field. Further, most athletes discussed the importance of feeling cared about and respected by their coach. This is important because research points to the important influence coaches can have on athletes. Throughout a young athlete's development, the impact of significant adults, such as athletic coaches, can have a dramatic influence on young athletes. In fact, the interplay between positive adult role models, non-parent adult

relationships (such as a coach), and youth programs such as organized sports have been found to greatly impact the developmental assets that a young person acquires during early life (Scales & Leffert, 1999). Examples of these assets are fewer feelings of loneliness, anxiety, or depression (Pretty, Andrewes, & Collet, 1994), enhanced identity development (Shaw, Kleiber, & Caldwell, 1995), and better development of life skills (Dubas & Snider, 1993). Further, we know from the work of Smith and Smoll (see Smith et al., 1979; Smith et al., 1977; Smoll et al., 1993) that athletes are influenced by a coach that cares about them as both an athlete and individual. While scores in CBE and CBC decreased over the season, all three coaches understood and worked towards developing this relationship with athletes.

Observed Practice Behaviors. Over the season these three coaches exhibited several interesting trends in observed practice behaviors. The highest behaviors, across the season for all coaches, were silence and management, supporting previous research in behaviors of inexperienced coaches (Jones, Housner, & Kornspan, 1997). However, it is important to know what increased amounts of silence mean. Is it that these inexperienced coaches are overwhelmed and do not adequately provide feedback to their athletes? Or, is it that as the season progressed, these coaches provided coaching-free times in which the athletes were responsible for making tactical decisions and running plays? The large amount of management feedback seems due to the fact that these head coaches were often the only leadership present at practices. Therefore, they were not only responsible for laying out the practice plan and agenda, but for relaying logistics for travel and other information not related to skill or play. These coaches all used concurrent instruction as their highest form of instructing both the team and individual athletes. Lacy and Goldston

(1990) also found that, for both male and female coaches, concurrent instruction is used more than pre- or postinstruction during practices. Finally, these coaches displayed low amounts of modeling (both positive and negative) and physical assistance. In fact, negative modeling and physical assistance were almost never observed over the course of the season. Perhaps these inexperienced coaches need to develop more comfort with teaching skills and tactics in order to increase their use of these behaviors. Another concern for physical assistance is perhaps the coaches' views on "touching" adolescent athletes. Society's views on "touching" could have made the physical assistance of athletes deemed inappropriate. The overall findings of these observed practice behaviors run counter to previous research in which more experienced coaches tended to have consistent behaviors over the season and spent low levels of time passively observing practice (Curtner-Smith et al., 1998).

What has been presented through these case studies are three different routes to becoming a master coach. Through experiences such as a successful athlete, a member of the community wanting to give back, and a coach who learned a sport later in life and developed a passion for the game, these coaches came to being first year varsity coaches. It is interesting that even though they came from very different educational backgrounds all mentioned how skills as a teacher, business owner, and social worker helped them in their duties as a coach. Specifically, they mentioned the impact of communication and management skills learned in the workplace as impacting their coaching behaviors. These coaches' expectations of the season and of coaching also impacted their behaviors and perceptions of coaching efficacy. For instance, Mark had an expectation of an easy

transition from being a player to being a coach. However, he was unprepared for the difference between being a player of lacrosse and a teacher of lacrosse:

What was surprisingly hard for me was you could be a good player, but making the transition to a coach is a lot more difficult than I thought. There are some things that are kind of innate in your game that make you a good player. It's trying to figure out what you do that makes you successful and get the kids to learn to think like that. Really, just trying to break down your game from, 'Oh I just know where to go, or I can see this situation coming' to, 'Why do I know where to go or why do I recognize certain situations?' (Appendix V, 163).

This expectation impacted his views on teaching lacrosse skills and his overall effectiveness in being a coach. Rob discussed his focus on being a player of good character as an expectation for his athletes:

We got great kids that competed hard, never really gave up and were gentlemen. I won't call lacrosse a violent game, but it is a very physical game and yet our guys are classy. I am proud of that and we worked to that. I mean I coached to that. One thing I keep coaching to is, 'you will be gentlemen' and they were good about it (Appendix W, 282).

This expectation was evident in Rob's focus on character building as well as his high scores on efficacy and competency in this area.

These three coaches had struggles, frustrations, and successes as they navigated their first year as a varsity coach. It is important to understand that what influenced fluctuations in scores over the season were season events, while idiosyncratic to this team and season, are the struggles faced by all new coaches.

CHAPTER 5

Implications

What has been presented in this dissertation is a season-long investigation of three developing coaches as they navigated their first year as a varsity head coach. Coaching efficacy, practice behaviors, and athletes' ratings of the coach's competency were assessed over the season. Further, the perceptions of both the coach and athletes into idiosyncratic season events and trends were examined. This chapter focuses on the limitations of the present study, the implications of findings on coaching education, and implications of this project on future research directions.

Limitations

While this study provided a comprehensive, season-long investigation of three developing coaches, there are several limitations with the present study. First, while the research design allows for examination across the season, a better season-long design would have used more than 6-7 observations for a 3-month season. However, having three teams to observe over a single season provided a richer understanding of the multiple paths that exist and their influence on coaching behaviors. Another limitation was the fact that teams played 3-4 games per week, limiting practice observation opportunities. Ideally, each team would have been observed each week during the season.

One limitation of this study was associated with collecting the subscale measures of teaching technique efficacy/competency (TE/TC) and character building efficacy/competency (CBE/CBC) only at the beginning and end of the season. This data collection decision was based on an assumption of collecting CES/CCS data several more times throughout season (using a shorter scale for collection ease and voluntariness of

athletes and coaches); however, only one middle of season collection was possible. Because of this decision, total coaching efficacy and total coaching competency were unable to be measured and reported. As past research has noted, coaches tend to decrease in efficacy over the season when measured at beginning and end (Haugen, Short, Brinkert, & Short, 2004). As was seen in this study, there was a decrease in these two subscales over the season. However, perhaps if scores were taken more than at the beginning and end, TE/TC and CBE/CBC would have fluctuated in the same manner as the other subscales. In a study that was sensitive to shifts over the season, this would have been the better approach.

Lastly, this case study design does not allow for generalization to the greater coaching population. While this study provides a rich understanding of the experiences of these novice lacrosse coaches, applying these results to the experiences of all inexperienced coaches is limited. As with all case study designs, the decision to investigate a phenomenon in a rich, contextual manner is made over the importance of generalizability to the group. What this study does provide is an in-depth investigation that can be used as a catalyst for future research on the general experiences of developing coaches.

Implications for Coaching Education

The season events and trends experienced by Mark, Rob, and Jen have several implications for coaching education, specifically how to help inexperienced coaches as they are developing. First, coaching educators need to explain that in the early years of coaching, coaches might experience a midseason decrease in confidence. Further, the athletes may perceive a decrease in coaching competency at this time. To counter this

decrease, coaches could vary practice plans, allow athletes more decision about practice sessions, or perhaps invite a trusted and experienced colleague to observe their practice. This last strategy could aid in identifying ineffective strategies. Coaches need to be given strategies for dealing with season-long responsibilities and stressors. Coaching education programs need to provide examples of how usual coaching education topics, such as motivation, goal-setting, skill development, etc., are impacted by the length of a season.

Secondly, inexperienced coaches need to be taught how to use modeling and physical assistance in their teaching of skills and tactics. Master coaches use a variety of pedagogical techniques and, while these three coaches varied their teaching approaches, they did not effectively use modeling and physical assistance. Perhaps this is a section to be added to a coaching education clinic on pedagogy or communication. Along with modeling, inexperienced coaches should be given a variety of pedagogical techniques to use when teaching skills. As the athletes mentioned in postseason interviews, varied and creative techniques were both effective and motivating. Specifically, the use of individual instruction should be stressed to inexperienced coaches. This was one of the main suggestions by athletes for improvement with these three coaches.

The results of this study highlight the importance of mentoring. While previous research has advocated this educational tool, few programs have been created (Bloom, Durand-Bush, Schinke, & Salmela, 1997). Inexperienced coaches need help in dealing with the fluctuation in their efficacy over the season. Providing developing coaches with a more experienced coach could provide much needed support over the first few seasons. For instance, these mentor coaches can provide suggestions or techniques, observe practice sessions, and a much needed sounding board for inexperienced coaches. This

assistance is even more imperative when coaches are handling the responsibility of practice management alone.

This implication of mentoring new scholastic coaches also impacts the athletic directors and school administration. Those that hire these novice coaches need to find the best ways to support them through their first few seasons and beyond. For instance, administrators need to understand that the confidence and competency of the coach will fluctuate throughout the year. This ebb and flow through the season could be aided by mentoring with experienced coaches and administrators, more evaluation with support throughout the season, and developing education and collaboration amongst all coaches in the school system. This is even more important if a school system is hiring a large contingency of contract-hire or non-faculty coaches. These individuals need to have opportunities to connect to the school culture and understand the athletic department's role in the life of the high school scholar-athlete.

Implications for Future Research

The findings and implications of this study provide several interesting areas for further research. First, while the season-long investigation of inexperienced coaches was an addition to the literature, a more in-depth investigation needs to be conducted. This methodology needs to be expanded to include subtle shifts (perhaps weekly assessments) and also needs to include a coach's game behavior. As was seen in the athlete's reaction to Jen interacting with the officials and coaches, much goes on at a game that needs to be factored into a comprehensive investigation of the season.

While this study examined the interplay of coaching efficacy and coaching competency, additional research is warranted. While previous work has examined

athletes' views of their coaches (Myers, et al., 2006) and even the congruence of coach/athlete perceptions of coaching efficacy (Short & Short, 2004), investigation into both athlete and coach perceptions should include more qualitative analysis into why significant differences do exist between some coaches and teams and not for others. For instance, what made Jen's athletes have similar perceptions of coaching competency as her coaching efficacy while Mark and Rob's athletes differed in many areas of efficacy/competency? As was seen with many examples given by the coaches and athletes, usually the coach would focus on the bigger picture of the season while athletes would focus on specific season situations.

There are several extensions to the ASUOI that would aid in more accurate systematic observation research. First, the instrument does not take into account the interpersonal aspect of coach-athlete interactions. There needs to be a development of "general conversation" categories. This could include categories regarding academics, personal issues, etc. The addition of these categories would aid in understanding the interpersonal relationships developed as a high school coach. Further, researchers need to distinguish between coaching behaviors that are reactions to specific athlete behaviors and those that are spontaneous. The addition of this feature would allow researchers to understand how coaches do or do not respond to specific athlete behaviors. This would also add more insight into categories such as management and silence. Along with this reactive and spontaneous addition, the behavior or silence needs to be further analyzed. For instance, with the current version of the ASUOI, silence is categorized the same whether it is in regards to practice activity or not. The silence category needs to be further divided by whether the coach is watching practice/athletes while silent or is not paying

attention to the practice session. Dividing the behavior in this manner would allow researchers to understand when a coach might be analyzing player skill or drills and when coaches are not reactive to the practice session.

Finally, further investigation is warranted into the effects of being a contract-hire coach. As outlined in Chapter 2, coaches are no longer coming predominantly from the field of teaching. As was seen in this study, two of the three coaches were contract-hires without pedagogy training. However, they had similar experiences to Mark, who was a teacher. Further, all of the coaches listed skills obtained from their occupations for coaching. Future research should investigate what strengths or weaknesses contract-hire coaches bring to high school sports. Also, a needs-assessment would allow coaching educators and researchers to identify what these non-teacher coaches desire in order to become better equipped as teachers, motivators, and role models. These investigations will begin to meet the needs of a new generation of high school coaches that have found that there are many routes and starting points to becoming a master coach.

Appendix A: Coach Demographic Questionnaire

Please check only one answer per question.

1. Gender:

- ☐ 1. Male
☐ 2. Female

2. Ethnic affiliation:

- | | |
|---|--|
| <input type="checkbox"/> 1. Caucasian/Non-Hispanic
<input type="checkbox"/> 2. African American/Non-Hispanic
<input type="checkbox"/> 3. Chicano/Mexican American
<input type="checkbox"/> 4. Hispanic
<input type="checkbox"/> 5. American Indian or Alaskan | <input type="checkbox"/> 6. Asian/Pacific Islander (Asian American)
<input type="checkbox"/> 7. Other Affiliation:
_____ |
|---|--|

3. Age: _____

4. What sports have you coached at the high school level and at what level/position?

Sport:	Level:	Position: Head Coach	Position: Assistant Coach	Years in this Position
<i>Example: Girl's soccer</i>	<i>9th Grade team</i>		<i>X</i>	<i>2</i>

Appendix A: Coach Demographic Questionnaire (cont.)

5. What educational experiences have you participated in? (please check all that apply)

PACE Level 1 (MHSAA, Legal Aspects, Medical Considerations) _____

PACE Level 2 (Pedagogy, Sport Psychology) _____

MHSAA Coaching Clinics _____

Other Coaching Workshops _____

Sport-Specific Coaching Certification _____

Coaching Minor in College _____

No Prior Training _____

6. Were you an athlete in:

a. High School? ____ Yes ____ No

b. College? ____ Yes ____ No

If yes, what sports/level?:

Sport:	Level:	Years:
<i>Example: Soccer</i>	<i>High School Varsity</i>	<i>3</i>

Appendix A: Coach Demographic Questionnaire (cont.)

7. What is the highest level of education you have attained? (please check):

____ High School

____ Some college

____ Completed college (specify degree and subject) _____

____ Some graduate school

____ Completed graduate school (specify degree and subject) _____

____ Other, please specify _____

8. Contact Information:

Name: _____

Mailing Address: _____

Preferred Phone Number: _____

Preferred Email: _____

I prefer to be contacted via (please check one): phone _____ email _____

Appendix B: Athlete Demographic Questionnaire

Please check only one response to each question.

1. Gender:
☐ 1. Male
☐ 2. Female
2. Birthdate (month/year) _____
3. Ethnic affiliation
☐ 1. Caucasian/Non-Hispanic
☐ 2. African American/Non-Hispanic
☐ 3. Chicano/Mexican American
☐ 4. Hispanic
☐ 5. American Indian or Alaskan
☐ 6. Asian/Pacific Islander (Asian American)
☐ 7. Other Affiliation: _____
4. Years on this team: _____
5. Years under this coach: _____
6. Total years experience in this sport: _____
7. Number of coaches you have played for in this sport: _____
8. Position you usually play: _____
9. What other sports do you play at the high school level?: _____

Appendix C: Coaching Efficacy Scale

Coaching confidence refers to the extent to which coaches believe that they have the capacity to affect the learning and performance of their athletes. Think about how confident you are as a coach. Rate your confidence for each of the items below. Your answers will be kept completely confidential.

How confident are you in your ability to—

		Not at all Confident						Extremely Confident				
		0	1	2	3	4	5	6	7	8	9	
1.	maintain confidence in your athletes?	0	1	2	3	4	5	6	7	8	9	
2.	recognize opposing team's strengths during competition?	0	1	2	3	4	5	6	7	8	9	
3.	mentally prepare athletes for game/meet strategies?	0	1	2	3	4	5	6	7	8	9	
4.	understand competitive strategies?	0	1	2	3	4	5	6	7	8	9	
5.	instill an attitude of good moral character?	0	1	2	3	4	5	6	7	8	9	
6.	build the self-esteem of your athletes?	0	1	2	3	4	5	6	7	8	9	
7.	demonstrate the skills of your sport?	0	1	2	3	4	5	6	7	8	9	
8.	adapt to different game/meet situations?	0	1	2	3	4	5	6	7	8	9	
9.	recognize opposing team's weakness during competition?	0	1	2	3	4	5	6	7	8	9	
10.	motivate your athletes?	0	1	2	3	4	5	6	7	8	9	
11.	make critical decisions during competition?	0	1	2	3	4	5	6	7	8	9	
12.	build team cohesion?	0	1	2	3	4	5	6	7	8	9	
13.	instill an attitude of fair play among your athletes?	0	1	2	3	4	5	6	7	8	9	
14.	coach individual athletes on technique?	0	1	2	3	4	5	6	7	8	9	
15.	build the self-confidence of your athletes?	0	1	2	3	4	5	6	7	8	9	
16.	develop athletes' abilities?	0	1	2	3	4	5	6	7	8	9	
17.	maximize your team's strengths during competition?	0	1	2	3	4	5	6	7	8	9	
18.	recognize talent in athletes?	0	1	2	3	4	5	6	7	8	9	
19.	promote good sportsmanship?	0	1	2	3	4	5	6	7	8	9	
20.	detect skill errors?	0	1	2	3	4	5	6	7	8	9	
21.	adjust your game/meet strategy to fit your team's talent?	0	1	2	3	4	5	6	7	8	9	
22.	teach the skills of your sport?	0	1	2	3	4	5	6	7	8	9	
23.	build team confidence?	0	1	2	3	4	5	6	7	8	9	
24.	instill an attitude of respect for others?	0	1	2	3	4	5	6	7	8	9	

Appendix D: Coaching Competency Scale

Coaching competency refers to the extent to which coaches affect the learning and performance of their athletes. Think about how competent you believe your coach to be. Rate his or her competence for each of the items below. Your answers will be kept completely confidential.

How competent is your head coach in his or her ability to--

		Not at all Competent						Extremely Competent				
		0	1	2	3	4	5	6	7	8	9	
1.	help athletes maintain confidence in themselves	0	1	2	3	4	5	6	7	8	9	
2.	recognize opposing team's strengths during competition?	0	1	2	3	4	5	6	7	8	9	
3.	mentally prepare his/her athletes for game strategies?	0	1	2	3	4	5	6	7	8	9	
4.	understand competitive strategies?	0	1	2	3	4	5	6	7	8	9	
5.	instill an attitude of good moral character?	0	1	2	3	4	5	6	7	8	9	
6.	build the self-esteem of his/her athletes?	0	1	2	3	4	5	6	7	8	9	
7.	demonstrate the skills of his/her sport?	0	1	2	3	4	5	6	7	8	9	
8.	adapt to different game/meet situations?	0	1	2	3	4	5	6	7	8	9	
9.	recognize opposing team's weakness during competition?	0	1	2	3	4	5	6	7	8	9	
10.	motivate his/her athletes?	0	1	2	3	4	5	6	7	8	9	
11.	make critical decisions during competition?	0	1	2	3	4	5	6	7	8	9	
12.	build team cohesion?	0	1	2	3	4	5	6	7	8	9	
13.	instill an attitude of fair play among his/her athletes?	0	1	2	3	4	5	6	7	8	9	
14.	coach individual athletes on technique?	0	1	2	3	4	5	6	7	8	9	
15.	build the self-confidence of his/her athletes?	0	1	2	3	4	5	6	7	8	9	
16.	develop athletes' abilities?	0	1	2	3	4	5	6	7	8	9	
17.	maximize his/her team's strengths during competition?	0	1	2	3	4	5	6	7	8	9	
18.	recognize talent in athletes?	0	1	2	3	4	5	6	7	8	9	
19.	promote good sportsmanship?	0	1	2	3	4	5	6	7	8	9	
20.	detect skill errors?	0	1	2	3	4	5	6	7	8	9	
21.	adjust his/her game strategy to fit his/her team's talent?	0	1	2	3	4	5	6	7	8	9	
22.	teach the skills of his/her sport?	0	1	2	3	4	5	6	7	8	9	
23.	build team confidence?	0	1	2	3	4	5	6	7	8	9	
24.	instill an attitude of respect for others?	0	1	2	3	4	5	6	7	8	9	

Appendix E: Coach Preseason Interview Guide

This interview guide was semi-structured and each question could have followed by probing and follow-up discussion depending on the flow of the interview. The exact order of questions was determined by the coaches' responses.

- 1. What are the most important roles you play as a high school coach?**
- 2. What experiences have you had that have helped your development in the coaching profession?**
- 3. As you are preparing for this season, what will your main focus be?**
- 4. How do you usually plan for/schedule your preseason?**
- 5. What do you look for as you are selecting the players for your team?**
- 6. If you were to plan to teach a new skill, how would you go about it?**
- 7. How would you describe a “positive coach”, how would you describe a “negative coach”?**
- 8. How do you usually interact with your players during practice?**
- 9. How are these practice behaviors influenced by the “roles” you spoke to earlier?**
- 10. How confident are you in your ability to teach skills and strategy; how do you know?**
- 11. How confident are you in your ability to strategize during a match; what tactics might you use to strategize against an opponent?**
- 12. What strategies do you use to help motivate your players?**
- 13. What do you want your athletes to remember about you in 10 years?**
- 14. What are your expectations for this season?**

Appendix F: Coach Postseason Interview

This interview guide was semi-structured and each question could have followed by probing and follow-up discussion depending on the flow of the interview. Specifically, the coach was asked about his or her CES scores over the season and events occurring over the season. The exact order of questions was determined by the coaches' responses.

1. If you could sum up this season in one sentence, how would you do that?
2. How confident are you in your overall coaching ability?
3. How would you rate yourself as a teacher of Lacrosse, what strategies do you use to teach skills?
4. What are some of the ways you use to get your point across to the team?
5. If you *really* needed to make a point, how would you do it?
6. What strategies do you use to motivate you during practices; what about during games?
7. During the season _____ happened. What was your reaction to the situation?
 - a. Season Event 1
 - b. Season Event 2
8. Over the season, your CES scores seemed to have _____ pattern. Was this an accurate portrayal of your coaching confidence? What do you think affected these scores?
9. What is one thing that you could do to improve as a coach; how will you do that in preparation for next season?
10. What pleased you most about the season; what disappointed you most about the season?
11. At the beginning of the season I asked you what you thought the most important roles of coach were. You said _____. Is there anything you would add to or amend on that list?

Appendix G: Athlete Postseason Interview

This interview guide was semi-structured and each question could have followed by probing and follow-up discussion depending on the flow of the interview. Specifically, the athlete was asked about his or her CCS scores over the season and events occurring over the season. The exact order of questions was determined by the athlete's responses.

1. Opening Questions
 - a. What grade are you in?
 - b. How many years have you been playing on the team?
 - c. What other sports do you play?
2. What was your reason for playing this year?
3. If you could sum up the season in a few sentences how would you do that?
4. Overall, what is your impression of your coach?
5. How would you rate your coach as a teacher of Lacrosse, what strategies does she/he use to teach skills?
6. What are some of the ways the coach uses to get her/his point across to you, to the team?
7. If your coach *really* needed to make his or her point, how would she/he do it?
8. What strategies does she/he use to motivate you during practices and/or games, how effective are these strategies?
9. What are some ways that your coach has impacted you outside of being your lacrosse coach?
10. During the season _____ happened. What was your reaction to the situation?
 - a. Season Event 1
 - b. Season Event 2
11. Over the season, your CCS scores seemed to have _____ pattern. Was this an accurate portrayal of your coach's competency? What do you think affected these scores?
12. If you could tell the coach one thing that would improve her/his coaching, what would it be?
13. Are you satisfied with your participation this year, why or why not?
14. What are your future plans for playing?

Appendix H: Institutional Review Board Approval

Renewal Application Approval

February 7, 2006

To: Martha E. EWING
138 IM Sports Circle
MSU

Re: IRB # 05-089 Category: EXPEDITED 2-6
Renewal Approval Date: February 4, 2006
Project Expiration Date: February 3, 2007

Title: THE DEVELOPING COACH: A SEASON-LONG INVESTIGATION OF EFFICACY, FEEDBACK,
AND PRACTICE BEHAVIORS

The Institutional Review Board has completed their review of your project. I am pleased to advise you that the renewal has been approved.



OFFICE OF REGULATORY AFFAIRS

BIOMEDICAL & HEALTH
INSTITUTIONAL REVIEW
BOARD (BIRB)

COMMUNITY RESEARCH
INSTITUTIONAL REVIEW
BOARD (CRIRB)

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202 Olds Hall
East Lansing, Michigan
48824-1046
517-355-2180
Fax: 517-432-4503

www.humanresearch.msu.edu
SIRB & BIRB: IRB@msu.edu
CRIRB: crirb@msu.edu



MSU is an affirmative-action
equal-opportunity institution.

The review by the committee has found that your renewal is consistent with the continued protection of the rights and welfare of human subjects, and meets the requirements of MSU's Federal Wide Assurance and the Federal Guidelines (45 CFR 46 and 21 CFR Part 50). The protection of human subjects in research is a partnership between the IRB and the investigators. We look forward to working with you as we both fulfill our responsibilities.

Renewals: IRB approval is valid until the expiration date listed above. If you are continuing your project, you must submit an *Application for Renewal* application at least one month before expiration. If the project is completed, please submit an *Application for Permanent Closure*.

Revisions: The IRB must review any changes in the project, prior to initiation of the change. Please submit an *Application for Revision* to have your changes reviewed. If changes are made at the time of renewal, please include an *Application for Revision* with the renewal application.

Problems: If issues should arise during the conduct of the research, such as unanticipated problems, adverse events, or any problem that may increase the risk to the human subjects, notify the IRB office promptly. Forms are available to report these issues.

Please use the IRB number listed above on any forms submitted which relate to this project, or on any correspondence with the IRB office.

Good luck in your research. If we can be of further assistance, please contact us at 517-355-2180 or via email at IRB@msu.edu. Thank you for your cooperation.

Sincerely,

Peter Vasilenko, Ph.D.
SIRB Chair

c: Ryan Hedstrom
1 IM Sports Circle
MSU

Appendix I: Coach Consent Form

Dear Coach:

You are being asked to be a part of this study because your role as a high school coach. This research project is looking at how coaches and athletes interact with each other during an athletic season. For this project, athletes and coaches will be watched and videotaped during practices throughout the season. Both you and the athletes will also be asked to fill out a few information sheets several times during the season. Filling these forms out will take about 10 minutes. You will be asked to participate in preseason and post season interviews lasting about 40 minutes each. Some of the athletes will be chosen for an audiotaped interview lasting about 40 minutes at the end of the season. Participating in this study is completely voluntary. You may choose to not answer questions or stop participating at any time you wish.

During the study your confidentiality will be protected. Only the researchers will have access to any questionnaires, video, or notes. All participants will be assigned a number and real names will never be used during review of the video. No names will be used during any publication or presentation of the data. You also have the right to choose at any time not to have video data including your image shown for educational purposes. Your privacy will be protected to the maximum extent allowable by law.

If you have any questions or concerns about this study, please contact Ryan Hedstrom, 205 IM Sports Circle, Michigan State University, East Lansing, MI 48824, phone: (517) 353-9196, or email: hedstro4@msu.edu or Martha Ewing, Ph.D., 201 IM Sports Circle, Michigan State University, East Lansing, MI 48824, phone: (517) 353-4652, or email: mewing@msu.edu. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact—anonously, if you wish—Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, email: uchrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

You indicate your agreement to participate by signing below.

Coach (Print Name)

Date

Coach (Signature)

You indicate your agreement to be videotaped by signing below.

Coach (Signature)

Appendix J: Parent Consent Form

Dear Parent:

Your child is being asked to be a part of this study because they are involved in high school sports. This research project is looking at how coaches and athletes interact with each other during an athletic season. For this project, athletes and coaches will be watched and videotaped during practices throughout the season. Athletes will also be asked to fill out a few information sheets several times the season. Filling these forms out will take about 10 minutes. Some of the athletes will be chosen for an audiotaped interview lasting about 40 minutes at the end of the season. Participating in this study is completely voluntary. Your child may choose to not answer questions or stop participating at any time they wish.

During the study your child's confidentiality will be protected. Only the researchers will have access to any questionnaires, video, or notes. All participants will be assigned a number and real names will never be used during review of the video. No names will be used during any publication or presentation of the data. You also have the right to choose at any time not to have video data including your child's image shown for educational purposes. Your child's privacy will be protected to the maximum extent allowable by law.

If you have any questions or concerns about this study, please contact Ryan Hedstrom, 205 IM Sports Circle, Michigan State University, East Lansing, MI 48824, phone: (517) 353-9196, or email: hedstro4@msu.edu or Martha Ewing, Ph.D., IM Sports Circle, Michigan State University, East Lansing, MI 48824, phone: (517) 353-4652, or email: mewing@msu.edu. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact—anonously, if you wish— Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, email: uchrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

You indicate your agreement for your child to participate by signing below.

Parent (Print Name and Child Name)

Date

Parent (Signature)

You indicate your agreement for your child to be videotaped by signing below.

Parent (Signature)

Appendix K: Athlete Assent Form

Dear Athlete:

You are being asked to be a part of this study because you play high school sports. This research project is looking at how coaches and athletes interact with each other during an athletic season. For this project, athletes and coaches will be watched and videotaped during practices throughout the season. Athletes will also be asked to fill out a few information sheets several times during the season. Filling these forms out will take about 10 minutes. Some of the athletes will be chosen for an audiotaped interview lasting about 40 minutes at the end of the season. Participating in this study is completely voluntary. You may choose to not answer questions or stop participating at any time you wish.

During the study your confidentiality will be protected. Only the researchers will have access to any questionnaires, video, or notes. All participants will be assigned a number and real names will never be used during review of the video. No names will be used during any publication or presentation of the data. You also have the right to choose at any time not to have video data including your image shown for educational purposes. Your privacy will be protected to the maximum extent allowable by law.

If you have any questions or concerns about this study, please contact Ryan Hedstrom, 205 IM Sports Circle, Michigan State University, East Lansing, MI 48824, phone: (517) 353-9196, or email: hedstro4@msu.edu or Martha Ewing, Ph.D., IM Sports Circle, Michigan State University, East Lansing, MI 48824, phone: (517) 353-4652, or email: mewing@msu.edu. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact—anonynously, if you wish— Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, email: uchrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

You indicate your agreement to participate by signing below.

Athlete (Print Name)

Date

Athlete (Signature)

You indicate your agreement to be videotaped by signing below.

Athlete (Signature)

Appendix L: Sample Systematic Observation Grid Sheet

Team 3 Practice 7

6/3/05

14	11	2	14	11	1	$\frac{13}{2}$	11	2	2	$\frac{13}{2}$	14	2	14	11	11
14	11	14	14	12	1	2	1	14	2	$\frac{13}{4}$	14	2	9	11	14
14	11	14	2	11	2	$\frac{13}{11}$	$\frac{13}{11}$	9	2	11	11	14	14	14	14
$\frac{13}{4}$	11	11	2	4	$\frac{13}{4}$	11	11	9	14	8	14	14	11	11	11
14	14	11	2	14	$\frac{13}{4}$	14	1	10	14	$\frac{13}{2}$	$\frac{13}{3}$	14	14	11	11
11	11	2	14	11	4	$\frac{13}{2}$	11	2	2	2	11	$\frac{13}{8}$	2	11	11
11	11	2	14	11	4	11	11	14	14	14	14	14	14	11	11
14	11	2	$\frac{13}{2}$	11	4	2	11	2	12	14	11	2	14	11	4
14	11	2	14	14	14	2	1	14	$\frac{13}{2}$	11	11	2	2	11	4
$\frac{13}{11}$	11	14	14	11	11	2	11	2	2	11	11	14	2	11	11
11	11	14	14	11	11	2	$\frac{13}{2}$	14	2	11	14	14	9	11	4
14	11	11	2	1	14	9	9	$\frac{13}{2}$	14	11	14	8	$\frac{13}{2}$	11	11
14	11	$\frac{13}{11}$	11	1	2	$\frac{13}{2}$	2	$\frac{13}{2}$	14	11	11	14	2	11	11
12	11	2	11	1	$\frac{13}{2}$	2	11	2	2	14	8	14	2	14	14
11	11	11	11	1	9	9	14	2	2	4	11	9	2	11	11
14	11	11	14	1	2	14	9	14	14	2	11	14	14	14	14
11	14	14	11	1	3	$\frac{13}{4}$	14	14	$\frac{13}{2}$	4	11	8	14	14	14
11	14	14	$\frac{13}{11}$	1	3	14	14	2	14	2	14	14	2	14	14
11	11	14	11	1	9	14	2	2	2	2	14	11	14	11	11
11	11	14	11	1	14	14	2	4	9	4	11	9	$\frac{13}{11}$	11	11
11	11	12	14	1	8	9	$\frac{13}{8}$	14	2	2	4	14	11	11	11
11	11	11	11	1	14	11	11	14	8	9	2	8	14	11	11
11	11	4	11	1	9	9	14	2	$\frac{13}{2}$	8	2	2	14	11	11
11	11	$\frac{13}{11}$	11	1	2	14	2	14	2	2	2	2	11	4	11
11	11	11	11	1	2	11	11	2	2	9	14	2	11	11	11
11	14	14	14	1	14	11	14	$\frac{13}{8}$	9	2	11	$\frac{13}{2}$	14	11	11
11	14	14	14	14	2	11	9	14	2	2	11	9	14	11	11
11	14	2	14	1	14	14	9	11	8	2	2	2	8	11	11
11	11	2	14	14	14	11	$\frac{13}{2}$	14	2	11	14	14	9	11	11
14	8	12	12	1	2	14	14	2	$\frac{13}{2}$	11	9	8	14	11	11
11	11	11	$\frac{13}{11}$	1	9	11	2	9	14	14	14	$\frac{13}{2}$	14	11	11
11	11	14	11	1	2	11	2	14	2	14	2	9	14	11	11
11	14	$\frac{13}{11}$	14	14	2	11	14	11	$\frac{13}{2}$	$\frac{13}{2}$	2	2	11	11	11
1	8	11	14	1	2	11	2	14	14	$\frac{13}{2}$	2	2	11	11	11
1	11	11	11	1	9	11	14	14	9	11	2	2	14	11	11
11	2	11	11	1	14	11	9	14	9	11	14	2	14	11	11
11	2	$\frac{13}{8}$	14	1	14	14	9	$\frac{13}{2}$	9	11	14	14	14	11	11
11	11	14	11	1	9	4	$\frac{13}{2}$	14	$\frac{13}{11}$	11	14	14	11	11	11

Appendix M

Team I -- Beginning of the Season: Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 1						Practice 2						Totals	
	No.	%	Beginning	Middle	No.	End	No.	%	Beginning	Middle	No.	End	No.	%
Preinstruction	14	6.9	82	36.9	18	7.6	3	1.3	73	28.3	15	5.5	205	14.3
Concurrent Instruction	11	5.4	28	12.6	45	18.9	19	8.0	27	10.5	74	26.9	204	14.2
Postinstruction	18	8.9	4	1.8	13	5.5	52	21.8	65	25.2	29	10.5	181	12.6
Questioning	3	1.5	2	0.9	2	0.8	3	1.3	2	0.8	3	1.1	15	1.0
Physical Assistance	2	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Positive Modeling	40	19.7	0	0.0	0	0.0	32	13.4	4	1.6	2	0.7	78	5.4
Negative Modeling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hustle	3	1.5	31	14.0	12	5.0	2	0.8	3	1.2	16	5.8	67	4.7
Praise	12	5.9	9	4.1	4	1.7	0	0.0	1	0.4	2	0.7	28	2.0
Scold	2	1.0	2	0.9	2	0.8	0	0.0	7	2.7	9	3.3	22	1.5
Management	32	15.8	0	0.0	30	12.6	46	19.3	7	2.7	36	13.1	151	10.5
Uncodable	0	0.0	3	1.4	1	0.4	4	1.7	5	1.9	0	0.0	13	0.9
Use of First Name	11	5.4	27	12.2	43	18.1	5	2.1	26	10.1	42	15.3	154	10.7
Silence	55	27.1	34	15.3	68	28.6	72	30.3	38	14.7	47	17.1	314	21.9
Totals	203		222		238		238		258		275		1434	

Appendix N
Team 1 -- Middle of the Season: Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 3						Practice 4						Totals	
	Beginning		Middle		End		Beginning		Middle		End		No.	%
Preinstruction	23	6.6	17	4.8	13	3.4	1	0.3	51	12.8	26	6.8	131	5.9
Concurrent Instruction	0	0.0	1	0.3	88	22.7	2	0.5	42	10.5	62	16.2	195	8.7
Postinstruction	7	2.0	5	1.4	20	5.2	1	0.3	17	4.3	19	5.0	69	3.1
Questioning	2	0.6	1	0.3	13	3.4	2	0.5	2	0.5	8	2.1	28	1.3
Physical Assistance	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Positive Modeling	0	0.0	172	49.0	2	0.5	110	30.0	4	1.0	0	0.0	288	12.9
Negative Modeling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hustle	1	0.3	0	0.0	13	3.4	0	0.0	18	4.5	5	1.3	37	1.7
Praise	0	0.0	0	0.0	5	1.3	0	0.0	19	4.8	0	0.0	24	1.1
Scold	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	8	2.1	10	0.4
Management	123	35.2	28	8.0	32	8.2	73	19.9	94	23.6	21	5.5	371	16.6
Uncodable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	2	0.1
Use of First Name	0	0.0	1	0.3	38	9.8	0	0.0	35	8.8	14	3.7	88	3.9
Silence	193	55.3	126	35.9	164	42.3	178	48.5	115	28.8	217	56.8	993	44.4
Totals	349		351		388		367		399		382		2236	

Appendix O

Team 1 -- End of the Season: Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 5						Practice 6						Totals	
	Beginning		Middle		End		Beginning		Middle		End		No.	%
Preinstruction	14	5.4	0	0.0	3	1.0	1	0.4	23	7.4	0	0.0	41	2.4
Concurrent Instruction	6	2.3	61	22.2	98	33.6	11	4.0	55	17.7	39	13.3	270	15.8
Postinstruction	0	0.0	24	8.7	0	0.0	2	0.7	4	1.3	3	1.0	33	1.9
Questioning	3	1.2	4	1.5	6	2.1	0	0.0	2	0.6	10	3.4	25	1.5
Physical Assistance	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Positive Modeling	63	24.3	0	0.0	0	0.0	65	23.6	1	0.3	3	1.0	132	7.7
Negative Modeling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hustle	1	0.4	2	0.7	2	0.7	3	1.1	7	2.3	1	0.3	16	0.9
Praise	1	0.4	7	2.5	7	2.4	0	0.0	15	4.8	8	2.7	38	2.2
Scold	0	0.0	1	0.4	1	0.3	0	0.0	5	1.6	7	2.4	14	0.8
Management	40	15.4	51	18.5	78	26.7	37	13.5	72	23.2	98	33.4	376	22.1
Uncodable	1	0.4	2	0.7		0.0	1	0.4	1	0.3	0	0.0	5	0.3
Use of First Name	1	0.4	19	6.9	36	12.3	10	3.6	46	14.8	27	9.2	139	8.2
Silence	129	49.8	104	37.8	61	20.9	145	52.7	80	25.7	97	33.1	616	36.1
Totals	259		275		292		275		311		293		1705	

Appendix P

Team 2 -- Beginning of the Season: Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 1						Practice 2						Totals	
	No.	%	Beginning	Middle	End	%	No.	%	Beginning	Middle	End	%	No.	%
Preinstruction	5	2.5	7	3.5	13	5.8	10	5.2	2	1.0	19	8.5	56	4.5
Concurrent Instruction	9	4.6	28	14.1	35	15.6	1	0.5	16	7.9	55	24.6	144	11.6
Postinstruction	24	12.2	1	0.5	14	6.3	39	20.4	0	0.0	0	0.0	78	6.3
Questioning	10	5.1	7	3.5	12	5.4	2	1.0	13	6.4	8	3.6	52	4.2
Physical Assistance	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Positive Modeling	0	0.0	7	3.5	16	7.1	0	0.0	17	8.4	0	0.0	40	3.2
Negative Modeling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hustle	1	0.5	3	1.5	0	0.0	1	0.5	11	5.4	2	0.9	18	1.5
Praise	0	0.0	12	6.0	9	4.0	3	1.6	5	2.5	10	4.5	39	3.2
Scold	0	0.0	0	0.0	0	0.0	4	2.1	1	0.5	0	0.0	5	0.4
Management	79	40.1	53	26.6	51	22.8	44	23.0	49	24.3	49	21.9	325	26.3
Uncodable	0	0.0	0	0.0	0	0.0	4	2.1	0	0.0	0	0.0	4	0.3
Use of First Name	9	4.6	21	10.6	38	17.0	5	2.6	15	7.4	36	16.1	124	10.0
Silence	60	30.5	60	30.2	36	16.1	78	40.8	73	36.1	45	20.1	352	28.5
Totals	197		199		224		191		202		224		1237	

Appendix Q
Team 2 --Middle of the Season: Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 3						Practice 4					
	Beginning		Middle		End		Beginning		Middle		End	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Preinstruction	23	11.6	23	10.7	69	30.5	0	0.0	0	0.0	0	0.0
Concurrent Instruction	3	1.5	28	13.0	52	23.0	5	2.8	26	13.2	55	26.8
Postinstruction	14	7.1	11	5.1	1	0.4	25	13.9	0	0.0	0	0.0
Questioning	13	6.6	5	2.3	10	4.4	7	3.9	13	6.6	8	3.9
Physical Assistance	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Positive Modeling	2	1.0	0	0.0	0	0.0	0	0.0	2	1.0	3	1.5
Negative Modeling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hustle	0	0.0	2	0.9	2	0.9	0	0.0	1	0.5	1	0.5
Praise	3	1.5	5	2.3	1	0.4	2	1.1	1	0.5	4	2.0
Scold	0	0.0	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0
Management	80	40.4	45	20.9	25	11.1	63	35.0	72	36.5	55	26.8
Uncodable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Use of First Name	11	5.6	28	13.0	47	20.8	4	2.2	19	9.6	26	12.7
Silence	49	24.7	68	31.6	18	8.0	74	41.1	63	32.0	53	25.9
Totals	198		215		226		180		197		205	

Appendix Q (con't)
Team 2 --Middle of the Season: Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 5						Totals	
	Beginning		Middle		End		No.	%
	No.	%	No.	%	No.	%		
Preinstruction	9	5.7	1	0.6	0	0.0	125	7.3
Concurrent Instruction	26	16.6	57	34.5	63	38.7	315	18.5
Postinstruction	0	0.0	0	0.0	0	0.0	51	3.0
Questioning	7	4.5	6	3.6	3	1.8	72	4.2
Physical Assistance	0	0.0	0	0.0	0	0.0	0	0.0
Positive Modeling	0	0.0	10	6.1	0	0.0	17	1.0
Negative Modeling	0	0.0	0	0.0	0	0.0	0	0.0
Hustle	2	1.3	1	0.6	0	0.0	9	0.5
Praise	6	3.8	5	3.0	4	2.5	31	1.8
Scold	1	0.6	0	0.0	0	0.0	2	0.1
Management	31	19.7	33	20.0	45	27.6	449	26.3
Uncodable	0	0.0	1	0.6	0	0.0	1	0.1
Use of First Name	15	9.6	22	13.3	20	12.3	192	11.3
Silence	60	38.2	29	17.6	28	17.2	442	25.9
Totals	157		165		163		1706	

Appendix R

Team 2 -- End of the Season: Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 6			Practice 7			Totals	
	Beginning No.	%	End No.	Beginning No.	%	End No.	No.	%
Preinstruction	8	3.8	1	0.5	1	0.4	50	24.3
Concurrent Instruction	10	4.7	27	12.4	55	24.4	0	0.0
Postinstruction	9	4.2	1	0.5	0	0.0	0	0.0
Questioning	7	3.3	8	3.7	6	2.7	7	3.4
Physical Assistance	0	0.0	0	0.0	0	0.0	0	0.0
Positive Modeling	1	0.5	24	11.0	35	15.6	5	2.4
Negative Modeling	0	0.0	0	0.0	0	0.0	0	0.0
Hustle	3	1.4	12	5.5	1	0.4	4	1.9
Praise	1	0.5	6	2.8	6	2.7	1	0.5
Scold	0	0.0	0	0.0	0	0.0	0	0.0
Management	60	28.2	46	21.1	33	14.7	59	28.6
Uncodable	0	0.0	1	0.5	0	0.0	0	0.0
Use of First Name	18	8.5	22	10.1	26	11.6	12	5.8
Silence	96	45.1	70	32.1	62	27.6	68	33.0
Totals	213		218		225		206	
							241	
							222	
							1325	

Appendix S

Team 3 -- Beginning of the Season Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 1						Practice 2						Totals	
	No.	%	Beginning	No.	%	End	No.	%	Beginning	No.	%	End	No.	%
Preinstruction	13	6.2	0	0.0	47	23.7	1	0.4	7	2.8	0	0.0	68	5.0
Concurrent Instruction	56	26.7	53	25.2	16	8.1	3	1.3	17	6.9	66	25.4	211	15.5
Postinstruction	0	0.0	0	0.0	3	1.5	0	0.0	0	0.0	23	8.8	26	1.9
Questioning	2	1.0	3	1.4	5	2.5	0	0.0	5	2.0	6	2.3	21	1.5
Physical Assistance	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Positive Modeling	0	0.0	7	3.3	22	11.1	0	0.0	0	0.0	0	0.0	29	2.1
Negative Modeling	0	0.0	0	0.0	6	3.0	0	0.0	0	0.0	0	0.0	6	0.4
Hustle	12	5.7	9	4.3	3	1.5	4	1.7	2	0.8	15	5.8	45	3.3
Praise	5	2.4	7	3.3	7	3.5	0	0.0	5	2.0	8	3.1	32	2.4
Scold	1	0.5	2	1.0	0	0.0	0	0.0	5	2.0	4	1.5	12	0.9
Management	36	17.1	61	29.0	50	25.3	156	66.1	79	32.1	27	10.4	409	30.1
Uncodable	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
Use of First Name	12	5.7	12	5.7	2	1.0	1	0.4	10	4.1	21	8.1	58	4.3
Silence	73	34.8	56	26.7	37	18.7	71	30.1	115	46.7	90	34.6	442	32.5
Totals	210		210		198		236		246		260		1360	

Appendix T
Team 3 -- Middle of the Season Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 3			Practice 4		
	Beginning No.	%	End No.	Beginning No.	%	End No.
Preinstruction	19	4.6	15	1	0.4	13
Concurrent Instruction	29	7.0	44	34	14.8	60
Postinstruction	0	0.0	5	0	0.0	19
Questioning	3	0.7	15	6	2.6	4
Physical Assistance	0	0.0	0	0	0.0	0
Positive Modeling	6	1.4	0	0	0.0	0
Negative Modeling	0	0.0	0	0	0.0	0
Hustle	8	1.9	4	0	0.0	4
Praise	4	1.0	18	1	0.4	11
Scold	0	0.0	2	6	2.6	0
Management	137	32.9	65	65	28.4	25
Uncodable	0	0.0	0	0	0.0	0
Use of First Name	17	4.1	35	9	3.9	31
Silence	193	46.4	233	107	46.7	86
Totals	416		436	229		253

Appendix T (con't)
Team 3 -- Middle of the Season Observed Coaching Behaviors During Practices by Segments

Behaviors	Beginning		Practice 5				End		Totals	
	No.	%	No.	%	No.	%	No.	%	No.	%
Preinstruction	6	2.4	5	1.8	5	1.7			79	2.8
Concurrent Instruction	15	6.0	102	36.6	92	32.1			505	17.8
Postinstruction	0	0.0	3	1.1	2	0.7			38	1.3
Questioning	0	0.0	3	1.1	15	5.2			78	2.7
Physical Assistance	0	0.0	0	0.0	0	0.0			0	0.0
Positive Modeling	9	3.6	3	1.1	0	0.0			18	0.6
Negative Modeling	0	0.0	0	0.0	0	0.0			0	0.0
Hustle	4	1.6	2	0.7	1	0.3			32	1.1
Praise	0	0.0	17	6.1	16	5.6			93	3.3
Scold	9	3.6	9	3.2	3	1.0			34	1.2
Management	57	22.7	30	10.8	30	10.5			525	18.5
Uncodable	0	0.0	0	0.0	0	0.0			0	0.0
Use of First Name	2	0.8	28	10.0	35	12.2			221	7.8
Silence	149	59.4	77	27.6	88	30.7			1214	42.8
Totals	251		279		287				2837	

Appendix U

Team 3 -- End of the Season Observed Coaching Behaviors During Practices by Segments

Behaviors	Practice 6						Practice 7						Totals	
	Beginning		Middle		End		Beginning		Middle		End		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Preinstruction	2	1.3	5	1.9	3	1.2	28	13.5	4	2.3	1	0.5	43	3.5
Concurrent Instruction	15	10.1	39	15.1	43	17.6	13	6.3	83	48.0	36	17.6	229	18.5
Postinstruction	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	1	0.1
Questioning	11	7.4	17	6.6	20	8.2	7	3.4	8	4.6	11	5.4	74	6.0
Physical Assistance	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Positive Modeling	0	0.0	4	1.6	0	0.0	0	0.0	0	0.0	0	0.0	4	0.3
Negative Modeling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hustle	2	1.3	17	6.6	30	12.2	7	3.4	2	1.2	6	2.9	64	5.2
Praise	1	0.7	5	1.9	8	3.3	0	0.0	24	13.9	8	3.9	46	3.7
Scold	8	5.4	4	1.6	2	0.8	0	0.0	1	0.6	0	0.0	15	1.2
Management	86	57.7	87	33.7	48	19.6	89	43.0	24	13.9	71	34.6	405	32.7
Uncodable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Use of First Name	7	4.7	16	6.2	12	4.9	14	6.8	27	15.6	11	5.4	87	7.0
Silence	17	11.4	64	24.8	79	32.2	49	23.7	0	0.0	60	29.3	269	21.7
Totals	149		258		245		207		173		205		1237	

Appendix V: Team 1 Qualitative Results

Game Strategy

My focus is going to be for the most part of this year on getting probably 2 or 3 offensive formations and 2 defenses in there. And working with those and getting the players comfortable with that. (Coach 1 Preseason Interview)

I think if I was sitting up in the stands and watching things go on, I'd be much better at strategizing. But, so far it's been hard for me to do it right on the spot. So, what I'm starting to do is, I wrote down a few things like, if this team is playing this kind of offense then do this on defense. If they're playing this type of defense, do this on offense. I can look at that and remember this is going on, and don't have to just focus for 10 minutes on it and say ok let's see how this works. (Coach 1 Preseason Interview)

I tried to tell them that what they do in practice is going to be what they do in games. Probably be physical, which I don't know if that's what I meant to really get across to them but that's what came out. (Coach 1 Postseason Interview)

He definitely got more, he got higher up in my opinion as the season went on, because his game strategies got more intense and he was more confident as a coach with what he was saying and everything. That really helped me bring up his scores. (Athlete 2110)

He wasn't always sure what to do when we got down because he was always used to winning, because he played college and he won then. That was a new experience for him; I could see. I felt bad for him, more than us. When we started losing I think the players felt bad, but you could just see that he wanted to win so badly and he was just ready to win. That was probably the worst part—him not knowing what to do when we're losing to get us back up. (Athlete 2110)

Motivation

I think when I was a player, when I felt confident was when I played well. To get them motivated is really getting them to realize how good they are. I've found that when we went into our game, and we talked about our first few games, I found that they generally have the expectation of losing because they've lost in the past. That's all they know. So it's really trying to get them understand, 'Hey, you guys are really good players, there is no reason you can't compete with this team' What they need to do it is play how they practice, or do things we practice, because like in our first game once we got down like 3 goals, they're just out there. I said to the guys on the bench a couple of times, 'when have ever practiced this stuff'? It was baffling to me that all of the sudden kids are just out of it. It wasn't something I expected at all. I think once they believe in themselves, once they have some success, then that will really motivate them. The team we played in our first game we lost 13-1, but that's a team from around here that's had a program for a long time, a little better at lacrosse than these kids, but not by leaps and bounds. We hung with them until the kids really kind of gave up, at least you get that feeling from them. What did the other team do different from us? Well they ran harder, they did this, and they did this. One of the things that made them superior players was just they played the

game better. So getting them to see if we do that, we can win -- getting them to be confident in themselves. (Coach 1 Preseason Interview)

It's really getting them to give their best effort and feel good about themselves. (Coach 1 Preseason Interview)

That's probably one of the harder things for me. I try to get them to play for a sense of respect for themselves. You know, everyone go out there and play hard. I think with me, as a player, my motivation came from within. So, I tend to leave a lot of that up to the kids, probably more than I should. (Coach 1 Postseason Interview)

To really see them realize that they can play well and they are capable of success and, to me, that's a great place to be. To have kids who are hungry to be better and know that they can get there. Maybe I'm mistaken, but I feel like that's where most of them are at. (Coach 1 Postseason Interview)

He likes to give speeches about things like what he would have done in high school and they're cool stories. You can kind of tell that he gets upset at times or frustrated which, for me personally; I know that I'm not doing well so I need to perform better when I see that in his eyes. As a team, he's positive with us or uses positive reinforcement. Also, he gets after us, but it's in a positive way. Like, "Hey, nice job, but try this." So, he's always trying to motivate us to become better as a team. (Athlete 2126)

You can tell when he gets frustrated or aggravated in his eyes or the tone of his voice. He would call a timeout and talk to the whole team. If that didn't motivate you, then nothing else would have. He'd say to the team, "We're not playing the way we should." You know, how to play better and stop making so many mistakes. If that didn't motivate you then nothing else would. (Athlete 2126)

Well, he always, before games and at the end of practices he'd tell us, he'd always say that we are good lacrosse players and that we need to start believing that and he believes in us. I don't know if we ever really caught on to that, but he always had positive motivation. He was telling us that we were good lacrosse players and if we did something wrong he made sure that we knew what it was and he helped us fix that. (Athlete 2108)

During games it's just at half time. If we were doing really bad he'd get in there and wake us up and make sure that we know that we're doing bad and we need to fix this, or this isn't the level of play we should be at. He stayed on top of it. (Athlete 2108)

Mostly the competitive atmosphere that he used was motivating. And the disappointment tone kind of motivated us. You know, we don't want this, this is his first year. You know we wanted to be successful. He's a nice guy, he's good to us. (Athlete 2110)

During practice it would be the competitive atmosphere that he'd create there. During games he'd point out that we're better than what were playing and we'd want to go out and prove to everyone watching that we're better than what we're doing. (Athlete 2110)

He just encourages you. He doesn't get down on you. He just encourages you and teaches you. He might pull you off and still teach you what you're doing wrong, but then he'll put you back into the game. He won't sit for the rest of the game because you did one little thing wrong. So he encourages you and he yells at you, like not *yells at you*, its more encouragement. (Athlete 2104)

He said when we're playing good we're the best part of the team, so that made us feel good. (Athlete 2104)

Frustrating because we kept losing, but it was fun too because the coach made it fun. He didn't get really down on us like if we were losing the game, he kept trying and trying. (Athlete 2104)

He does it good. Yeah, I'd say he does. Not yelling and getting down on the kids is the best way. (Athlete 2104)

Teaching Technique

I think that if they're going to be a good student of the game, they're going to be a good student in school too. So it's trying to develop both of those aspects. (Coach 1 Preseason Interview)

Definitely the challenges are unlearning things they have learned in the past, because I'm finding that they've been coached by people who don't play the game and don't have a real good understanding of it and that makes it really hard. If you're starting from scratch it's easier to teach them good things but when you gotta go back and unlearn it, it's a real struggle...They think they've played lacrosse for 3 or 4 years and they've got it. What they're really missing is the basics.

(Coach 1 Preseason Interview)

I usually have them do it in slow motion. We walk through it if they're learning where to go on an offense. Or you know let's just practice this individually. A lot of times with the defense I'll have them work in a body position. I have them not use their sticks because they can't use that. I mean probably most coaches would say this but if you practice well you'll play well. And a lot of them still want to practice lazily. It's trying to get them to actually buy into going through those things and really say, "I need to do this for 5 minutes or 10 minutes to see what it's like." Then transition that to the full speed game. But teaching individual skills has been probably one of the hardest things that I've done this year because practice goes by so quick and it's really hard to focus on all the kids on a team. Especially with an assistant coach who comes 3 times a week if I'm lucky. So I think if I'm not watching them they'll get lazy really quick. So it's hard for me to leave a group of 15 of them to do a drill why I'm working over here with another group. (Coach 1 Preseason Interview)

I guess I treat it similar to a class where I only have them doing a certain activity for certain amount of time, because I've found after that they'll get seriously distracted. Things are only good for 20-30 minutes and then move into something different. And

really try to point out things to them that will really make them better players, smarter players. Little things about where they should stand, where they should be looking and really getting them get a feel for the game. (Coach 1 Preseason Interview)

Interacting with them through little drills, talking to them one-on-one about what they can do to improve, and then talking to them as a team. The hard thing for me is to fit in time where I can really talk to them about how they were practicing, how they can handle certain situations and stuff like that. It's hard to sit and take 20 minutes to do something like that when you've only got 2 hours for practice. I try to use stories from when I played to get them to understand the importance of practice and to do things right. So I try to share a little personal stuff with them. (Coach 1 Preseason Interview)

I played defense so I'm a lot more comfortable teaching them defensive stuff than offensive stuff. I have stuff that I've printed off the internet because I don't know where they should be. I tell them that and they laugh when I pull out my cheat sheet. That's the kind of stuff that no one ever taught me and most of the people I played with, someone taught them along the way, and you just get comfortable in knowing what you should do in certain situations. (Coach 1 Preseason Interview)

I think showing the kids how it's supposed to be played is probably what I was best at. Getting them to play with respect for the game and respect for themselves were the biggest things that I stressed, learning the basic skills and playing the game right. (Coach 1 Postseason Interview)

What was surprisingly hard for me was you could be a good player, but making the transition to a coach is a lot more difficult than I thought. There are some things that are kind of innate in your game that make you a good player. It's trying to figure out what you do that makes you successful and get the kids to learn to think like that. Really, just trying to break down your game from, 'Oh I just know where to go, or I can see this situation coming' to, 'Why do I know where to go or why do I recognize certain situations?' (Coach 1 Postseason Interview)

I do some one-on-one stuff. I try to treat the kids as a group based on position, which I found convenient, but still pretty hard. Sometimes I would try to walk them through scenarios and try to mimic game situations. But even then the thing that I found really hard, and things I need to find better ways of doing, is that it's hard to practice against kids you know, so when you want a real live situation and you know it's your friend and he knows it's you and that kind of stuff on the team, it doesn't quite come out the same way. So, I try to get them to walk through some stuff at times. (Coach 1 Postseason Interview)

Trying to delicately teach them, while at the same time making them realize that they're doing some things that aren't necessarily correct. So, it was really, coaching is a real challenge. (Coach 1 Postseason)

Probably how hard it is to teach individual skills. I remember thinking of that about my high school coach, like man this guy doesn't know anything. He never, I thought all the stuff that I learned, was never from our practices in high school. They were always from our camps I'd go to in the summer and stuff. Now, coaching I realize how hard it is to take an individual and really teach them a lot of individual skills and really you are trying to coach the team and get them cohesive and to play the game together and it's hard to focus on one kid individually. (Coach 1 Postseason Interview)

The practices were better when I had a set plan of what I was going to do and wasn't doing drills for too long. (Coach 1 Postseason Interview)

I learned more how to play the game right. He taught me a lot about the sport and how to play it right...He's able to understand each kid's individual personality and he works with that. He works with kids one-on-one before practice, during practice, and after practice. He does what is comfortable for the kids. If a kid's not getting something, he'll try something else, another way to explain it. So, he understands what he has to do with individual kids. (Athlete 2126)

So, he was there before practice and after practice and if you needed him he would stay. And you could go into his room and talk lacrosse, and anything that you needed to talk about. So, he helped the kids who wanted to take advantage of the opportunities. (Athlete 2126)

He'll either bring the whole team in and talk to us a group, or, when we're doing individual drills, he'll pull you off to the side and talk to you. He'll just make sure that everyone's attention is there, that everyone's not talking. That's about it. He talks to you and tells you what you did wrong and what did you right and how to fix it and everything. (Athlete 2126)

It was frustrating at times and sometimes it was fun. Frustrating in a sense of, a couple times, he would not know what to do for a couple of people drill-wise. So, we'd be doing the same thing. But, at the same time, we were learning more about the sport than we ever had. He brought that to us and he brought how well he knows the sport to us. So, that was a good thing that he knew the sport and he brought it to us. He definitely tried to make us a better team. (Athlete 2126)

I've been playing for 3 years so I know how to play the game, but we learned a lot of plays this year. I've never been involved in lacrosse plays. The program we had before we just didn't do that. So, I learned a lot of that kind of stuff. He taught us positioning, where we should be in certain situations. Things like what we need to do in the off-season to become better lacrosse players. (Athlete 2108)

Repetition. We got in there and did a lot of it. If he saw things that were happening that were wrong he made sure that he got in there and corrected it. Sometimes I felt that he was a little too impatient...I say that because a lot of the times when we were doing the plays people would drop passes and things and we'd get yelled at for that and after awhile

he'd just get impatient because it kept happening and happening. But now I realize that really shouldn't happen and he has a right to do that. We're a varsity team you know, we should be out there in the off-season practicing so at least everyone can at least pass and catch, that's fundamental. (Athlete 2108)

Also, coming up with more creative methods of teaching the game and things like that, like I said it was a lot of repetition. We did the same thing over and over again. And that helped because we learned different parts of the game, but once we do learn that and we keep doing it, it's not making us any better. I think we need a couple of more creative areas where we can learn the game in different ways and learn different aspects of the game (Athlete 2108).

I recall we did a lot of game situations like 6 on 6 so we could see how it actually would happen in a game. He made sure that everyone all through the lines, 1st, 2nd, 3rd line, everyone got in there and were doing these plays and knew what was going on because we all have to play in the game. You know people might not get as much playing time. So everyone knew what was going on. (Athlete 2108)

I'd give him an 8 out of 10. Because he's still trying to figure out the best way to do it, but you can tell he's teaching us the right way and if we just did it we'd improve. (Athlete 2110)

Just different drills and then games that we play and when we played 6 on 6 he started to make it more competitive, so that we'd get more intense about it. There was a lot of passing and catching, we'd just repetitively work on what we needed to improve, so we'd get better at that. (2110)

His body language. He'd be tense. And then his tone of voice. If it was really, really important, he'd almost get quieter to make sure we'd listen and if it was something we were doing bad, you could just hear disappointment in his voice and that was worse for us than getting yelled at. (Athlete 2110)

Start working on the plays right away, because only about half the guys knew the plays at the end of the season. And start working on those right away and keep the competitive atmosphere in the practice because we didn't do that so much at the beginning of the year and at the end and it really was helping us. (Athlete 2110)

He knows it a lot and what he's talking about and this was his first year so it was kind of a learning experience for him, so it's gonna get better but it's good. (Athlete 2104)

In practice he does different drills that he did when he was younger that helped him a lot that he would think would help us. Then during the game if he sees something the next day in practice he'll do those types of drills, instead of other drills. Because you never do the same thing like 2 days in row. So I think that's the biggest thing he did, just switched it up. (Athlete 2104)

Well, when he taught offensive plays I wasn't around because I was on defense, but when he taught ground balls there were a couple different drills we did. There were like 2 or 3 and we did a couple things but it was all pretty much the same for one topic or section of lacrosse. (Athlete 2104)

Character Building

You know athletes and students and people outside of the sports fields. You know me being a teacher, like the academic and how they are as a person is probably the biggest thing I look for. And then, I think generally with a good athlete is that that stuff comes with; they kind of go hand and hand. (Coach 1 Preseason Interview)

I guess trying to be someone who gives constructive criticism rather than just criticism. Someone who listens to what the kids say, that they can come to with questions or advice. Someone that they trust. (Coach 1 Preseason Interview)

That I respected them and they respected me. When I think back to my coaches, the ones that made an impact on me, were the ones that taught me a lot, but that I also really looked up to them as people -- as far as character, what they do for us, how they treated other people, stuff like that. (Coach 1 Preseason Interview)

Probably learn how to treat all kids the same. I think there were times when if a kid got in my dog house, it was hard to get out. Or some of the kids who I think maybe should have been reprimanded, I didn't always do that. It was hard dealing with the personal relationship with kids versus the ones I didn't know; it was easier to be hard on them. (Coach 1 Postseason Interview)

A big group of kids, kind of took their licks and they were looking towards the future and I started doing towards the end too; really trying to think about the process that we're going in and building a team, and not so much worrying about the losses. (Coach Postseason Interview)

But really, and maybe it's because it's something that we lacked in was the team focus, getting kids to succeed in being part of the team is probably, I think, even more important. I would rank that definitely above even teaching skills. I mean skills are obviously important. Getting them to play as a team, I think we lost to groups of kids who weren't as good as us, but were a better team. Really getting that focus to the kids is very important. (Coach 1 Postseason Interview)

He's tried making me a better person by the fact that we have to know our responsibilities, either at home or at school and it's not just about athletics or lacrosse, we have other responsibilities. Most of us won't play lacrosse in the future. It's about getting your future prepared and making sure that everything is okay at home first. I mean if something came up with a family member, he makes it so family is more important than the sport. If we tell him that we can't make it, he understands that. Basically, he understands that you need to do the things that you do first, and lacrosse isn't the most important thing. (Athlete 2126)

I think it'd just be the fact that he's just a little inconsistent with his rules and setting rules. He started rules late in the season and he really didn't follow all of them. Just the fact that you're going to set rules and make sure that everyone's on the same field. If you're going to set them, set them early on. He said, 'Well, if you miss practice because of academic reasons, you sit out the first quarter. If you miss because of another reason, it's the first half.' But that didn't come in until 2/3's of the season was already over with. So, I mean people weren't too sure on how to take him, if he was serious or not. There were a couple of times where people missed the practice because they were sick, yet they still went in the first half after those rules were set. I think the rules are good because last year everyone was skipping practice whenever they wanted to and we had a little bit of that in the beginning of this year. But, just set them early and everyone knows them and they're like written down. (Athlete 2126)

When I had him as a teacher he was a really fun guy like I said he was kind of quiet but he'd have days where he'd break out and start saying jokes and things. He just was a really good teacher and made me want to work hard for grades and lacrosse. Just the kind of person he was made me want to work harder (Athlete 2108)

He made sure that we had code of conduct. Not only was he making us better lacrosse players, but he was trying to make us better citizens, by watching our attitudes, the way we carry ourselves in the community and our school, the actions that we take, just making sure that were good people I guess as well and that is important. Sports builds teamwork and also you know, self-esteem, character that kind of stuff. That part of it was pretty important too. (Athlete 2108)

We have a lot of people on our team that are kind of rebellious I guess you could say. They're always getting into fights with someone else or you know yelling at someone else for doing something wrong. We need to in some way bring our team together in that aspect. You know, change those people somehow and maybe the rest of us be more accepting of the kind of person they are. Just more team cohesion. We need to really pull together as a team and I don't know how you'd do that, but just focusing on that I think would really help us as a team. (Athlete 2108)

Well he's impacted me because of the way he interacts with people. He listens to them and he'll help people out when he needs to and I really like that. I hope people get that same type of thing for me. I kind of strive to be more like him in that way. (2110)

He's just taught me to be a better person because he's really nice and he teaches us about sportsmanship and stuff that's not actually in the game, but part of the game. He was talking about fighting and you'll be kicked off the team and bad penalties you'll be sitting. It's just being fair and being nice and being kind to people is the most part. (Athlete 2104)

Well, he was a teacher and he taught me to do good in school because I hadn't really this semester. He just says do well and he's a good teacher too. (Athlete 2104)

Disciplining the kids. Because there were a couple of kids on the team who goofed off and slacked off in practice and he just let him go. One kid, he wasn't there one time, but he suspended him for half of a game. But he should have got a lot more than that. So, probably discipline and another one is taking control of a practice more. Kids are always talking and goofing around and he kind of controls it, but kind of just lets it go sometimes. So some practices are serious and some practices are not. I say all practices should be serious so I'd say that's probably one of the biggest ones. (Athlete 2104)

Explanation for scores on measures throughout the season

Fluctuated Throughout Season. I remember thinking that too. And then being unsure, like, "Was I higher than this last time or how was it?" I remember feeling like I was kind of fluctuating a little bit. But, you know it was a lot of emotions for me. Days feeling like I didn't know at all what I was doing, and then days where I felt really good about what I was doing...I think I went out there with really high expectations and I think the kids really did too. And then, that just crashed right in on us. Then, I saw some of the changes that they were making as they started to improve a little bit and they started to play as a team. So, that probably made me feel a little bit more confident. By the end of the season, there were still some disappointments, but there wasn't the same kind of pressure as maybe there was in the beginning. (Coach 1 Postseason Interview)

Decreasing Over Season. Yeah, towards the beginning of the year, the season got to be long when you're playing 40 or 50 games in a season, and we were on the road a lot, so we wouldn't get home till 11. Earlier on I was excited for the year, and then I noticed that there was just a couple of instances later on where he had set rules or we did something. Like when we ran, we didn't know what we were running for till after the practice, which is kind of frustrating and mentally draining because you don't know what you're running for. I mean we ran at the beginning of the practice and you didn't know what you're running for until the whole practice was done. So that kind of sticks with you. You know what did we do, what was wrong? So, it kind of sticks with you, brings you down, loses your focus. You know, like I said earlier, there was the rule with the practice policy where I noticed a couple kids weren't getting the same treatment. As far as game strategies go, towards the end of the year we had a lot of teams where it could have been pretty close if not win and half-time he'd sit there and say, "We have to do this, have less turnovers, and move the ball more. We have to come out in the second half and perform better." So, we'd have half of the half time, and we weren't really learning anything as far as like making adjustments on the field. I think he got frustrated with how we were performing because he expected us to play better. He'd call a timeout and say, "Look up when you're running down the field, you have people wide open." He wouldn't say, we're gonna make these adjustments or anything. He didn't really experiment with changing up lines, as far as how other people would work together and see what would work, because some people are stronger at certain things. So, he didn't really try that. The whole mental aspect for me just wasn't there anymore. (Athlete 2126)

Down then Up. Yeah, I went up and down a couple times during the season. I guess it was just moments like maybe in the season that changed my opinion throughout it. Maybe games that we won or things that we saw even in games that we lost that I saw

things that I liked about him, or that I disliked. So my opinion changed quite a bit. (Athlete 2108)

Yeah, it probably had a lot to do with my mood throughout the season. Like a lot of the time I had a lot of homework and things and projects and it was really hard to get balance between lacrosse and school and things and I was probably really frustrated at times. I don't know if that had an effect on it, but maybe. (Athlete 2108)

Increased Over Season. Yeah definitely, he definitely got more, he got higher up in my opinion of him as the season went on, because his game strategies got more intense and he got more confident as a coach. With what he was saying and everything and that really helped me bring up his scores. (Athlete 2110)

I think it's really important, because if the coach isn't confident in himself, you're going to start to second guess him and when you have a team second guessing the coach, it's not going to work. (Athlete 2110)

Decreasing Over Season. Yeah, because he was really ready for the season and as the season went on and we kept losing he kind of lost confidence and we started doing less and less in practice. If we would have won a lot more, we probably would have done the same thing, but he kept trying new things and some of them weren't good in my opinion but I'm not the coach so I can't say anything. Maybe that's why I went down a little bit on it, because we kept doing different things that weren't working at all and I just liked what we were doing before and it seemed like it worked a lot better. So that's probably way it went down a little bit.

Views on Season Events

1. Losing followed by a win-streak...

Well, getting to that point was really frustrating because we lost a couple of games that I think the kids were expecting to win and I definitely was expecting to win. I think that they improved a lot at the beginning of the year and I was teaching them some things that were new to them so they were optimistic, and then to go in and lose 6 in a row was pretty tough. Then, when we won those 3 games it was just a complete reversal of those kids and I could see it even after winning one of them. Their attitudes changed and everything. It was really neat to see. They went from thinking really negatively to thinking really positive. I think they got a taste of what it was like to win. They won a couple of those games pretty handily. They saw what they were capable of and a little bit of what it takes to do that. Two of those 3 wins they really played as a team and that was the biggest difference with just about every other game we played all year. (Coach 1 Postseason Interview)

Well, for me it was really frustrating because I thought, and I still do think, that we were better than a lot of those games showed. So, for me as a coach to think I've got a team that's more capable than what they're doing, that really falls on me I think. It's okay, I'm not getting these kids to play like they can. It's frustrating to watch them play that way. I put a lot more pressure on myself to figure out how to get them to do that. I don't know

that I ever did, but it's tough on your ego just to lose those and think we're a better team than that and we shouldn't have lost those games. (Coach 1 Postseason Interview)

Well, both me as an athlete, and the team, it gave us confidence and confidence is a big thing... We were playing well and we thought we could go on and win more games. We could have probably won a couple more and went on a 5 or 6 game win streak. It's just high school sports where you play bad one game and it just affects us. And we don't prepare all the time for home and away games. I mean it was an up and down season, I would say. It's all about confidence and how you mentally prepare and how you prepare during practice. You practice how you play and when that goes toward games, we got maybe a little too confident and we started goofing off during practice and it would show during the game and it just affected the rest of the season. (Athlete 2126)

I guess we started out losing a couple of games and we're like okay gotta get everyone into the team and we have to start playing as a team you know learning each other's abilities and things. You know we were okay with that and we started going out and kept losing games and it kind of got frustrating because we didn't know what we needed to do to get better. We were trying things and they weren't working I guess. And a lot of our season I think was a mental problem. We didn't believe in ourselves as much and we were bringing 2 teams together so there was a lot of bonding issues and things. And the 3 games I don't know? A lot of it, and Coach said this too, in those games he saw us playing as a team it wasn't as much individual players running down the field and scoring. We were making the passes, looking for each other for cuts and things. We were playing as a team and we were really together for those 3 games or that streak. And then on for there on down, I can't remember who we played, but I don't know why it fell apart, but I don't know maybe we just got too cocky with winning 3 games in our streak. I don't know. I can't remember why we would have started losing again. (Athlete 2108)

I think at the beginning of the year we were learning the system and trying to figure things out. How we all came together as a team and how he worked as a coach. And then those 3 games where we started winning everything had clicked for us. Then, for whatever reason, after that we played some better teams and we got too cocky about what we were doing and started not running the offense or doing what he said and that's when it fell apart. (Athlete 2110)

That was the best part of the season because those were the only 3 games we won. Its just fun to win and not that fun to lose and we were all happy and practice was going good and we played the next game and lost and we all lost confidence again and it all went downhill from there...we lost confidence because it wasn't a good team and we should have beat them and we lost it close and the coach was really expecting us to win this game and get us back to .500. We had the lead and just blew it. It just wasn't good. (Athlete 2104)

2. Impact of overall record on season...

Well, I remember thinking, including those 3 games; there were about 6 or 7 games I thought we could have won. A couple times we lost to a team we lost to previously, but I

think we could have beat. So it was really, to get to the rest of the season and see the kids play well, and then not be able to keep it up and keep it going. See some conflicts come out amongst the kids. Seeing some kids who really weren't enjoying playing and stuff was very frustrating. And they didn't like losing, it hurt. They were teased by other kids at school, and they heard about it there. So, it wasn't any fun for them and I think some of them, I mean it does take the fun out of the game when you're losing all the time. A big group of kids took their licks and they were looking towards the future and I started doing that towards the end too; really trying to think about the process that we're in and building a team, and not so much worrying about the losses. (Coach 1 Postseason Interview)

Mentally it was draining. It was getting to be a long season; you play Tuesdays and Thursdays, sometimes 3 times a week, and with school. I mean everything else, with being a senior, with all the graduation stuff, lacrosse became one of the lowest priorities and I just wanted to season to be done. So, I wasn't really caring too much, like I said I had other stressful things going on and that 3 hours there I could have used probably in a better way. But, that's just the last 2 or 3 weeks of the season where mentally I just didn't want to be there and it showed. If I was still like sophomore or a junior I would definitely have wanted to be there. But being a senior I was mentally other places. (Athlete 2126)

I felt like the whole team was just giving up. We had already lost so many games that it really didn't matter anymore. So, I feel like people really weren't maybe playing as hard as we should. We were just out there playing a game, it wasn't anything really serious and it was kind of frustrating. I guess we had a pretty frustrating season. (Athlete 2108)

During the end of the season it started to pick up a little bit more as we were playing better teams and we were playing them better than we would have had if we played them earlier in the season. But, we were down because we had won then we had lost more. We just wanted to win. (Athlete 2110)

It's frustrating and kids were quitting and just didn't want to come to practice because we were always losing. It just wasn't good because no one wanted to be there and people were saying that they didn't want to go to practice because there's no point of practice because we're just going to lose the next game. So, it just was not fun for a lot of kids. (Athlete 2104)

A lot of them were glad that the season was over so we could stop losing. Most of the seniors were glad that it was over and they were out of school now and they just wanted to have summer and get ready for college. (Athlete 2104)

Appendix W: Team 2 Qualitative Results

Game Strategy

I felt pretty good about that, I know what to do, I feel that's one thing that we're a little handcuffed by. We have been at this so short of time that there are many, many strategies I would like to implement that either we're not there yet skill wise or you can't always seem to get new minds around so many things. I would love to have half a dozen plays and offensive sets and clears in there. But we, we have to get the basics down before we do it. So, I know what I'd like us to do but if you only, and not that we don't have the raw talent, we have the raw talent to do it, but how much can you absorb and count on people being able to execute, I say give me little above average on that. If we had a mature team that really knew this game and everything, oh we could do some plays, we could put different defenses in we could do a lot of things. And yet already I think we're more mature than we were last year, we can do some things, we did some things Saturday that we couldn't have done last year. You know, I looked and said we're going to play balls and knots all over the field. I want you ragging everybody who gets the ball and to rag the next guy. They did it and they did it great. I picked strategies I knew would work. And again, I mean it should be like that right from the beginning. We can do that a few more time this year! Now today when we play a very good team we can't do that, we have to have a different strategy a different pass defense so you can't do too much loitering! (Coach Preseason Interview)

I would say in the game and strategy within the game I am confident that I know how to think the strategy of the game and all that. (Coach Postseason Interview)

I think we individualized games and strategies a little more, I think we were more in depth on analyzing what they had and what we needed to do, I mean for the 1st time ever we actually scouted so we knew who was going to do what. That was beneficial but you know we had better players, many of the same players or some of the players just evolved and got better so...but I do think from a game situation we got better. I mean we played a tougher schedule and still ended up with a better record. (Coach Postseason Interview)

I'd call a time out and I would say "gentleman they're going to come after you, remember who you are and remember to be classy" and I would look everybody in the eye and say "that's what I am expecting". And so you've got literally, in that case to take time out. When we're behind and guys are down, you take a timeout and you say "all I want" and this is all I asked of them all year it's broken record they'll hear it all next year "focus and effort" okay, so when they'd get down I'd say "don't stop tryin" or "guys your heads not thinking, you gotta focus on what you're doing either you're spooked because this is a really good team or you're just not putting the effort out". We used time outs that way quite a bit. (Coach Postseason Interview)

I think most of the time when you were there if it was post game we talked about the things we did well, the things we could've done better, did we reach our goals, and we usually give 4 goals that we wanted to do. How did we do compared to those? I didn't say did we win, how did we do compared to our goals? And sometimes we notice our

goals up when we're playing a weaker team; we'll say we want three quarters of the face offs. When we're playing a great team we want half of 'em. So we tried that way too. (Coach Postseason Interview)

Yeah his game strategy I think changed throughout the year. At the beginning I think I rated him kind of low, but we hadn't played many games so I didn't have much to go off of for that. But, it got better because the specific case that I know is that he doesn't like to play zone defense. But, then as we needed it, as we came across teams that we needed to play zone defense, even though he didn't like it, he thought that we could win with a zone defense. So, I think that it shows his competitive drive to win and not his selfish side I guess in that, "I don't like to play zone so I am going to just keep playing man to man". So he did what he needed to do to win. (Athlete 2206)

Motivation

We will then walk through the drill and then we will up the ante all the time trying to get the pace a little faster. An example would be if we were trying to teach kids how to do a spin move or a roll dodge is what they call it or not, and we literally say take your stick everybody all once: step, turn, and we walk through it and you walk through it and they get bored to tears, but what you do is up the ante a little bit more so they get you know progressive, that's what you want, to progress...progressively make it harder make it so that they acquire the even finer, finer points. It gets hard when there are 25 kids and there's a lot of space. (Coach Preseason Interview)

It doesn't mean that it has to be Disney land where you go "okay everything's great" . But rather than pound on the negative, point out where you were, talk about the great things and those things where you come up short or individuals come up short tell them what they need to do differently. Don't spend as much time on the bad acts and saying "hey this is what I rather you be doing" and uh take it to the next step. (Coach Preseason Interview)

And the players that have played for us will hear "focus and effort". All, all I talk about...focus, effort. Well, I say those things and I keep it as simple as I can. (Coach Preseason Interview)

Well, First, I have to get them to believe in themselves. I also try and keep it simple. I try to give them 4 at a time, small things I like us to focus on, not a great list of things. My strategy is, we got to do, and they're the same things, I mean, they must get bored with this...I would love to hear, you know, I say "win the ground balls" like a broken record, always, always, always. (Coach Preseason Interview)

Well, in practices we try to have fun. I mean we have fun with games; groups of guys versus each other. We do play the freshmen and sophomores versus juniors and seniors. You try to do something that, while going through just the dull drill, would try to make some competition of it. We'd have fast break drills where I'd put defense against offense and if the offense, first one to get to 10 won, we had some incentive. You know, I think

that's the type of thing you gotta throw them so that's what we tried. (Coach Postseason Interview)

I really, I don't believe in berating a kid because they perform poorly. To me, the only way you're going to get kids to want to do better is to make them feel good, even when they get down. (Coach Postseason Interview)

Well, sometimes we do relay races and stuff. Just like he'd say that the losing team has to do push-ups or do a suicide or whatever but I don't know. (Athlete 2224)

Well, if we're down or something, he'll just tell us that you know lacrosse is game that can swing back and forth with momentum really quickly so like 4 goals we can come back from pretty easily and just try to get our hopes up. (Athlete 2224)

We do a lot of competitions like relay races or whatever in practice. He says if you win then the other group has to do sprints or whatever. You know, nobody likes doing sprints so I think that's, he gives that competitive drive not only in practice but in games and stuff. (Athlete 2206)

I guess it's more of self-motivation in that there's always competition for a place in the field. And a spot, a spot as a starter you know, on man up or man down or whatever you want you know there's always competition in there. I think. He points it out a little but it's more self-driven. (Athlete 2206)

A lot of positive reinforcement and like he tries to keep energy up tries to like show, like you know, tries to excite us by being excited. He stays upbeat I mean I felt like we played some good teams that just beat the crap out of us but he tries to always just stay upbeat and like learn from games like that and just remind us that we're still you know, there's a lot of teams we can beat, we can still take away from those games and keep everything positive. (Athlete 2205)

He's not afraid to sit players if their either he's not performing or if their you know like getting on a losing you know their cool so that I like you know he's not afraid to sit you no matter how good you are so that keeps you focused on the game and he just always talks to the players like when you come off the field he always says something about what you did out on the field either tells you how you can do something better or complements you on something you did out there so he always like keeps you in the game and lets you know he's paying attention to what you're doing out there. When you're out on the field you always know like you always know he's watching you whether you're have the ball in your stick or you're umm on the other side of the field you know like he's paying attention so it keeps you, you want to focus on the game cuz you don't want to sit down. (Athlete 2205)

I think it [playing with athletes during practice] was a big motivational technique because you see that he's willing to get in there with you, in there with us and take hits with us

and he's not afraid to do whatever it takes to coach us. It was a motivational technique whether it was intentional or not. (Athlete 2205)

Teaching Technique

I want our kids moving forward everyday in their skills in their knowledge of the game and as a team I want them to continually improve. We'll have small set backs, but if you were to look at a trend- is the trend going up? Is it improving? That's what I want. (Coach Preseason Interview)

We will diagram, we will demonstrate personally or with other kids, umm, that do the skill well already, we will then walk through the drill and then we will up the ante all the time trying to get the pace a little faster. An example would be if we were trying to teach kids how to do a spin move or a roll dodge is what they call it or not, and we literally say take your stick everybody all once: step, turn, and we walk through it and you walk through it and they get bored to tears, but what you do is up the ante a little bit more so they get you know progressive, that's what you want, to progress...progressively make it harder make it so that they acquire the even finer, finer points. It gets hard when there are 25 kids and there's a lot of space. (Coach Preseason Interview)

I noticed that we were not overly confident in our last game and running and catching on the run so I designed a practice and say this is what we're going to do. I believe that you have to tell folks what you're going to do first; you do it and then tell them why it was important and how that will build into it. That's the goal, I will say this in work it works a lot (Coach Preseason Interview)

If I had 2 assistants it would be much easier. What I'd like to do, ideally, is have someone running the drills and me coaching individuals, as you see something from the kid - pull them over and say this is what I'd like you to do. What you end up doing when there's just one like there was yesterday umm you know, gotta stop and you gotta coach in front of everybody because you don't have the time otherwise. You're stretched thin. When it's just one of me there, when the other coach is not able to be there, you just don't...you have to give up on saying I am going to teach a lot today, you hope to drill it. I think. (Coach Preseason Interview)

I also realize that I am a little hand strung, but you notice 90% of the time I am there alone, it's 22 against 1 and to be able to keep it energetic and fun and teaching and yet be able to provide instruction enough down to an individual level; I am challenged by that. (Coach Postseason Interview)

I mean all I really did all year was run them through drills and let the drills and let the drills take care of the building as opposed to being able to work with a kid and actually grabbing him and say hey you need to do this and I need you to get your stick this way and that didn't happen. (Coach Postseason Interview)

I also think that I teach by trying to instruct as opposed to yelling at them. You yell to be heard you don't yell to, I don't mean, I wouldn't ever say I like to yell, but I'd rather, you

know you've got to be heard, like hey do this, but I do think I am good when I have the opportunity to help with that and I do try to help them with the mental aspect of the game because I think that's such a differentiator. (Coach Postseason Interview)

I felt like in many ways I lost a year of improving kids individually. I do think that just 5 days a week practicing everything got them better. I don't know that I was able to move a kid a whole lot further. I think that was some of it that disappointed me. (Coach Postseason Interview)

He knows what he's doing and he's a good teacher I'd say. He'll go over a drill or something before with everyone around and then like we'll go set it up and then we'll start doing it and he usually like stops us in the middle of it and if somebody did something wrong he'd just like give us pointers on it and then show them how to do it. With his own stick. (Athlete 2224)

It's nice to have them out there and demonstrate: it shows them that their, they actually played the game their not just a text book coach. It just makes it easier to relate to the players themselves. (Athlete 2224)

I think he's a great coach, he's got high level of confidence in himself and what he knows in the game and he can really get to people and you know he uses good communication. Umm, telling you exactly what he wants and how to play the game. (Athlete 2206)

Like I said he's really, he knows everything basically there is to know in every situation he's got a comment to it. You know, umm, I think he knows a lot about drills and about improving technique and stuff. But I'd say as a coach, the only problem he has is giving - - acknowledging what people did good when it's needed. Sometimes he, he just, after you do something good he doesn't always come up to you and say "good job" you know "that was a good play" and stuff like that. (Athlete 2206)

I'd say drills, drills; he does a lot of drills. And then shows them himself. You know he'll go through and show you exactly what he wants you to do, he doesn't just tell you, he also shows you what he wants.... Yeah I am a visual learner and I think a lot of younger athletes are too. And seeing it is what is really helpful. (Athlete 2206)

Yeah, I like it a lot. Not many coaches, I even recognize it on our varsity football team, they'll show you stuff but they only show you at walking pace and stuff like that but then Coach gets in and shows you like exactly what he wants to do and plays with you and shows you where you should be at this time; in game situations it can get a little confusing, everybody's moving everywhere, it's not stop go and like slow it down and stuff, but then Coach does it right at game pace and that's really helpful. I like it a lot. (Athlete 2206)

He also uses the better players he has on his team to his advantage because there are certain players who have the skills already and he uses them to demonstrate those skills to the rest of us. So if there is anything that he can't do he isn't afraid to use them to show

us how to do it. And he, he plays and things he likes a lot of, like to walk us through it as opposed to drawing it up on a board, he likes to get us up and moving around and walk us through it and show us how it should feel. (Athlete 2205)

He's big at like I guess he uses drills a lot like repetition especially with like throwing with your weak hand catching with your weak hand stuff like that, a lot of repetition. And see more yeah like a lot of repetition like a little bit of instruction and then just over and over again 'til you get comfortable with the new skill. (Athlete 2205)

It's good [playing with athletes in practice] because in our case he did it out of necessity because we only had 5 attack man so if we wanted to run a full scrimmage we needed an extra man. But it was also, first of all, helps him demonstrate that he knows the plays so helps him demonstrate what we you know can while he's playing you can watch him and see you know that's what I should do in that situation or that's what he'd want me to do in that situation. (Athlete 2205)

He likes to discuss it. You know, a lot of coaches will yell to get their point across or something like that, but he just likes to get the team together around him and just tells them what we need to do. It's less like a parent and more like a boss, he's not yelling at us to do something, giving us chores but he's like this is the task that needs to be finished and this is what we need to do, let's go do it. (Athlete 2205)

Character Building

If they do anything in terms of you know whacking a stick out of the other guys hand or something that could end up hurting somebody you pull the kid over. I don't allow cussing, if you hear any of that you grab the kid and pull them over and you say "there's no room for that" (Coach Preseason Interview)

I don't have to be the reason why they want to play lacrosse, I want to be just part of their reason...looking back I have the fondest memory of my high school hockey coach. I have a fond memory of my college lacrosse coach. To this day I still call him and meet with him. I have a lot of respect for the person. (Coach Preseason Interview)

Well, I think, I think on the blow outs, the ones that you win you better just say we're going to build on things and we're going to try and do everything we can here to remain classy. In a blow out our kids don't laugh. I, because I have been on the other end of that, and I said don't you dare make this other team feel like you're mocking them. And when you have a tough loss I mean sometimes you gotta say hey this hurts and let's dissect it, let's look at it. (Coach Postseason Interview)

No one is above it. You're a team and just because I am middle aged and fat doesn't mean that I don't have to do that. So, I know I think I don't want to be their buddy but I want to say hey for this moment I was teammate and I am going to you know, you got to run, I'd run. That's fine. Otherwise, how can I ask everyone else to do it? (Coach Postseason Interview)

So when we have a bad game and we don't do some things well, I am more apt to, just personally in life and I don't know if I did it but my lifestyle is, to say even when things are bad don't let them think that. The only time I really, really want to get down on a person whether it's here or work or whatever is when they don't care and they don't try. I have a low tolerance for that but if they're trying, they're really giving their effort, hey you can't I mean these are kids. (Coach Postseason Interview)

We got great kids that competed hard, never really gave up and were gentleman. I won't call lacrosse a violent game, but it is a very physical game and yet our guys are classy. I am proud of that and we worked to that. I mean I coached to that. One thing I keep coaching to is, 'you will be gentleman' and they were good about it. (Coach Postseason Interview)

I hate people who play the game like thugs. I hate trash talk. Trash talk and all that is what's wrong with American sports. So I am on my one-man crusade to say no end zone dances, no every single play you're the king of the world. No, play the game. The best guy you know Barry Sanders, Walter Payton, these guys were the best in the world and they would just hand the ball to the ref. So some of that I'd say is let's teach our kids how to compete the right way. (Coach Postseason Interview)

I think he looks at it and says you know we're young kids we're growing kids so he takes what you can get from lacrosse and makes it a real world situation sort of makes you become more of a man when you're grown up person and just being a good person in life as well as on the lacrosse field, you know fair, and emphasizes sportsmanship and stuff like that. (Athlete 2206)

Being part of a team and not being a single individual. You know emphasizes getting rid of the ball don't just try to take care of it yourself you know, especially in higher level that we play. You have to pass it around, use all the people on the field and stuff and becoming a team player can help you with the rest of your life and stuff like that. (Athlete 2206)

He's really an upstanding guy. I noticed he really had a lot of integrity and outside of lacrosse he seemed really trustworthy and really honest. And in lacrosse he's just, he knows what he's talking about. He knows the basics of lacrosse and he knows that he's a better coach and makes us better and it shows...Especially in high school you know, you can tell that he knows it's more about developing us than it is about winning but he doesn't ignore winning. He just really cares about the players. (Athlete 2205)

Coach [head] doesn't even drink, he doesn't smoke, umm he doesn't swear you know, he drives responsibly, he just like he's just like an all around like a very good guy, very upstanding, so like it's good to have that as a role model you know, when we say on the weekends "don't do anything coach wouldn't do" [Laughter] It keeps you in check. It keeps you pretty safe for that, he was good for that. (Athlete 2205)

He emphasizes sportsmanship and commitment too. Commitment to the team but also commitment to everything else you do in life and hard work. He emphasizes a lot of like the skills that you teach in sports. He emphasizes using those outside of sport so a good mentor in that way I guess and role model for the players in that way. (Athlete 2205)

Explanation for scores on measures throughout the season

Decreasing over season. I think mine went down because I felt the effects of being alone. And I felt I was not doing all I could do if I had more help. And so I didn't think I was doing a great job. You know, with the appropriate amount of help I could do a great job. Alone it was difficult so I felt I was not reaching what I could do. That's probably, that's where I kind of started knocking myself a little. That's all right. (Coach Postseason Interview)

Stable. Yeah. There's one point in the season I think it was like the 2nd survey you sent out and I scored him a little bit lower because we played a team [Name] and the first time, their team is a lot better than ours we lost to them 6-4. Then the second time it was something like 17-3 and he was mad that game because we just got beat really badly and he played at the club team at State and that team wasn't really that good so they got beat a lot and he just got mad and at the beginning of the game he wanted to run zone defense I think and then we switched to man to man and then back to zone. So I think scored him a little bit less in the adapting to game strategy. But they're just overall better than us so I don't think there's really much he could do... That was the only time I really saw like a change in that. (Athlete 2224)

High-Stable. Yeah, I think it was pretty stable. His motivation, it comes back to giving athletes credit where it's needed. He didn't do that very well I don't think throughout the year. But, everything is pretty stable except for that his game strategies got higher as we more games. I saw what he did differently in other games. (Athlete 2206)

High-low-Middle. Thinking back to the season it seems like towards the middle of the season you, I just got, I think personally I think I graded harder then. I just graded ridiculously, like I must of put 2 or 3 points lower than normal and I was a lot tougher on Coach that day for some reason. Probably mad at him for something. I don't want to say like I was sick of him but it seemed like in the middle of the season there was a low, I don't know if it was just me but I got tired of Coach because he really, because he really is strict about not swearing and I don't swear all the time but it's part of my regular speech. It was just things like that where you were just getting irritating at him so that's probably, [I was] probably mad at him about some things and I graded him for it. (Athlete 2205)

[Why the higher scores at end of the season?] Oh, I probably realized that I was being an idiot. Just because he doesn't want us to swear is no reason to call him a bad coach or grade him badly on our surveys. And that even if I do grade him badly on the surveys, I do really need to support him. I feel like more the more I got back into lacrosse the more I relearned the strategies the more I realized that he was a good coach and liked him. I could appreciate the way he's coaching. Not knowing the sport very well, it's hard to

judge somebody else's knowledge of the sport if you don't know it. So, when I learned it more my appreciation for his knowledge of the sport grew. (Athlete 2205)

Views on Season Events

1. Up and down record...

Well, there are some games that you walk into that we have no business winning. At this stage we had no business beating [opposing team name]. We probably cannot stay with [opposing team name] or [another team] for that matter. You schedule them, and you don't want to do them all at once, but yet you need to find the victories that are within there. I mean we played [team name] and lost 8-6 or 6-4 whatever it was. It was 2-goal game against a very, very good team. Our guys felt tremendous after that and they should've. Who cares? Who cares if we won? I mean they do, but as far as I am concerned, if you give it all, if you focus and give all the effort you have, what if you don't win? At least you can say you gave it your all. I am not going to say winning is over rated because I love to win. But I had no problems; I think the ones that hurt you are the ones you should've won, that you saw slip away, but we beat some teams that not many other people beat either. (Coach Postseason Interview)

Oh well we were still like fresh because this is our first varsity season and we played some teams that were better than others. Coach is just trying to play, schedule harder teams to get us recognition as a program. So that's where most of the losses came from. (Athlete 2224)

It was actually kind of frustrating we couldn't catch ourselves in a winning streak. It started at the beginning I think we had a little run of wins, but then as we started to play tougher teams we just couldn't, that winning streak stopped and then it was up and down and then the losing streak was just real frustrating we just couldn't seem to beg a win even against teams that we should've beat or that we beat earlier in the year even that we beat last year. And then we started to get some hope as we started to win a little bit and then it was just up and down so it sort of just carried on out. So it was a little frustrating but then at times it was fun especially important games and like close score against [team name] that was really exciting...I think as a team everybody felt the same about the frustration and stuff. Then the coaches they were confident every game that we could win if we just played our game and played to the best of our ability and stuff. So they kept a good head about it, but we all just got frustrated and some of us got down on ourselves (Athlete 2206)

In a way it's kind of, it's nice because 2 years ago in football, we lost our 1st eight games. That's a lot worse because by about the 5th or 6th game, you're just like "what am I doing here"? Where as with the lacrosse season, I don't think we lost more than 3 games in a row ever. With 2 or 3 games a week that means you didn't go a week or week and a half without a win. So, it kind of helped lift your spirits up but at the same time you never got on that roll. But also you know the season was kind of different because the I think that kind of schedule or that kind of record does a lot to our schedule because we would play like we would play you know teams that were closer to our caliber then we would play

these really good teams and they would slaughter us. So the losses didn't hurt as much when we were getting beat by like teams that we knew were you know, like top teams in the state, so it was I don't know, even though we didn't hit the win streaks, they felt like win streaks because they were games we theoretically going into the game knew weren't going to just get killed. We kept winning those games. (Athlete 2205)

2. Running with team after his team loses during a drill...

I'm going to play, I'm going to pay. I would've surely made everyone of them run. I don't really like to play, I've played, and I've had my time. I am not one of these that has to throw my hat on an go play. I go do that in the summer, so I really don't like that, but I thought to make it the game a couple times that I did was because otherwise we would've been short handed so I did that but hey if I am going to do it I gotta pay. No one is above it. You're a team and just because I am middle aged and fat doesn't mean that I don't have to do that. So, I don't want to be their buddy, but I want to say, 'hey for this moment I was a teammate and if you got to run, I'd run'. That's fine. Otherwise, how can I ask everyone else to do it? (Coach Postseason Interview)

Just a team sport, shows team unity. Win together, lose together. (Athlete 2224)

Even though, I see it as, even though he is the higher individual then us as being the coach and even an older person but he was in the situation and he was playing with that team and since the team lost, he lost as well and he didn't just step out he went and ran with them. And so I think it shows just that idea of being a team player on the field and he that was a good example on his part of being a team player. So it kind of motivated us to be also team players. (Athlete 2206)

He's big into commitment and he's saying if we commit to being a team under him he's committing himself in the same way to be our coach and do whatever it takes to make us the best team we can. He takes the wins with us and the losses with us...It's a good feeling to know that your coach is there to back you up if something happens, being there to help you out if you need help off the field and stuff isn't like isn't just talk, he's actually there for you. (Athlete 2205)

Team 3 Qualitative Results

Game Strategy

The frustrating part is that you can strategize all you want but if your team does not buy into it the strategy goes right out the window. That is something that I have really tried to work with the girls, letting them know that I have faith in their abilities and they need to show me that they have faith in themselves. That is the hard part with strategy, knowing that your team is capable of doing something but actually getting the girls to do it is that work in progress. (Coach Preseason Interview)

Another thing to work on is probably focusing on the other team's strategies, we never really focused on what the other team was doing. Like if the other team was rolling the crease, we never really looked at what they were doing and I think that's what killed us. The other team kept doing the same play over and over again, and our defense really didn't notice that, because our coach really didn't, we weren't really paying attention. So, I think if we would have noticed, that she could have helped us point that out...and we could have planned that out and maybe shifted and noticed that and got more on top of them and maybe that would have helped us a little bit (Athlete 2307)

Motivation

I tell the girls that our season is only like 3 months long, look at how far you've come; it does not necessarily take years to master something, even in a short amount of time you can really improve. I am hoping that is something they can apply in other things in life as well (Coach Preseason Interview)

You know, they're self-motivated. For me, that is way more important than a girl who might be better but not motivated. I've even told the girls that I would rather take someone who has never picked up a lacrosse stick but has that athlete mentality; they are willing to push themselves. I've already seen with tryouts that there is like this separation and like girls who I have said 'you need to go home and work on this' and you know seen the girls who really take it to heart and now their hand is in the right position and others that it makes absolutely no impact (Coach Preseason Interview)

I think this year the motivation is going to be a little bit easier. By setting up these three groups, I have my varsity, transition team, and junior varsity, the girls that are in the transition need the most motivation. By putting them in their own category I think I am putting the responsibility more on their shoulders, they know that where I put them for playing depends on how hard they work. I think that self-motivation will be the focus this year (Coach Preseason Interview)

It was unintentional, but I think some of that communication was missing. Some of that more positive aspect, like 'Let's pump up and have a great practice' was lacking on some days (Coach Postseason Interview)

I think everything from trying to lighten up situations to being heavy handed. This year was interesting because especially during games we had a few key people that would do

the talking for me, which would kind of make me happy that they would say exactly what I would have said, which helped me know that they got it. It would vary, and I think the girls would see it vary. If it was something as far as 'lets do this', and then it would intensify. I think the girls would notice too, and if it got to a certain level of intensity, they'd be like, 'oh my gosh she's really pissed off at us.' I think if it did get more intense there was a reason for it and I'd kind of pull them out. It was really interesting at tournaments where they would point out other coaches and other coaches' strategies like, 'Oh my gosh, look at that coach. He's just yelling.' And I ask them if I ever do it and they'd be like, ' Oh no he's just kind of scary.' And for them to see what it could be like and thank God it's not like that. But, I think there was a varying level, and I think the girls, especially the girls that had been with me 3 years, would know. Okay she wants us to be serious, okay now she really wants us to be serious, and can kind of just tell that (Coach Postseason Interview)

Well, if we don't do something we have to do push ups. Mostly it's just if you screw up, you have to do push ups and stuff like that. Or run a lap (Athlete 2312)

Well, if we screw up in a game she won't make us do push-ups or anything like that. But, I think she just tells us what we need to work on and tries to help us. She'll try to let you know what we're doing wrong (Athlete 2312)

Oh, it depends on how we played like if we have this famous speech when we played Big Varsity High the first time. She's like, "You guys are sucking." Not really being serious, but then we came back and we won. So now if we're doing badly, she's like 'Yeah, you suck', but it's a joke. So it depends, like if we had played really badly before, like in the game before practice, she would not be as happy with us or as confident. But, if we won, she would be more like that, because we had just won (Athlete 2312)

We kind of had a motivation problem on our team I think. Like a lot of girls would just go out there and not feel like playing. I think a lot of it was we just weren't motivated. I think that's something she could have done better as a coach, like get us in game-mode (Athlete 2312)

Well, the big thing this season was Regionals and going on from Regionals because we wanted that trophy really bad. The coach would be like, 'Oh you guys gotta get it and keep doing it, and we can get to Regionals.' Then, after we won the first game leading up to Regionals, she'd be like. 'You guys made it this far, keep on doing it, you guys can do it.' I think the team was [school]. So, she was like you beat them now you just have to beat the next school. So that was our big motivation. She was just like you guys are better than them. There was one team, [school], that was the team we killed like 18-4 I think. She'd always give us a speech, like the "you suck" speech, you might have heard that, and she'd, whenever we're playing bad it would always get us angry, but we wanted that speech. So, she'd always tell us that and it'd get all of us really motivated to keep playing better and she'd tell us that and we'd go out there in practice and we'd really hustle and work our butts off and we'd do really good. So, we just needed that little pep talk and

then we made it really far and that's why we made it as far in the season as we did. That was the main motivation that she gave us (Athlete 2307)

Well it was basically that speech or, she'd never point anyone out, you don't want to let your team down to all of us, just thing of how far you guys could go now. You don't want to make your school look bad, she'd say. Compare yourself to the guys team, she'd say that. She's like you want to make it further then the guy's lacrosse team, because the lacrosse team was really bad this year. So, we wanted to see how far we could go so we could rub it in their faces and stuff. She's like, just see if you guys want to win you can keep on going further and further. Or we'd say, "Do it for peanut!" That's what we call her little baby, because she's pregnant. Mostly, it was the 'you suck speech,' or rub it in the guys' faces. She'd be like you have to win so you can rub it in the guys' faces tomorrow (Athlete 2307)

Well, if we had a game coming up she'd always bring up the game and say how nice it would be, since it was the first year as an actual sport, how nice it'd be to have a good record. So, she'd bring up winning games. Sometimes we had to cradle in line and if we weren't doing that we'd have to do push ups and that kind of motivated us, because after doing 50 push ups, you don't want to do them anymore (Athlete 2317)

She doesn't make us do push ups, but she still tells us that she knows that we have it in us to win and that we should be playing harder. Usually, that gets people motivated to do stuff. She talks to us about what we should be doing. It works, most of the time (Athlete 2317)

She would just continually go over it, every time. Even if we were playing, she would yell ground balls if we weren't picking up the ground balls well. She would just make sure that we knew what we were doing wrong or what we should be doing and she would just tell us and at practice if we had a game and we didn't do the ground balls right, she would make us practice ground balls the entire practice. I mean no one really wants to pick up ground balls all practice, but she motivated us that way (Athlete 2317)

Well, during a game if we're playing really bad she gives us this one speech. She just tells us we suck and all the sudden we play better. She doesn't really mean it but she just says it so we'll play better. We really do, like a half time, if we're not playing good the first half and half time our heads are down and things aren't looking good for us she's like you guys suck and then we just laugh about it. Then, she'll be like no really you need to pick it up. I know you guys are better than this (Athlete 2301)

There are coaches that really, really compliment the girls and she does that, but not as much as I'd like to see her do it. Because in a sport you love to hear your coach say good things about you and sometimes she doesn't always recognize your strengths. She motivates us as best as she can, maybe that's the best she can do, but she could motivate a little more I think (Athlete 2301)

Probably, during game situations, she recognizes what we need to do to improve during the game, but I think it would help if she recognizes the good things that we do. Because if you're losing you don't like to come out and here, okay you're doing this wrong and this wrong and this wrong and this wrong. It would be really good if she stepped up telling us what we're doing right and telling us to continue doing that. In like the huddles, during half time, it's usually like the goalie, who's the other captain, that are telling our defense, you're doing a really job of shutting the offense out. So, she could definitely step up and give positive feedback during game situations (Athlete 2301)

Teaching Technique

We bring them all in and I break it down into little bite-size pieces. Sometimes I have to stop because I think it's a small piece but I see the confusion. Then, I will try to break it down and I'll say hold your stick like this and then realize they cannot even hold the stick that way so I'll say put your right hand here and left hand here! On big thing for me is to say remember how this feels; remember how this feels in your hands or how you are standing. So a lot of it is starting with standing and then transitioning into jogging and doing it and then its incorporating the new skill into what we do every day. It's a real progression, and sometimes it's breaking it down more on an individual basis. Sometimes when they are just not getting it you need to bring everyone in and say why we are doing something and then you see the light bulbs go on in some people. I'm finding that I need to, after I show them technically how to do something then tell them this is how it would be used in a game situation (Coach Preseason Interview)

I try to create an environment where I do not care if you go out there and make a mistake as long as you are trying something, that is a message I am constantly sending. Just show me that you are trying it. It's all about trying new things, trying new skills, and seeing what works for you. I think also, and the girls can tell, when I am more serious and frustrated and have those range of emotions and the girls can respond to that and know exactly where I am going (Coach Preseason Interview)

I have been a trainer in other aspects that have helped me. It is tough when it is a numbers issue and so many of them and one of me. With teaching skills, with my experiences with training, my education, and working with refugees where English is not the first language where you have to become real creative with how to send messages, those experiences have been a real asset. You have to use all those skills in coaching (Coach Preseason Interview)

I think one thing was just, that was better, was being able to focus more on developing rather than on teaching. So, it was kind fun to be able to step up and instead of just going over the basics and really focusing on that, actually doing some of more what the kids consider fun things. The kids are like oh, teach us plays, teach us tricky things. And the kids be really respective and having the ability to do it. I think that was one thing that was different and better was being able to refocus the team away from, okay now you have the fundamentals now lets move on to the next level (Coach Postseason Interview)

I think this new growth of lacrosse, it was definitely a growing year with the officiating and the coaching, the teams we played against. I think it really even drove the point home of how much better it is for players and teams to be a good educator and to teach them to do things the right way. I think its definitely, I think the girls got an appreciation of it because they would run off the field and go, "You taught us this way, but they aren't doing this way" And having this dialogues of why is what you're teaching us different from what we're experiencing. And being able to have that, and even sometime second guessing myself and having to go back and say okay let me make sure that's the right way. In that aspect, this season has pushed me to be a better educator because there were so many inconsistencies (Coach Postseason Interview)

I think the most important thing is to use more than one, first of all. I think that's a strategy in and of itself. Knowing everyone's not gonna learn the same way. A lot of my strategies were being able to demonstrate it, have the kids demonstrate it back, walk through it, break things down, even to the point of, "okay your hand goes here, lower your hand a little lower," but the just really being able to break it down into bite size, because I know a few times I would be like okay too much information let me back up, let me break it down even further for you. That was the first strategy, being able to break things down into smaller pieces for the kids. And then I think being able to utilize other players to kind of lead by example and asking them to lead by example. Because I can sit there all I want and say do this, but when they see someone, especially someone they admire, and say hey, "can you do me a favor, can you work with this person?" (Coach Postseason Interview)

Ways of getting my point across... physically demonstrating, talking through, expressing my frustration, letting them know I'm frustrated I think is one too, and also trying to explain why I'm feeling the way I'm feeling and putting some of the responsibility back on the players, rather than I'm feeling this way just because I am, but rather there's a reason why I'm feeling this way and is it something that was more of the negative side, putting the responsibility on them to try to rectify the situation. So a lot of it was like can you understand me? Give me some suggestions, how can I get through to you? So, kind of engaging them in dialogue to get my point across. (Coach Postseason Interview)

I think she's a really good teacher. She really knows what she's doing and I think she can communicate that to the team really well. I think she's a good coach when it comes to coaching and teaching skills that you need (Athlete 2312)

We do mostly drills and she'll show us how to do it. Then she'll put it into a drill, and then we learn the skill. Like if we're doing like flip passes she shows us how to do it then we just pass and catch. I mean she can't just show you. And she'll also come around and help you individually if it's something you're having trouble with. (Athlete 2312)

I mean she's been playing lacrosse her whole life. She played it in college and she's been learning it from her husband [another coach]. I think she still learns stuff from him, and even stuff from us she's said. So, there's always room for improvement, but she teaches us day by day. She's really good (Athlete 2307)

She'd just keep, if she wanted to teach us a skill, she'd keep doing it over and over. She just makes us do it over and over until we get it. She focuses on one thing until we get it. I really like how she does that, but sometimes it can be hard because we do it like the whole practice. Some practices we focus just on one thing. One practice we were focusing on quick sticks and we had to do that the whole practice until we could get to 30, and that was just to 30. Some practices we'd do it like 40 or 50 and we couldn't even get 30. So, she'd make us do that the whole practice because we couldn't get it. So, I mean some of it is hard, but she wants us to get it right and that's good because she wants us to get better (Athlete 2307)

I think she was a really good teacher. She just like, for like ground balls and stuff, she would teach us until we got it. If we didn't get it during games, she would make us do it the next day at practice and she'd continue helping us through it no matter what. And like the plays, even though they were confusing, she went over them a lot of times to help us (Athlete 2317)

She would demonstrate it too. Basically she would just talk about it. Then, she would have some people go through it just to show us and then we'd practice it all practice (Athlete 2317)

I think they were probably the best ways that she could do. Because if nobody knows what she's talking about the best way is to show it and tell it. If you're not good at something you're supposed to just practice and that's what we did. So, I think that's that best way of coaching she could have done. It was confusing at times, because you didn't have a clue what she was talking about. But, she would still stop and say you're doing this wrong and you should do this way so that was good (Athlete 2317)

She always had us practice with the team, which is what you're supposed to do, but sometimes she'd tell everyone that they weren't doing the ground balls right, but there were people doing it right. So you really wouldn't know if you were the one doing it wrong or right. She didn't really single out people as much. Like if she would have come up to me individually and said you need to do this better, it could have made me learn quicker how to do something. Instead of just saying as a whole team, you're not doing it correctly. Then, she would say whenever I say something it applies to the whole team, but sometimes you didn't really know if it did or not. (Athlete 2317)

She knows a lot about the sport and if you need to work on something, or during tryouts, she'll let us know. She had like a meeting with us and let every single individual know what we needed to work on that she noticed about them. Like during practice every day she'll critique us and if we're messing up on like cradling or our shots or something like that, she'll critique us. Yeah, she really teaches the game well (Athlete 2301)

I think she does have us do certain drills, just not for our benefit, but for her benefit so she can critique us. She has us do these drills, she just basically the whole time through

the drill she's telling us what we're doing wrong or what we're doing right. So, she definitely has us do certain things so she can watch us or critique us (Athlete 2301)

At the end of practice she'll sum up the practice and tells us like the big game's coming up, you need to really work on this or there defense is really good so we really need to work on offense. So, she really talks to us a lot about what we need to work on (Athlete 2301)

Character Building

I think there is a definite need, to not only teach on the field, but to have the kids take the lessons off the field as well. One of the things I told a parent that I really want to work on is team-building, you know, as I am taking this team from a club status to a varsity status I feel that there is a need for a real cohesion between the girls (Coach Preseason Interview)

I want them to remember, not necessarily me, but the team environment. I just really want them to take away a real positive experience and they stay involved (Coach Preseason Interview)

I do thoroughly believe that you have an impact both on the field and off the field and it's not only about the sport of lacrosse, but it's about character building. It's about instilling some things that I'm finding that you assume that kids know about respect and sportsmanship and you learn that it's not common place and just really holding true to that. Your job just isn't during the game, but, it's using those teaching moments that occur after the game, during the game when they're not in play, but if you're not constantly staying on your toes you can miss out on a lot of things or you can overlook a lot of negative things that if they are not corrected, even though they may not directly impact your team, I think it directly impacts the fact that, that person may leave the experience with some pretty negative behaviors (Coach Postseason Interview)

Stuff like during our games, this really bothered me, she wasn't being sportsmanlike, she'd yell at the refs or something like that. I think it reflects poorly on the team when she does that, but that's about it (Athlete 2312)

She's really nice. I mean we still talk like females and stuff even though we're not playing lacrosse. She's friendly. If there was something going on within the team, like girls fighting or anything, we could talk to her and she would help resolve it. She's good with managing issues within in the team (Athlete 2312)

Mostly it'd say probably motivating our team in getting ready for games and sportsmanship towards the other team and the refs because of the way it affects how people look at our team. I think she's a good coach besides those two things. Those are what I noticed anyway (Athlete 2312)

A little bit I did just because of the sportsmanship thing. I don't think it bothered any of the other girls because they were all like, "Yeah, that was a stupid call." It really bothered

me but that's just because my dad raised me that way I guess. I lost a little bit of respect for her, but I still think she's a good coach (Athlete 2312)

She teaches us a lot on and off the field. She's really good. I've been to a few camps, and she was there at the camps, and not even when we're playing after the camps, she's taught us a lot about being a person and stuff and not to do bad things and stuff. She's just a good person overall (Athlete 2307)

Well she really just tells us not follow people; just be your own person really. And not go with the crowd and stuff. Because personally, there was only 4 of us that went to camp last year, that her and her husband coached, and she taught us a lot of stuff. She would come in our room at night and let us stay up a lot later and we'd all just sit and talk. And like all the girl would be really, like because there was a wrestling camp going on there, and all the girls would be like, they'd just all go out and do their own thing and they were like really nasty and all that. She'd be like don't do that, you guys are better than that. She'd be like you guys don't need guys and all that stuff. She'd be like be your own person, you don't want to let yourself down, and you guys are better than that. She'd just boost you up and not feel low and everything. She just doesn't want you to feel, I don't know what the word is for it. She just makes your self-confidence go up. When other people are like going off and doing stuff, she wants to make sure, she cares a lot about you, she doesn't want you to go off and do the same, she wants you to be your own person. She doesn't want you to go off and follow people. You know, and make bad decisions, because she doesn't want you, because she's so focused on you. Like for our last game, she wasn't all so focused about winning, like we really wanted that trophy and she wanted it, but she was like more concerned about how we had fun and stuff. She's not so focused on winning. She was like more concerned about us and stuff and how we feel and if we're having a good time and stuff. Like she's one of those coaches so she cares more about us then the game and how we're doing (Athlete 2307)

Because when I was cheerleading, my coach was like so focused on winning the competitions and at practices she was like we have to work because we want that trophy and it was not fun at all and that's why I only did it one year. I quit right after because I didn't like my coach. So, I really like a coach that's not focused on winning and all that stuff (Athlete 2307)

I think it was the whole experience of being on a team just affected me because I've never had that before. Of course, being a coach, she taught us things we could use in everyday life. Like not giving up, or even just like listening skills, because you have to listen in order to be able to understand what she's talking about. So, that kind of stuff applies to life (Athlete 2317)

I learned a lot about being on a team, and teamwork. If we were playing bad you can't just single out one person and say you're playing bad. You have to work at it as a team and figure out ways to not play as bad. You can't just blame it on one person and call it good. If you think about a job, everything relies on everyone in order to work well and that's how it was on the team. It's on everyone's shoulders and you can't single out one

person and say their playing bad so let's kick them off the team. It kind of helps you get along with people, even though you might not like them as much (Athlete 2317)

She's not just a coach, she's a friend. She really gets along with everyone. She's really nice, outgoing and fun to be around. You get those coaches that yell a lot, and [coach] never really yells that much or when we're goofing off in practice or like during a game when we're playing like crap and we know we can do better then she'll yell, but overall, she doesn't say things to destroy our confidence or she just is really is a good coach overall (Athlete 2301)

She's definitely taught me about responsibility and stuff. Like I was captain this year and I had a lot of responsibilities on me and it's taught me to be more responsible and be more dedicated to things (Athlete 2301)

Explanation for scores on measures throughout the season

High-Low-Middle. Well this is a very, a season, well there were some factors that weren't planned that definitely affected it. We had really high expectations in the beginning and because of my own personal limitations at times, it was like eh, maybe I'm not going to be able to accomplish all the goals that I wanted to accomplish. Yeah, I think that's pretty representative. As far as starting high, and dealing with some of the things, and then leveling out midline, I guess that's pretty much how it went (Coach Postseason Interview)

I can definitely see it could have been a different season if, I feel like if I say this it sounds bad, but if my attitude was more consistent. Because I know that it went up and down, because of what I was able to do. You know there were days when I was out there and I really didn't want to be out there and feeling bad knowing that girls understood, but at the same time feeling that in a sense I was kind of cheating them in way, because I couldn't give 100% and expecting them to. (Coach Postseason Interview)

Decreasing over season. Yeah, I like Jen don't get me wrong. It's just that, towards the end of the season she got a little more edgy, well she's pregnant yeah, but she's just more stern I guess you could say. She might have just been more serious about it. Because of the playoffs, stuff like that. But I think a lot of the girls lost some respect for her because of the way she was coaching. Maybe it's just that after you spend so much time listening to someone, it just gets old (Athlete 2312)

Stable. Well I've been with her for 3 years. I just think a lot of people haven't been with her that long and I think there is probably only 6 people on the team that have been with her that long, so I think that through the years and her coaching, I've been with her and seen her coach 3 years, so I know what she's capable of and I know how she's doing. So, to me, I know how she's compared to other coaches that I've had and just how I feel about her and stuff and just seeing her work and that's why I thought she was doing good. I think we wouldn't be as close of a team if we didn't have her because she's like really easy going compared to other coaches that I've had throughout the years and they were

going to make us have a different lacrosse coach when we became a varsity sport, because there were like other options because we were a varsity sport and I don't think we would have been nearly as close without her. Just like having her for multiple years, that's why they were high and stayed the same I guess (Athlete 2307)

Fluctuated over season. I think that the stuff that bounced around score-wise was because it kind of depended on the game that we had or the practices that she, like sometimes she did motivate us more to do stuff and other times she kind of just let us do our own thing and that's when it kind of fluctuated. I know it went down when it asked about working with individuals or something. I just remember that at the beginning of the year everything was going really well and by the end it was like well she hasn't really helped me individually and I didn't know exactly if I was doing it right and she never really said, so that went down. I think it just mainly depended on the games or practices before that and what I had to compare it to (Athlete 2317)

Stable. I think that at the beginning of the year they were a little higher then the end of the year, because I love [coach] as a coach. She's a great person and I love being around her and everything. There were just some things that, she like, whenever I would go into the game, this is me personally. I don't know if has to do with me or all the other girls? But I would go into the game and work my butt off and I would work to keep the team ahead and stuff like that. I just felt like she didn't really care sometimes. Like I came off the field tired and stuff like that. I can honestly say that after every game, I did not receive any sort of compliments from her. And that's what was weird to me because that's just not her. I don't know if she was doing that because she didn't want to play favorites or something like that, or she felt like if she said something like that to me then the other girls might think that she likes me more or something. But, she never once said to me, "Good game. You played really good." And I know I played good, but it's always nice to hear from your coach that you played good. But, never once did she say that she liked the way I did this or the way I did that. I mean in practice when we were doing warm-ups or doing defense and offensive drills, she'd be like good goal or that's the way. But during the game, I just think during the game is the best time to encourage your athletes to play better and stuff like that. That was just one thing that I was really surprised at about her. And then, she does an okay job of motivating. It's not like the best. I think towards the end of the year I started to realize that she didn't do that as well as at the beginning of the year. Because, I just had to get refreshed with her, and at the beginning of the year I remembered her being this and that. But then, at the end of the year I remembered that she didn't do this well, but she did that well. So, they all stayed in the top, but I think they went down a little bit (Athlete 2301)

Views on Season Events

1. Watching Each Team's Games...

Well, I think part of it was the respect issue of being supportive to their younger teammates. It was kind of an ongoing problem and something we definitely had to work on just because, I don't think they realize it, but I know how much the younger players look up to the older players, and are just enthralled when they watch the varsity game. I wholeheartedly believe that you learn from watching and when they would watch and

they would encourage, I really think they got something out of it. I think it was really to instill that respect, and letting them know that their job as a teammate isn't done when their game is done. They need to be supportive and also use it as an opportunity to learn when they're given it. So, that was basically the message of it was just please be respectful, use this opportunity because it is an opportunity and trying to get them to understand why it's important (Coach Postseason Interview)

No, like I said, it was something that we had to work on and I know part of it is that they're like 15-17 year old girls and when they get together, especially when they have prom pictures, its hard to get them to focus and I guess its something that I know its difficult. I don't know if they necessarily understood the significance of it, like at home games, away games they had no where to go they had to watch the game, but at home games there's boyfriends, and parents, and grandparents to distract them. It was a pretty consistent message and it was pretty typical in a sense that I think that for every home game where there's a J.V. game it was discussed and the captains were informed that it's your job to corral your teammates and make sure that they're just not sitting there but they're actually watching. So, that was a pretty typical interaction (Coach Postseason Interview)

She really wanted us to stay, because she wanted J.V. to watch the varsity game to learn about lacrosse. To learn about how our team plays and the other team plays. You can learn if you're watching your teammates play, like, "That didn't really work so I won't do that. Or "I should try that because that worked really well." Or you can watch the other team, like how they set up their defense and how they do their offense. I think it's very important to watch. I if you just go out there and you don't really know what's going on then you don't have as much as an advantage as someone that does know. I think that's what she's trying to tell us (Athlete 2312)

I think she got her point across pretty well when she was talking about it. Because I know it was really important to her that we all stayed and watched. I think a lot of us girl took it to heart and did stay and try to learn by watching (Athlete 2312)

I think it was pretty effective, definitely not to talk and to pay attention. We learned that I know. We hated doing practice, and in practice we had to do push-ups the whole time because people kept talking and everything. I think it was pretty effective because we do learn from like the coaches and the refs like she said. Like we learn from the refs because the refs would make calls that were completely pointless we learned. We learned some things that we have never heard of before. So, you just like learn every time. Yeah, so we learned what to expect from her. Like she is going to put her foot down. Like if we are talking we're not gonna get, I think, from the first year and second year she was kind of lenient. Like, "oh their talking, I'm just going to tell them to be quite." But now she's gonna make us do push-ups and stuff. So now she's putting her foot down and we know not to like talk and it's serious. It's a school sport and she's serious now. I think it was effective, because she's telling us from the beginning what to do and what not to do. She told us straight forward (Athlete 2307)

She was just basically saying that we need to pay attention to the game because we can learn from other people on our team and its easier to watch our team play and say, "Oh this is not working well," and try to think of ways to change it instead of her just always telling us that we're not doing it right. She was trying to get cross that it's nice to have the team supporting you when you're out there. If everyone's kind of doing there own thing and not paying attention to the game, it's rude when you're out there trying to play and the rest of your team doesn't really pay attention. She was trying to get us to watch the game more and pay attention to what we were doing wrong when we were out there (Athlete 2317)

I never really thought about watching your own teammates play and try to learn from that. I mean you watch the game, but maybe pick a person who plays the same position as you and see how they do it. Or, to see if there's anything that you can do to change how you play. That's how it kind of impacted me. Every game after that I kind of picked up on the people that played my position and I watched them. Even from just seeing where they were standing when the ball wasn't down there kind of helped me realize what I was doing wrong or if it worked out better or not. But, it impacted me a lot (Athlete 2317)

That we need to during games, like you know how girls are either always gossiping or talking on the sidelines, a lot of girls don't pay much attention to the game that's going on. So the J.V. doesn't watch the varsity and the varsity doesn't watch the J.V. She gets really frustrated with that because she knows how much you can learn from watching the game. You can learn so much from the calls, the way the defense and offense works. I think she just got really frustrated because our J.V., they were basically all new and really knew nothing about lacrosse and here they are on sidelines talking and doing other stuff. She just really wanted them to watch us because they still were kind of clueless about the whole lacrosse thing. She really likes for us to watch each other because she's really into learning new things every game and it's true, it's very true. I learn things all the time, but I think that after that, well there were a couple rough practices after that, but after that J.V. really watched varsity and varsity watched J.V. and we participated in the others games and stuff. So that definitely worked when she talked about that (Athlete 2301)

it's always nice having you teammates on the sidelines encouraging you and you know you look over there and its like a neck and neck game and if you look over there and they're like talking instead of cheering you on, its frustrating to look over at your team and they're not even paying attention (Athlete 2301)

Getting Ready for Postseason...

First of all, that we hadn't practiced for awhile and this was kind of a key opportunity to have to kind of brush some of the dust off, get our heads in the game, use this as an opportunity to feel out not only the weather, but how everyone responded to the weather, because I knew that was going to be an issue. And for the girls to kind of mentally get prepared for the game..So, I was just trying to get them motivated to do that. And with the weather as hot as it was, it was going to be harder to get them motivated, so that was kind of the main message. We have a lot to do and especially the end of the school years I know it's so hard for the girls. They're already thinking about open houses and

graduation, and for the juniors, senior pictures. You just gotta get them refocused. (Coach Postseason Interview)

She was talking, she talks about it a lot, that our team would slack off in the beginning of a game and other teams would get ahead and then that's when we'd play hard and win or lose the game. I think that's what she was trying make it that we can't be lazy in the beginning because then [regional finals opponent] will stomp on us. She sounds, I remember that clip, pretty confident in us. That was good (Athlete 2312)

And even though it's hot, we need to work hard. Because I know we were really lazy that day. She would get really ticked at us, but it was hot (Athlete 2307)

She just said how lately we weren't practicing because it was the end of the school year and we had more fun practices and that wasn't the best thing to do because we weren't used to working as a team again. And then she said about the weather being warm and how we had to get used to that again. Basically she was just trying to motivate us for our game (Athlete 2317)

Well, she always talks about winning and trying to motivate us every practice. I think she has her own way of saying that we should be winning and trying to help us through it. But, this one was kind of different because there was the regional one and she wanted that trophy and she was kind of using that to motivate us. She said about calling the newspapers and trying to them down, and trying to get the news team and the word out that we were actually playing. That was kind of exciting that the news stations much actually be interested in us playing lacrosse. She motivated us every practice to try to work better or to try to win the next game, to just work our hardest and do that every practice (Athlete 2317)

Letting us know that it's not going to be an easy game and the weather is definitely hotter and it's going to be a change to what we usually play in which is kind of cold. So, she was just letting us know all these different things that are going to be going on and what a challenging game it's going to be. When she said that, I really got kind of worried, because I was like its not going to be an easy game, we're going to have to work and if we're not there, and our heads aren't in the game then we're not going to win and I was getting worried at that point. So, she was just letting us know that our heads have to be in it and you guys have to bring your "A" game. She was just letting us know the challenge ahead of us (Athlete 2301)

REFERENCES

- Abraham, A., & Collins, D. (1998). Examining and extending research in coach development. *Quest, 50*, 59-79.
- Ahlgren, R.L., Housner, L.D., & Jones, D.F. (1998). Qualitative analysis of experienced and inexperienced basketball coaches during practice. *Applied Research in Coaching and Athletics Annual, 13*, 142-163.
- Allen, J.B., & Howe, B.L. (1998). Player ability, coach feedback, and female adolescent athletes' perceived competence and satisfaction. *Journal of Sport & Exercise Psychology, 20*, 280-299.
- Amorose, A.J., & Weiss, M.R. (1998). Coaching feedback as a source of information about perceptions of ability: A developmental examination. *Journal of Sport & Exercise Psychology, 20*, 395-420.
- Anshel, M.H., & Straub, W.F. (1991). Congruence between players' and coaches' perceptions of coaching behaviors. *Applied Research in Coaching and Athletics Annual, March*, 49-65.
- Baker, J., Cote, J., & Hawes, R. (2000). The relationship between coaching behaviours and sport anxiety in athletes. *Journal of Science and Medicine in Sport, 3*, 110-119.
- Baker, J., Yardley, J., & Cote, J. (2003). Coach behaviors and athlete satisfaction in team and individual sports. *International Journal of Sport Psychology, 34*, 226-239.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barling, J., & Abel, M. (1983). Self-efficacy beliefs and tennis performance. *Cognitive Therapy and Research, 7*, 265-272.
- Barnett, N.P., Smoll, F.L., & Smith, R.E. (1992). Effects of enhancing coach-athlete relationships on youth sport attrition. *The Sport Psychologist, 6*, 111-127.
- Beauchamp, M.R., & Whinton, L.C. (2005). Self-efficacy and other-efficacy in dyadic performance: Riding as one in equestrian eventing. *Journal of Sport & Exercise Psychology, 27*, 245-252.

- Bloom, B.S. (Ed.) (1985). *Developing talent in young people*. New York: Ballantine.
- Bloom, G.A., Crumpton, R., & Anderson, J.E. (1999). A systematic observation study of the teaching behaviors of an expert basketball coach. *The Sport Psychologist*, 13, 157-170.
- Bloom, G.A., Durand-Bush, N., & Salmela, J.H. (1997). Pre- and postcompetition routines of expert coaches of team sports. *The Sport Psychologist*, 11, 127-141.
- Bloom, G.A., Durand-Bush, N., Schinke, R.J., & Salmela, J.H. (1998). The importance of mentoring in the development of coaches and athletes. *International Journal of Sport Psychology*, 29, 267-281.
- Bloom, G.A., & Salmela, J.H. (2000). Personal characteristics of expert team sport coaches. *Journal of Sport Pedagogy*, 6, 56-76.
- Bloom, G.A., Schinke, R.J., & Salmela, J.H. (1997). The development of communication skills by elite basketball coaches. *Coaching and Sport Science Journal*, 2, 3-10.
- Bloom, G.A., Stevens, D.E., & Wickwire, T.L. (2003). Expert coaches' perceptions of team building. *Journal of Applied Sport Psychology*, 15, 129-143.
- Bogdan, R.C., & Knopp Biklen, S. (2003). *Qualitative research for education* (4th ed.). Boston, MA: Allyn and Bacon.
- Chase, M.A., Galli, N., Mellus, K., Marker, A., Pappas, G., & Ronayne, L. (2004). Coaching efficacy and the acquired or innate ability to coach at the collegiate level. Proceedings of the Association for the Advancement of Applied Sport Psychology, 41.
- Chase, M.A., Lirgg, C.D., & Feltz, D.L. (1997). Do coaches' efficacy expectations for their teams predict team performance? *The Sport Psychologist*, 11, 8-23.
- Chelladurai, P., & Kuga, D.J. (1996). Teaching and coaching: Group and task differences. *Quest*, 48, 470-485.
- Chelladurai, P., Kuga, D.J., & O'Bryant, C.P. (1999). Individual differences, perceived task characteristics, and preferences for teaching and coaching. *Research Quarterly for Exercise and Sport*, 70, 179-189.
- Clark, M.A. (2001). The role of the coach as teacher, mentor, and role model. In V. Seefeldt, M.A. Clark, & E.W. Brown (Eds.), *Program for athletic coaches' education* (3rd edition) (pp. 12-16). Traverse City, MI: Cooper Publishing Group.

- Claxton, D.B., & Lacy, A.C. (1986). A comparison of practice field behaviors between winning high school football and tennis coaches. *Journal of Applied Research in Coaching and Athletics*, 1, 188-200.
- Claxton, D.B., & Lacy, A.C. (1988). A systematic observation of more and less successful high school tennis coaches. *Journal of Teaching in Physical Education*, 7, 302-310.
- Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education*, 60, 323-337.
- Crocker, P.R.E. (1990). Facial and verbal congruency: Effects on perceived verbal and emotional coaching feedback. *Canadian Journal of Sports Science*, 15, 17-22.
- Curtner-Smith, M.D., Wallace, S.J., & Wang, M.Q. (1998). Behaviors of girls high school basketball coaches and their players during early season, mid-season, and late season practices. *International Sports Journal*, 2, 79-93.
- Curtner-Smith, M.D., Wallace, S.J., & Wang, M.Q. (1999). Relationship of coach and player behaviors during practice to team performance in high school girls' basketball. *Journal of Sport Behavior*, 22, 203-220.
- Cushion, C.J., Armour, K.M., & Jones, R.L. (2003). Coach education and continuing professional development: Experience and learning to coach. *Quest*, 55, 215-230.
- d' Arripe-Longueville, F., Fournier, J.F., & Dubois, A. (1998). The perceived effectiveness of interactions between expert French judo coaches and elite female athletes. *The Sport Psychologist*, 12, 317-332.
- DeMarco, G.M., Mancini, V.H., & Wuest, D.A. (1997). Reflections on change: A qualitative and quantitative analysis of a baseball coach's behavior. *Journal of Sport Behavior*, 20, 135-163.
- DeMarco, G.M., Mancini, V.H., Wuest, D.A., & Schempp, P.G. (1996). Becoming reacquainted with a once familiar and still valuable tool: Systematic observation methodology revisited. *International Journal of Physical Education*, 32, 17-26.
- Dils, A.K., & Ziatz, D.H. (2000). The application of teacher education curriculum theory to interscholastic coaching education: Learning outcomes associated with a quality interscholastic athletic program. *The Physical Educator*, 57, 88-98.
- Docheff, D.M. (1990). The feedback sandwich. *Journal of Physical Education, Recreation & Dance*, 61, 17-18.

- Dodds, P., Placek, J.H., Doolittle, S., Pinkham, K.M., Ratliffe, T.A., & Portman, P.A. (1991). Teacher/coach recruits: Background profiles, occupational decision factors, and comparisons with recruits into other physical education occupations. *Journal of Teaching in Physical Education, 11*, 161-176.
- Dodds, P., & Rife, F. (1981). *A descriptive-analytic study of the practice field behavior of a winning female coach*. Unpublished manuscript, University of Massachusetts, Amherst.
- Douge, B., & Hastie, P. (1993). Coaching effectiveness. *Sport Science Review, 2*, 14-29.
- Dubas, J.S., & Snider, B.A. (1993). The role of community-based youth groups in enhancing learning and achievement through nonformal education. In R.M. Lerner (Ed.), *Early adolescence: Perspectives on research, policy, and intervention* (pp. 159-174). Hillsdale, NJ: Lawrence Erlbaum.
- Everhart, C.B., & Chelladurai, P. (1998). Gender differences in preferences for coaching as an occupation: The role of self-efficacy, valence, and perceived barriers. *Research Quarterly for Exercise and Sport, 69*, 188-200.
- Feltz, D.L. (1982). Path analysis of the causal elements in Bandura's theory of self-efficacy and an anxiety-based model of avoidance behavior. *Journal of Personality and Social Psychology, 42*, 764-781.
- Feltz, D.L. (1988). Gender differences in the causal elements of self-efficacy on a high avoidance motor task. *Journal of Sport & Exercise Psychology, 10*, 151-166.
- Feltz, D.L., & Chase, M.A. (1998). The measurement of self-efficacy and confidence in sport. In J.L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 65-80). Morgantown, WV: Fitness Information Technology, Inc.
- Feltz, D.L., Chase, M.A., Moritz, S.E., & Sullivan, P.J. (1999). A conceptual model of coaching efficacy: Preliminary investigation and instrument development. *Journal of Educational Psychology, 91*, 765-776.
- Feltz, D.L., Lirgg, C.D. (1998). Perceived team and player efficacy in hockey. *Journal of Applied Psychology, 83*, 557-564.
- Gallimore, R., & Tharp, R. (2004). What a coach can teach a teacher, 1975-2004: Reflections and reanalysis of John Wooden's teaching practices. *The Sport Psychologist, 18*, 119-137.
- Gardner, D.E., Shields, D.L.L., Bredemeier, B.J.L., & Bostrom, A. (1996). The relationship between perceived coaching behaviors and team cohesion among baseball and softball players. *The Sport Psychologist, 10*, 367-381.

- George, T.R. (1994). Self-confidence and baseball performance: A causal examination of self-efficacy theory. *Journal of Sport & Exercise Psychology*, 16, 381-399.
- Gilbert, W.D., & Trudel, P. (2004). Role of the coach: How model youth team sport coaches frame their roles. *The Sport Psychologist*, 18, 21-43.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology*, 14, 172-204.
- Gould, D., Hodge, K., Peterson, K., & Giannini, J. (1989). An exploratory examination of strategies used by elite coaches to enhance self-efficacy in athletes. *Journal of Sport & Exercise Psychology*, 11, 128-140.
- Griffey, D.C., & Housner, L.D. (1991). Differences between experienced and inexperienced teachers' planning decisions, interactions, student engagement, and instructional climate. *Research Quarterly for Exercise and Sport*, 62, 196-204.
- Hardin, B. (2000). Coaching expertise in high school athletics: Characteristics of expert high school coaches. *The Applied Research in Coaching and Athletics Annual*, 15, 24-38.
- Haugen, C., Short, S.E., Brinkert, R.H., & Short, M.W. (2004). The relationship between coaching efficacy and coaching burnout. *Journal of Sport and Exercise Psychology*, 26, S89.
- Hedstrom, R.A., Ewing, M.E., & Gilson, T.A. (2004). The effect of coach-athlete interaction time on athlete's perceptions of the youth sport experience. Manuscript in preparation.
- Hodges, N.J., & Franks, I.M. (2002). Modeling coaching practice: The role of instruction and demonstration. *Journal of Sports Sciences*, 20, 793-811.
- Horn, T.S. (1985). Coaches' feedback and changes in children's perceptions of their physical competence. *Journal of Educational Psychology*, 77, 174-186.
- Horne, T., & Carron, A.V. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology*, 7, 137-149.
- Howell, D.C. (2002). *Statistical methods for psychology* (5th ed.). Pacific Grove, CA: Duxbury.
- Jones, D.F., Housner, L.D., & Kornspan, A.S. (1995). A comparative analysis of expert and novice basketball coaches: Practice planning. *The Applied Research in Coaching and Athletics Annual*, 10, 210-227.

- Jones, D.F., Housner, L.D., & Kornspan, A.S. (1997). Interactive decision making and behavior of experienced and inexperienced basketball coaches during practice. *Journal of Teaching in Physical Education*, 16, 454-468.
- Jones, R.L., Armour, K.M., & Potrac, P. (2002). Understanding the coaching process: A framework for social analysis. *Quest*, 54, 34-48.
- Jones, R.L., Armour, K.M., & Potrac, P. (2003). Constructing expert knowledge: A case study of a top-level professional soccer coach. *Sport, Education, and Society*, 8, 213-229.
- Jones, R.L., Potrac, P., & Ramalli, K. (1999). Where sport meets physical education: A systematic observation of role conflict. *International Journal of Physical Education*, 36, 7-14.
- Kent, A., & Sullivan, P.J. (2003). Coaching efficacy as a predictor of university coaches' commitment. *International Sports Journal*, 7, 78-87.
- Krane, V., Greenleaf, C.A., & Snow, J. (1997). Reaching for gold and the price of glory: A motivational case study of an elite gymnast. *The Sport Psychologist*, 11, 53-71.
- Kenow, L.J., & Williams, J.M. (1992). Relationship between anxiety, self-confidence, and evaluation of coaching behaviors. *The Sport Psychologist*, 6, 344-357.
- Kenow, L.J., & Williams, J.M. (1999). Coach-athlete compatibility and athlete's perceptions of coaching behaviors. *Journal of Sport Behavior*, 22, 251-259.
- Lacy, A.C., & Darst, P.W. (1984). Evolution of a systematic observation instrument: The ASU observation instrument. *Journal of Teaching Physical Education*, 3, 59-66.
- Lacy, A.C., & Darst, P.W. (1985). Systematic observation of behaviors of winning high school football coaches. *Journal of Teaching in Physical Education*, 4, 256-270.
- Lacy, A.C., & Darst, P.W. (1989). The Arizona State University observation instrument (ASUOI). In P.W. Darst, D.B. Zakrajsek, & V.H. Mancini (Eds.), *Analyzing physical education and sport instruction* (2nd ed.) (pp. 369-377). Champaign, IL: Human Kinetics.
- Lacy, A.C., & Goldston, P.D. (1990). Behavior analysis of male and female coaches in high school girls' basketball. *Journal of Sport Behavior*, 13, 29-39.
- Lacy, A.C., & Martin, D.L. (1994). Analysis of starter/nonstarter motor-skill engagement and coaching behaviors in collegiate women's volleyball. *Journal of Teaching in Physical Education*, 13, 95-107.

- Lee, K., Malete, L., & Feltz, D.L. (2002). The strength of coaching efficacy between certified and noncertified Singapore coaches. *International Journal of Applied Sports Sciences*, 14, 55-67.
- Lirgg, C.D., George, T.R., Chase, M.A., & Ferguson, R.H. (1996). Impact of conception of ability and sex-type of task on male and female self-efficacy. *Journal of Sport & Exercise Psychology*, 18, 426-434.
- Malete, L., & Feltz, D.L. (2000). The effect of a coaching education program on coaching efficacy. *The Sport Psychologist*, 14, 410-417.
- Marback, T.L., Short, S.E., Short, M.W., & Sullivan, P.J. (2005). Coaching confidence: An exploratory investigation of sources and gender differences. *Journal of Sport Behavior*, 28, 18-34.
- Martens, R. (2004). *Successful Coaching* (3rd ed.). Champaign IL: Human Kinetics.
- McAuley, E. (1985). Modeling and self-efficacy: A test of Bandura's model. *Journal of Sport Psychology*, 7, 283-295.
- Moritz, S.E., Feltz, D.L., Fahrbach, K.R., & Mack, D.E. (2000). The relation of self-efficacy measures to sport performance: A meta-analytic review. *Research Quarterly for Exercise and Sport*, 71, 280-294.
- Myers, N.D., Feltz, D.L., Maier, K.S., Wolfe, E.W., & Reckase, M.D. (2006). Athletes' evaluations of their head coach's coaching competency. *Research Quarterly for Exercise and Sport*, 77, 11-121.
- Myers, N.D., Vargas-Tonsing, T.M., & Feltz, D.L. (2005). Coaching efficacy in intercollegiate coaches: Sources, coaching behavior, and team variables. *Psychology of Sport & Exercise*, 6, 129-143.
- Paient, C.A. (2006). An assessment of the factors predicting coaching efficacy and coaching satisfaction in athletics. Unpublished doctoral dissertation. Michigan State University.
- Parker, M.J., Guarino, A.J., & Smith, R.W. (2002). Self-efficacy in a sample of education majors and teachers. *Psychological Reports*, 91, 935-939.
- Patton, M.Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Plourde, L.A. (2002). The influence of student teaching on preservice elementary teachers' science self-efficacy and outcome expectancy beliefs. *Journal of Instructional Psychology*, 29, 245-253.

- Potrac, P., Brewer, C., Jones, R., Armour, K., & Hoff, J. (2000). Toward a holistic understanding of the coaching process. *Quest*, 52, 186-199.
- Pretty, G.M.H., Andrewes, L., & Collett, C. (1994). Exploring adolescents' sense of community and its relationship to loneliness. *Journal of Community Psychology*, 22, 346-358.
- Sage, G.H. (1987). The social world of high school sport coaches: Multiple role demands and their consequences. *Sociology of Sport Journal*, 4, 213-228.
- Sage, G.H. (1989). Becoming a high school coach: From playing sports to coaching. *Research Quarterly For Exercise and Sport*, 60, 81-92.
- Saury, J., & Durand, M. (1998). Practical knowledge in expert coaches: On-site study of coaching in sailing. *Research Quarterly for Exercise and Sport*, 69, 254-266.
- Scales, P.C., & Leffert, N. (1999). *Developmental assets: A synthesis of the scientific research on adolescent development*. Minneapolis, MN: Search Institute.
- Schempp, P., McCullick, B., St. Pierre, P., Woorons, S., You, J., & Clark, B. (2004). Expert golf instructors' student-teacher interaction patterns. *Research Quarterly for Exercise and Sport*, 75, 60-70.
- Schunk, D.H. (1995). Self-efficacy, motivation, and performance. *Journal of Applied Sport Psychology*, 7, 112-137.
- Schinke, R.J., Bloom, G.A., & Salmela, J.H. (1995). The career stages of elite Canadian basketball coaches. *Avante*, 1, 48-62.
- Seaborn, P., Trudel, P., & Gilbert, W. (1998). Instructional content provided to female ice hockey players during games. *The Applied Research in Coaching and Athletics Annual*, 13, 119-141.
- Segrave, J.O., & Ciancio, C.A. (1990). An observation of a successful pop Warner football coach. *Journal of Teaching in Physical Education*, 9, 294-306.
- Shaw, S.M., Kleiber, D.A., & Caldwell, L.L. (1995). Leisure and identity formation in male and female adolescents: A preliminary examination. *Journal of Leisure Research*, 27, 245-263.
- Short, S.E., & Short, M.W. (2004). Coaches' assessment of their coaching efficacy compared to athletes' perceptions. *Perceptual and Motor Skills*, 99, 729-736.
- Siedentop, D., & Tannehill, D. (2000). *Developing teaching skills in physical education* (4th ed.). Mountain View, CA: Mayfield Publishing Company.

- Sinclair, D.A., & Vealey, R.S. (1989). Effects of coaches' expectations and feedback on the self-perceptions of athletes. *Journal of Sport Behavior*, 11, 77-91.
- Smith, R.E. (1988). The logic and design of case study research. *The Sport Psychologist*, 2, 1-12.
- Smith, R.E. & Smoll, F.L. (1990). Self-esteem and children's reactions to youth sport coaching behaviors: A field study of self-enhancement processes. *Developmental Psychology*, 26, 987-993.
- Smith, R.E., & Smoll, F.L. (2002). *Way to go coach! A scientifically-proven approach to youth sport coaching effectiveness* (2nd ed.). Portola Valley, CA: Warde Publishers, Inc.
- Smith, R.E., Smoll, F.L., & Curtis, B. (1979). Coach effectiveness training: A cognitive-behavioral approach to enhancing relationship skills in youth sport coaches. *Journal of Sport Psychology*, 1, 59-75.
- Smith, R.E., Smoll, F.L., & Hunt, E. (1977). A system for the behavioral assessment of athletic coaches. *Research Quarterly*, 48, 401-407.
- Smith, R.E., Zane, N.W.S, Smoll, F.L., & Coppel, D.B. (1983). Behavioral assessment in youth sports: Coaching behaviors and children's attitudes. *Medicine and Science in Sports and Exercise*, 15, 208-214.
- Smoll, F.L., Smith, R.E., Barnett, N.P., & Everett, J.J. (1993). Enhancement of children's self-esteem through social support training for youth sport coaches. *Journal of Applied Psychology*, 78, 602-610.
- Smoll, F.L., Smith R.E., Curtis, B., & Hunt, E. (1978). Toward a mediational model of coach-player relationships. *Research Quarterly*, 49, 528-541.
- Solomon, G.B., Golden, A.J., Ciapponi, T.M., & Martin, A.D. (1998). Coach expectations and differential feedback: Perceptual flexibility revisited. *Journal of Sport Behavior*, 21, 298-310.
- Solomon, G.B. & Kosmitzki, C. (1996). Perceptual flexibility and differential feedback among intercollegiate basketball coaches. *Journal of Sport Behavior*, 19, 163-177.
- Stewart, C.C. (1993). Coaching behaviors: "The way you were, or the way you wished you were." *The Physical Educator*, 64, 23-30.
- Stewart, C.C., & Sweet, L. (1992). Professional preparation of high school coaches: The problem continues. *Journal of Physical Education, Recreation, and Dance*, 63, 75-79.

- Sullivan, P.J., & Kent, A. (2003). Coaching efficacy as a predictor of leadership style in intercollegiate athletics. *Journal of Applied Sport Psychology, 15*, 1-11.
- Templin, T.J., Sparkes, A., Grant, B., & Schempp, P. (1994). Matching the self: The paradoxical case and life history of a late career teacher/coach. *Journal of Teaching in Physical Education, 13*, 274-294.
- Tharp, R.G., & Gallimore, R. (1976). Basketball's John Wooden: What a coach can teach a teacher. *Psychology Today, 9*, 74-78.
- Trudel, P., Cote, J., & Bernard, D. (1996). Systematic observation of youth ice hockey coaches during games. *Journal of Sport Behavior, 19*, 50-65.
- Trudel, P., Cote, J., & Sylvestre, F. (1996). Systematic observation of ice hockey referees during games. *Journal of Sport Behavior, 19*, 66-81.
- van der Mars, H. (1989a). Basic recording tactics. In P.W. Darst, D.B. Zakrajsek, & V.H. Mancini (Eds.), *Analyzing physical education and sport instruction* (2nd ed.) (pp. 19-51). Champaign, IL: Human Kinetics.
- van der Mars, H. (1989b). Observer reliability: Issues and procedures. In P.W. Darst, D.B. Zakrajsek, & V.H. Mancini (Eds.), *Analyzing physical education and sport instruction* (2nd ed.) (pp. 53-80). Champaign, IL: Human Kinetics.
- van der Mars, H. Darst, P., & Sariscsany, M.J. (1991). Practice behaviors of elite archers and their coaches. *Journal of Sport Behavior, 14*, 103-112.
- Vangucci, M., Potrac, P., & Jones, R.L. (1997). A systematic observation of elite women's soccer coaches. *Journal of Interdisciplinary Research in Physical Education, 2*, 1-17.
- Vargas-Tonsing, T.M., Myers, N.D., & Feltz, D.L. (2004). Coaches' and athletes' perceptions of efficacy-enhancing techniques. *The Sport Psychologist, 18*, 397-414.
- Vargas-Tonsing, T.M., Warners, A.L., & Feltz, D.L. (2003). The predictability of coaching efficacy of team efficacy and player efficacy in volleyball. *Journal of Sport Behavior, 26*, 396-407.
- Wang, J., & Ramsey, J. (1998). The relationship of school type, coaching experience, gender and age to new coaches' challenges and barriers at the collegiate level. *Applied Research in Coaching and Athletics Annual, 13*, 1-22.
- Wandzilak, T., Ansorge, C.J., & Potter, G. (1988). Comparison between selected practice and game behaviors of youth sport soccer coaches. *Journal of Sport Behavior, 11*, 78-88.

- Weiss, M.R., Barber, H., Sisley, B.L., & Ebbeck, V. (1991). Developing competence and confidence in novice female coaches: II. Perceptions of ability and affective experiences following a season-long coaching internship. *Journal of Sport & Exercise Psychology*, 13, 336-363.
- Weiss, M.R., & Ferrer-Caja, E. (2002). Motivational orientations and sport behavior. In T.S. Horn (Ed.), *Advances in sport psychology* (2nd ed.) (pp. 101-184). Champaign IL: Human Kinetics.
- Weiss, M.R., & Fredrichs, W.D. (1986). The influence of leader behaviors, coach attributes, and institutional variables on performance and satisfaction of collegiate basketball teams. *Journal of Sport Psychology*, 8, 332-346.
- Westre, K.R., & Weiss, M.R. (1991). The relationship between perceived coaching behaviors and group cohesion in high school football teams. *The Sport Psychologist*, 5, 41-54.
- Woodman, L. (1993). Coaching: A science, an art, an emerging profession. *Sport Science Review*, 2, 1-13.
- Woolfolk, A.E., Rosoff, B., & Hoy, W.K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching & Teacher Education*, 6, 137-148.
- Yin, R.K. (2003a). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R.K. (2003b). *Applications of case study research* (2nd ed.). Thousand Oaks, CA: Sage Publications.